

Enhancing Social- Emotional Experiences to Improve Student Outcomes



Part 1:

Introduction	3
Section 1: Whole School Social and Emotional Wellness: What Is It?	3
What is a whole-school approach to wellness?	3
What are the components of the CDC whole school framework?	4
What are key principles to enhancing health and well-being in schools?	7
Why is it important to support students in maintaining resiliency and emotional wellness?	9
Mental Wellbeing.....	10
Emotional Wellbeing.....	11
Physical Wellbeing	11
Social Integration	12
Behavior	12
Personal Satisfaction	13
Academic Performance	13
Section 1 Key Points and Summary	14
Section 2: Research Supporting a Whole-School Approach to Social and Emotional Wellness.....	14
Beneficial Child Outcomes are Interconnected	15
Better Social-Emotional Skills Result in Improved Academic Outcomes	15
Case Study: The Implementation of SEL Instruction to Support Families, Teachers, and Parents.....	16
A Randomized Trial Delving Into the Causative Effects of Social-Emotional Learning on Academic Outcomes.....	17
A Meta-Analysis Confirmed The Causative Link Between SEL and Academic Outcomes	17
The Effects of Investing in Students' Social and Emotional Outcomes Over a Multi-Year Period	18

Whole-School Programs to Promote Good Outcomes for Elementary-School Children .	18
Seeking out Benefits of Whole-School Academic Investment Beyond Academics.....	19
What does the research say about how schools should go about investing in a high-quality social and emotional environment?	19
Section 2 Key Points and Summary	23
Section 3: Relationships, Self-Care, and Classroom Strategies: Implementing a Whole-School Approach	24
What is the role of relationships between and among senior leadership, school staff, and students in creating a sense of belonging and enjoyment?	24
What are some specific ways that a school can employ a whole-student, whole-school approach to wellness (Earp, 2021)?	27
What key actions educators can take to create a whole-school approach to promote emotional health and well-being?	28
As a teacher, how can I help my students learn to self-soothe?	31
How can educators foster whole-school social and emotional wellbeing through either a large-scale disruption in education or with a sudden shift to remote education?	33
Section 3 Key Points	35
Conclusion	36
References	36

Introduction

Over the past couple of decades, many experts and professionals in the education field have been gaining an understanding of the importance of a child's emotional health and well-being. Rather than being an afterthought in a child's development and education, the significance of social and emotional wellness it's becoming abundantly clear, particularly since evidence has shown that childrens' mental health directly influences their physical health, overall development, and even academic success.

As a result, it's integral that schools prioritize social and emotional wellness not only for the benefit of their students but also so that schools can more successfully work toward their own purposes and goals. Today's educational professionals need to have strategies in place in their school to promote an atmosphere for positive mental health and wellness. One such way to do so is to implement a "whole school" approach to wellness.

In this course, we'll discuss the philosophies underlying this aim, the studies that have shown its benefits, and some of the key actions that educators can take to make this happen.

Section 1: Whole School Social and Emotional Wellness: What Is It?

As we begin to work toward a comprehensive framework (including all parties involved —mental health professionals, teachers, school administrations, students, and their families) that is meant to increase a school community's wellness, it's first helpful to clarify our goals. What is social and emotional wellness? What do we mean by a "whole-school approach"?

In this section, we'll provide some helpful overviews and components, including a ten-component community model that should work as an ideal endpoint for school wellness initiatives.

What is a whole-school approach to wellness?

A basic definition of a whole-school approach to wellness is simple: It's one in which every member of the school community is working toward better social, emotional, and other (e.g., academic) outcomes for all (CDC, 2021). It's more complex than it sounds,

however, as a true whole-school approach requires a commitment from every member of the academic community. It also requires partnerships between these members, e.g., strong teacher-parent relationships, or school administration-community relationships (CDC, 2021).

It may, perhaps, be easier to think about a whole-school approach as a whole-child approach in order to first wrap our minds around the ultimate goal of such a concept. At its heart, the whole school approach exists to serve the whole child (CDC, 2021).

The CDC has established a Whole School, Whole Community, Whole Child model as an overarching framework for addressing wellness and health in school communities. The emphasis of this model is on the role of the entire community as support for a child's holistic health. Since this model may represent a good starting point for conversation, we'll begin by defining it here before moving on to research supporting the whole-school approach and some practical strategies for its implementation (CDC, 2021).

What are the components of the CDC whole school framework?

The CDC's components that whole school communities should work toward in order to optimize social and emotional wellness for all include (CDC, 2021):

1. **Health education.** In order for students to be healthy, we can't just assume that they come to school with a basic knowledge of health goals or an established metric for what constitutes health. We also can not make any assumptions that they know how to get there! Part of embracing a whole-school framework involves equipping students with the information and skills they need to make important health decisions for themselves. Health education needs to encompass an extensive curriculum that students can learn in a detailed manner, not a supplemental lesson that simply discusses a few nutrition or exercise goals and leaves it at that. Rather, we need to conceptualize this education as a full system of health literacy (or a more comprehensive, holistic way to think about health). We need to discuss health-promoting decisions with our students and give them the resources they need to incorporate health-enhancing behaviors into their daily routine. A holistic curriculum that focuses on these concepts could include a pre-K through grade 12 series of courses that address everything from physical activity and injury prevention to sexual health, violence prevention, healthy eating, and emotional wellness. In addition, the school administrators should run routine assessments of the health and wellness needs of their specific

student base and ensure that the health messages that their courses (and related materials, such as hallway posters) promote are specifically relevant for their students.

2. **Nutrition environment and associated services.** Think about it: A school campus and cafeteria constitute the consistent location of a significant amount of meals for most students throughout their childhoods. As such, the environment in which students receive these meals can afford a significant opportunity to provide students with information about healthy eating practices. It can also serve as a natural center for tangible resources (such as finances and food) aiding children as they make healthy choices. One goal of a whole-school approach to wellness should involve due consideration surrounding the quality of meals and snacks available in school cafeterias, as well as their presentation, their accessibility, and the messaging surrounding certain dietary and meal choices at schools. This methodology extends beyond the cafeteria: Schools should also be mindful of the nutrition standards presented at all school events. For example, it could be confusing to the students if their cafeteria environment is optimized to show the benefit of healthy food choices, but all vending machines throughout the school offer less healthy choices; or if the school consistently offers “fun” food at school events such as fundraisers; or if teachers consistently offer “fun” food as a reward in the classroom. On a federal level, there are nutrition standards that must be met for offered lunch and breakfast programs, but schools themselves need to ensure that their messaging is consistent, their nutrition professionals receive ongoing professional development, and the entire academic community (e.g., the whole school) models dedicated participation in the school meal program and other healthy behaviors such as drinking water. Why is this such an important part of the framework? We’ll discuss this below, but healthy eating has been shown in many studies to be directly linked to student wellness and increased academic outcomes.
3. **Employee wellness and an optimized physical environment.** While the central focus of a whole-school approach to wellness is the student, it’s important to remember that school professionals will be better equipped to help students become healthier if they’re healthy and happy themselves. Moreover, students learn as much by seeing other people’s behaviors (if not more) than they learn by simple instruction. If students are able to see that their teachers and other school officials are practicing healthy behaviors, students are much more likely to do so as well. Since this is the case, a whole-school approach to wellness will

necessarily include provisions and resources to help school employees (including instructors and those in administration) have better health outcomes. This includes environments that are conducive to healthy eating, enough time off work, adequate support to help employees do their jobs well, and other similar initiatives. Administrators and their employees also need to make sure that the school environment is physically safe, e.g., free of mold, asbestos, and active dangers. Schools need to provide information to both students and teachers regarding risk factors that may be more endemic to their populations (e.g., sedentary lifestyles) and provide opportunities and information to help people combat these risks (e.g., more opportunities for physical activity) as well as the results of these risks (e.g., depression and diabetes). Importantly, one basic way to ensure that employees are healthy is to give them adequate time off work and the highest-quality health plans that the school is reasonably able to afford.

4. **Helpful and accessible health services.** If at all possible, your school needs to have a health resource department on campus that is fully accessible to every person at the school. This department and its professionals need to be equipped to assist with the full range of potential concerns that both students and employees may exhibit, from physical maladies to emotional issues. A school's suite of health services should be able to go further than simply providing first aid: It should be able to help children and adults alike plan to manage chronic conditions with a high recurrence (e.g., diabetes, depression, and asthma). The health services department should also have a mental health professional on staff to help students and instructors manage the high-stress load that often accompanies an active academic environment.
5. **Counseling and social services.** On a similar note, a school should be able to thoroughly administer and interpret ongoing psychoeducational, psychosocial, and psychological assessments (overseen by qualified professionals) on a regular basis. From those assessments, schools need to provide targeted interventions as necessary as well as comprehensive support services. School safety and crisis response counselors should be freely accessible to all members of the academic community, and social workers should also be on staff to help identify any concerning situations and respond effectively through their positive resolution.
6. **Strategic, symbiotic involvement in the school's community.** A whole-school, whole-child approach to learning needs to be mired in a whole-community approach, as well, so that children feel that they exist within an environment that

supports their academic and emotional needs even when they're not specifically on their school's campus. Schools can do this by partnering with local businesses and volunteer organizations to support student learning and health-related activities in their neighborhoods. This should be a win-win situation for all involved because organizations and businesses will get exposure to the young people in their community and the students will experience a more holistic learning environment.

7. **Engagement with every students' family.** A whole-school, whole-child, whole-community approach to education and wellness would not be complete without emphasis on the family partnership as well. School staff needs to make sure that families feel welcomed; instructors need to provide recurrent, easily-accessible information to families; and school administrations need to establish modes of communication as well as frequent activities in which families can be involved. As we'll discuss in a moment, studies have shown that students do far better when their families are engaged in the school environment. This doesn't have to require an extensive amount of time on the part of the parents, but it's key that they are at least apprised of their student's progress, given opportunities to work closely with instructors to ensure student success, and provided with suggestions to enhance learning at home. In the event that your school is based on a remote model of learning, this type of family engagement is absolutely essential.

This framework should exist as an imperative goal for schools to work toward as they implement a whole-school approach to support every student's complete picture of wellness.

What are key principles to enhancing health and well-being in schools?

Recently, the World Health Organization (WHO) completed a study to determine what a school that effectively promoted student, employee, and family health looked like. In concert with the CDC's recommendations, this information can start to paint a more complete picture of what a school should really be working toward (Pulimeno et al, 2020).

WHO worked with researchers across the globe and ultimately released a 2020 study in the journal *Health Promotion Perspectives* to discuss their findings. Ultimately, WHO was able to identify several key points of health-promoting schools. Additionally,

through their research, WHO created a concise definition of such a health-promoting school:

A health-promoting school is one that constantly strengthens its capacity as a healthy setting for living, learning, and working (Pulimeno et al, 2020).

In addition to this definition, WHO created a rubric of the types of activities and recurring actions that health-promoting schools will undertake. These include (Pulimeno et al, 2020):

- Fostering health and learning equally and with every measure and resource at their disposal
- Engaging with healthcare professionals as well as every other member of the academic community to do so (e.g., relying on experts instead of making their own decisions regarding healthcare)
- Investing in the nuts and bolts of a healthy environment, from high-quality nutrition and food safety programs to accessible programs for recreation, physical education, mental health counseling, and social support
- Implementing practices and policies that truly respect both students and their wellbeing, in addition to giving students every resource that they may need in order to achieve their version of success
- Investing in the health of families, school administration, instructors, and community members, based on the idea that it takes a village to fully educate a child; and that students who grow up in a healthy community are much more likely to themselves be healthy

Finally, WHO has developed a series of first principles or focus points that students who attend a health-promoting school should come away with. These include (Pulimeno et al, 2020):

- Students learn that caring for themselves and for other people are important and necessary goals.
- Students learn the importance of healthy decisions and being in control of their lives.
- Students learn which conditions they have control over that are the most conducive to health outcomes.

- Students understand the relationship between their actions and some of the leading causes of disease and disability.
- Students feel that they have the capacity to take on health-favoring endeavors in their daily lives

These last goals may lead to another question: Why do these principles matter? Why are we talking about students and their comprehension and capacity in regard to their health?

Their physical health and emotional wellness and resilience are inextricably linked. We'll touch on this subject next.

Why is it important to support students in maintaining resiliency and emotional wellness?

It could be completely justified to wonder why we need to invest so heavily in the comprehensive health of our students—concentrating not only on their academic prowess but their mental and physical health as well. Not only do we need to make sure that our students are succeeding in their classes, but we're expected to ensure that they're able to regulate their emotions as well. As teachers, we're expected to monitor their social wellbeing and provide channels for community outreach (Spark, 2021).

Putting aside for the moment the question of whether teachers are already doing enough, and assuming that initiatives investing in student wellness would provide increased support for the higher workload expected of teachers, there are several reasons that the importance for schools to invest in holistic student wellbeing becomes clear. It also makes sense to ensure that the entire school community and the school itself reinforces those investments, instead of (for example) simply teaching students the importance of wellness without providing support, or offering nutritional advice with no increased opportunities for students to follow up on those recommendations (Spark, 2021).

In a nutshell, student wellbeing—including emotional wellness and resiliency—is heavily tied to satisfaction with life, general health, and academic wellness. It, therefore, makes sense for schools to be places where students can count on excellent instruction, consistent learning opportunities, and support for their whole-person wellness (Spark, 2021).

This is all well and good, but in order to understand how to truly support our students in this holistic way, we need to understand how a whole school environment and community can meaningfully and realistically contribute to a student's wellbeing. For example, the following descriptions of a school environment may represent some aspects that could make a student feel and be well (Spark, 2021):

- A school that supports students who participate in meaningful, significant activities (perhaps instead of pushing participation in specific activities for any reason, or not allowing students the time to pursue their interests outside of prescribed academics)
- A school that helps students understand their emotions and strengthen their control over those emotions, instead of rewarding those who ignore or push down their emotions
- A school that pushes each child to achieve success while giving all students the unique support they need in order to do so (while also being able to hear and respect those students when they need a break)
- A school that celebrates students when they feel like they belong to the academic community, while also allowing all students to show that sense of belonging in their own way

There are various types of student well-being that your school will need to respect and promote in order to truly support whole student wellness. These types of wellbeing include:

Mental Wellbeing

We'll start by defining a student's mental wellbeing, as this is the sphere of wellness that should be most obviously linked to the traditional function of a school. When students enjoy fully-exercised and healthy mental wellbeing, they (Spark, 2021):

- Will likely be better able to recognize their own skills and potential
- Can meet challenges with a certain level of resiliency
- Are able to solve problems with creativity
- Can certainly be productive under the right conditions
- Feel that they are able to contribute to their community

A school might employ a whole-school approach to mental wellness by taking time to educate students on a regular basis about the common signs and symptoms that accompany common mental health issues. Moreover, these schools can invest in their campus to ensure that the buildings and grounds their students walk through are comfortable and safe. (As we know, Maslow's hierarchy of needs dictates that students must feel safe prior to being ready to learn, in any case). Finally, by both example and by direct education, a school can help students learn how to conduct themselves in a safe, nonjudgmental manner, and to take steps to reduce the dangers of bullying. Additionally, a school wholly oriented toward student wellness might concentrate on teaching students how to support each other, instead of tearing each other down (Spark, 2021).

Emotional Wellbeing

When students are emotionally well, they are able to have (at least to some extent) a working knowledge of themselves. They find themselves equipped to take on the daily problems and stressors they face without being completely overwhelmed. Emotional resilience is an extremely important goal to work toward for every student, and schools prioritizing a whole-school approach can invest in their students' emotional development and provide awareness training to help equip students for the obstacles in their paths (Spark, 2021).

Students who develop higher emotional resilience and wellness tend to have fewer counts of disciplinary infractions. They have more time and availability to concentrate on their academics, which may be one of the reasons that increased academic outcomes are correlated with overall student wellness. An additional outcome is extended student health, as emotionally healthy students may have a higher ability to make appropriate and meaningful decisions for their physical health (Spark, 2021).

Physical Wellbeing

A school that utilizes a whole-school approach to wellness cannot ignore a student's physical wellbeing. A student needs to feel both physically protected (e.g., safe) as well as able and supported to make healthy decisions (e.g., dietary and exercise-oriented) while they are at school. As a general rule of thumb, schools need to invest in and allow students to take regular exercise breaks, invest in a healthy diet, enjoy physical security, and practice any preventative healthcare measures that their personal physicians or the school medical team deems beneficial for their health. Your school may be able to help students invest in their physical wellbeing by giving them breaks throughout the day to

go on brief walks. In addition, investing in the nutritional content of cafeteria meals as well as the financial and other support necessary to ensure that all students enjoy equitable access to the cafeteria food is critical (Spark, 2021).

What is the link between education, health, and wellbeing? People need a certain level of energy and alertness in order to learn effectively. This goes for adults as well as young students. People also require a certain amount of education regarding good health choices and outcomes in order to be happier and healthier (Spark, 2021).

There are those who say that education is more than just a means to improve our brains; it's a full-body wellness intervention. However, students do require the whole support of their school and community in order to make this happen (Spark, 2021).

Social Integration

Schools represent the settings in which children learn basic academic skills such as reading and writing. To a much larger extent, it's key to remember that schools are also the places at which students learn how to be part of a community. Students learn to talk with people their age, reason their way through problems and conversations, argue, care for others, and more within the school context. When schools actively work to support students as they learn to interact more effectively with each other—a key part of social and emotional wellbeing—students are happier. There have even been recent studies that show when students are able to consistently enjoy pleasant interactions with those around them, they tend to perform and learn better (Spark, 2021).

Behavior

Consider this: For students that have a difficult home life, for any reason, the fact that they're able to go to a school that considers their wellbeing to be a priority can be a game-changer for their life's trajectory. Not only will they have the heightened academic achievements associated with increased social-emotional wellbeing, but they'll also have access to professionals they can trust. They may be able to gain resources to help them move through any trauma or difficulties they may have experienced. These students may be able to enjoy a safer, happier childhood as a result of their school life—which may enable their life to have a dramatically different (and better) outcome than they might have otherwise experienced. For example, studies have shown that students who attend schools that support their emotional well-being will be better able to internalize and move on from difficult experiences (Spark, 2021).

Personal Satisfaction

At school, students learn valuable personal skills such as confidence and self-assurance. The very fact that they practice taking on new information, manipulating it, internalizing it, and learning how to communicate related ideas and information successfully is a process that confers a great deal of satisfaction and self-worth for many students. Similarly, learning how to shoulder the increasing demands of school, juggle different tasks, and take on responsibility can show many students the extent of their strengths and levels of resiliency. Of course, there is a balance to be found here, as schools need to be wary of causing too much stress or burnout. The goal here is to provide adequate goals and enough growth to make students feel good about themselves and their progress (Spark, 2021).

Academic Performance

It cannot be emphasized enough that students and schools that invest in social-emotional well-being tend to do better academically as well. Although this is evident, the mechanism for seeing this result is not always clear. Perhaps students who are emotionally well and confident feel more equipped to concentrate on their studies or do better overall in school environments. In order to realize heightened academic outcomes, schools need to remind students of their achievements and avoid concentrating on any perceived flaws. Students need to be equipped to work hard and must be given the support systems they need to do well. This will increase their ability to be resilient to stress and give them a sense of self-worth in addition to their academic successes (Spark, 2021).

Ultimately, if we had to nail down in the most succinct manner possible just why student wellbeing is so important, it's this: Schools have an incredibly wide-reaching impact on a community. Not only do they serve children during their most formative years, but they also employ hundreds of staff members, and they give back to their communities in many ways. Schools that incorporate wellbeing initiatives into their communities are better empowered to support students and their communities. As a result, entire communities will be happier and healthier. Some of the other important benefits, such as reduced disciplinary issues and increased academic performance, are almost secondary when the social impact to wide groups is considered (Spark, 2021).

Section 1 Key Points and Summary

- A whole-school approach to wellness is one in which every member of the school community is working toward better outcomes for all. It requires commitment from every member of the academic community: Parents, students, educators, and community members.
- We need to move from the idea that mental, physical, and emotional wellness are different and discrete. Rather, they're all parts of health literacy—as are other facets of our health, from social integration to personal satisfaction.
- School employees will be better prepared to help their students be healthier if they're happy and healthy themselves.
- Schools can partner with student families, local volunteer organizations, and businesses to support student learning in their larger communities. Studies show that students do better with this level of integration.
- Education, health, and wellbeing are inextricably linked. Schools need to focus on a whole-child approach, as well, and work toward strengthening all of these factors for a child's optimal school experience.

Now that we've discussed what a whole-school, whole-child, and whole-community approach is, we'll talk about some of the research that links social and emotional wellness to a range of positive outcomes.

Section 2: Research Supporting a Whole-School Approach to Social and Emotional Wellness

If we are going to be investing in our school's systems for supporting our students, it's very important that we have a good reason for doing so. Fortunately, there is a world of research backing up the whole-school, whole-child approaches that we discussed in the first section of this course. In this section, we'll summarize some of the recent findings in the research that support these methods.

We'll also cut to some of the more salient of the findings right now: According to many studies, the consensus appears to be that whole-school, whole-child programs that support not only top-tier academic outcomes but a student's ability to communicate well, negotiate through problems, and practice their empathy, emotions, and social skills

tend to result in better outcomes for students across the board (e.g., both in the academic sphere as well as in their general lives).

The takeaway? Focusing on holistic support for your students' overarching development will result in better targeted academic results, as opposed to simply providing academic support only.

More granular takeaways from the current research seem to be as follows:

Beneficial Child Outcomes are Interconnected

The first finding in support of the whole-child approach underscores something that many have suspected for decades: Social, emotional, and academic development are inextricably interconnected. A consortium of scientists across a wide array of disciplines—including economics, medicine, brain science, and psychology—joined forces to determine why, precisely, social-emotional-academic learning competencies are connected. It seems to come down to neurology, and the idea that boosting brain activity in one isolated part of the brain is impossible; rather, it's a symbiotic effect where helping a student in one area helps the student as a whole. While this may not seem to be an overwhelmingly revolutionary finding, the researcher's combined findings allowed governmental educational bodies to switch their focus from the question of whether public schools should concentrate on improving the social and emotional development of their students to how they could more efficiently prioritize this growth (Education Northwest, 2018).

Better Social-Emotional Skills Result in Improved Academic Outcomes

Now that some level of correlation had been established, it was time to see whether a causative effect could be proven. Fortunately, it could. Moreover, the causative link was unidirectional.

What does this mean? Researchers were able to show that increased investment into a student's social-emotional learning directly led to increased academic outcomes without a distinct upgrade in the investment toward academic outcomes as well. However, the same benefits were not seen in the reverse direction: Merely boosting investment in academic training, for example, did not have a similar symbiotic effect on a student's social-emotional development. To provide a succinct, if potentially overly-simplistic

translation: Happier, healthier students are better learners, but better learners are not necessarily happier or healthier (Education Northwest, 2018).

The research in this area concentrated on students who participated in social-emotional instruction in elementary and middle school programs. Researchers found both short- and long-term benefits in the involved students. Researchers also found that preschool and high school teachers tend to understand the benefits of social-emotional development, but few teachers in these groups have the support, time, or bandwidth to invest in social-emotional instruction. The researchers noted the benefits in the elementary and middle school children and issued a general recommendation that schools find a way to support preschool and high school teachers in their ability to provide social-emotional instruction. They theorized that even earlier support would likely lead to positive outcomes as well and that extending support through the later grades certainly couldn't hurt (Education Northwest, 2018).

The researchers acknowledged that this would not be simple. Making social-emotional-learning, or SEL instruction, a supported endeavor for all grade levels would require ongoing professional development, statewide policies, and a general upheaval of many current educational standards. The researchers also recommended that helping students instill in themselves appropriate behaviors and self-discipline, and investing in a safe and healthy school environment would likely contribute to SEL and academic outcomes (Education Northwest, 2018).

Case Study: The Implementation of SEL Instruction to Support Families, Teachers, and Parents

The researchers examined one Californian school district that decided to invest in helping their schools become “full-service community schools.” This would in theory support integrated efforts and supports for the students in their schools and create an entire school climate that was fully conducive to holistic student support. The school invested in partnerships with businesses and organizations in their community, partially through the establishment of a dedicated community school manager at each school in their district. At the end of a three-year review period, the researchers found that extending the school beyond the borders of the campus into the community, as it were, boosted student safety and success-related outcomes (Education Northwest, 2018).

A Randomized Trial Delving Into the Causative Effects of Social-Emotional Learning on Academic Outcomes

The gold standard of research trials is something called the randomized trial, one in which a large group of study participants—in this case, students—*randomly* receive an assignment into either a test group or a control group. The reason this is the gold standard is simple: When the bank of study participants is large enough, this system more or less results in demographically equal groups as test and control subjects, instead of allowing for any type of bias in subject selection (Education Northwest, 2018).

In one randomized trial, researchers were hoping to learn more about the effect of social-emotional instruction on urban, low-income youth. After obtaining a significant set of results from the study, the researchers found that thorough social-emotional instruction led to a beneficial result on absenteeism, as well as a smaller but still significant impact on how the students performed in their math classes. There was also a generally positive impact on reading skills for the involved students (Education Northwest, 2018).

A Meta-Analysis Confirmed The Causative Link Between SEL and Academic Outcomes

Beyond randomized trials, meta-analyses are considered to be quite compelling, as the sheer amount of data available and considered can help researchers draw conclusions with a much higher amount of confidence. In one meta-analysis, researchers considered the results from over 200 studies delving into whole-school wellness. The number of students involved in these studies was well over 250,000, and the age range included a diverse range of kindergarten through twelfth grade students (Education Northwest, 2018).

Compared to students who did not benefit from a whole-school approach that included an emphasis on SEL instruction, the participants who had that benefit enjoyed an 11th-percentile-point-gain in academic achievement—certainly significant regardless of any other criteria (Education Northwest, 2018).

The Effects of Investing in Students' Social and Emotional Outcomes Over a Multi-Year Period

Next, the researchers sought to confirm that supporting children with their emotional and social development had concrete benefits over a course of several years. The researchers examined one school district that had a specific multi-year holistic student development program. After reviewing the profiles of the children who had been in the program for multiple years, researchers noted that students had reduced aggression, more engagement in their studies, and increased social behaviors (Education Northwest, 2018).

Intriguingly for our whole-school hypotheses, the researchers noted that the bulk of the effects of the intervention were “moderated by the school environment.” While it was clearly important to invest in teacher instruction and other mainstays of whole-school improvement, investing in the school and community itself had a huge effect at the population level on student social competence, academic excellence, and even interpersonal skills (Education Northwest, 2018).

Whole-School Programs to Promote Good Outcomes for Elementary-School Children

In this case, the researchers wanted to see the effects of different whole-school programs to help reduce problem behavior in school-age children and track their objectively measurable outcomes. The key difference in this study was to see whether the implementation of these initiatives for the entire school community, instead of a select few randomized students for study purposes, had a holistic effect on the entire school. The researchers found that, on the balance, all of the students tended to do better in measurable outcomes such as academic excellence when the implemented measures involved the entire campus instead of just a few students. In other words, when the entire culture was oriented around holistic wellness and healthiness instead of it being implied that health and excellence was by definition a fringe expectation, everyone seemed to benefit (Education Northwest, 2018).

Seeking out Benefits of Whole-School Academic Investment Beyond Academics

The researchers here were ultimately interested in learning more about the specific benefits that adolescents experienced from a whole-school approach beyond concrete academic outcomes. After all, implementing a whole-school approach to wellness is expensive and requires a great deal of work. If the researchers were able to determine beyond doubt the specific benefits that a school community would experience from the implementation of these types of systems, that would make the investment seem far more intriguing, particularly from an administration's perspective (Education Northwest, 2018).

Fortunately, the researchers were able to determine that students who attended schools that implemented whole-school forms of wellness enjoyed heightened civic engagement, favorable mental health outcomes, and even safety. This is partially due to the fact that many adolescents spend the vast majority of their daylight hours in school, so the potential that schools have to positively affect their students is quite large. The researchers further noted that the benefits they were seeing depended on the implementation of several different types of whole-school activities, from formal instruction during class time hours to after-school programs of heightened quality, increased investment in campus safety, and the emphasis on a varied world of high-quality nutrition choices (Education Northwest, 2018).

What does the research say about how schools should go about investing in a high-quality social and emotional environment?

At this point, it could be tempting to say that the evidence is clear: supporting the social and emotional well-being of our young students boosts most, if not all, other aspects of their development. Doing this also improves virtually every segment of a school's larger community. Here, we'll start to shift to talking about what we know in the context of what we can do to support high quality social and emotional development (Badger, 2020).

For a long time, teachers believed that enhancing social and emotional skills in their students was a project best taken on at the classroom level—one wherein each teacher got to have control over the individual strategies used. This strategy was seen as sensible for a long time for a few reasons: Perhaps only a few teachers were interested in social-

emotional learning and did not have administrative backing, so they had no choice but to implement strategies at the classroom level. In addition, the administration thought that social-emotional learning strategies should be created and administered by the people who know the students best (Badger, 2020).

More and more, it's becoming clear that we need to forego an individualized classroom approach in favor of a whole-school one. We're learning that we need to embed these wellness-centered practices into our students' daily routines. We need to help them cement these skills with activities that occur outside of the classroom. We need our students' parents and the community at large to help our students invest in their social and emotional wellbeing (Badger, 2020).

This is not a new concept. WHO recommended this type of approach (even terming it the 'whole school approach') as far back as 1998. However, even though we're decades out from that recommendation and although there has been a lot of money and time invested into this idea, we're still not a great deal closer to having this as a universally-enjoyed standard (Badger, 2020).

If we break this down logically, we might find that a whole-school approach can be distilled into the ongoing involvement and partnership of the teaching and learning component of a school system, its ethos and environment, and the external community of the school—the partnerships and families which the school can leverage to draw learning outside of merely the school campus (Badger, 2020).

One group of researchers decided to perform a meta-analysis to learn more about the efficacy of a whole-school approach based on some case studies of schools that have effectively implemented this type of system. After reading thousands of abstracts and hundreds of full articles, the researchers selected studies for their analysis that had a solid experimental design (such as a randomized trial), data that was well-reported and formatted for easy use and confident extrapolation, published recently, and met the whole-school-approach as defined by WHO. In addition, the researchers decided to look carefully at studies that appeared to be aimed at elucidating the relationship between a whole-school approach to social and emotional wellbeing and reduced "problem behaviors" (such as bullying or extreme social reticence) (Badger, 2020).

In all, the researchers identified 45 studies that encompassed a total of 500,000 students between the ages of 4 and 16. The researchers decided to look at four main outcomes associated with the implementation of a whole-school approach to wellbeing (Badger, 2020):

- School performance
- Social and emotional adjustment
- Behavioral adjustment
- Internalizing symptoms (which can be associated with reduced pathologies like anxiety and depression)

As the researchers completed their analysis, they made sure to correct for certain variables in order to learn as much from the data as possible—including the original intent of any interventions included in the studies, and demographic information provided regarding the participants in the studies, and how far the interventions actually went (e.g., for how long, or whether they involved the entire community or just the school employees and families (Badger, 2020).

The researchers saw the following results regarding the four outcomes they chose to examine (Badger, 2020):

- In schools that implemented a whole-school approach, the studies showed that there was a significant (if small) increase in the social and emotional adjustment of the involved students.
- Regarding behavioral adjustment: The students in the study exhibited a positive increase.
- School performance: The researchers actually saw no significant effect.
- Internalizing symptoms: The researchers saw a small but positive increase (Badger, 2020).

The researchers noticed a few more salient and highly relevant facts among the data and drew significant conclusions including:

- When a school included its entire surrounding community (e.g. parks, nearby businesses, even other close schools) in its whole-school social-emotional learning approach, the students involved saw a much higher positive impact on their social-emotional adjustment.
- While many other analyses and studies have shown that academic performance grows with social-emotional wellness, the researchers in this study found that there was no significant correlation.

- However, as there was a positive impact from the whole-school approach regarding the students' health and outcomes in other areas, the researchers felt comfortable saying that there was an overall clearly positive effect (Badger, 2020).

It's important to realize that this meta-analysis had strengths and limitations. For example, it's impossible to normalize the data for every single affecting variable. It's also entirely possible that the validation process that the authors went through to narrow down thousands of studies to 45 naturally left out studies that showed, for example, the impact of whole-school social-emotional wellness initiatives on academic performance (Badger, 2020).

The researchers then went on to discuss what the data showed about the effective implementation of whole-school approaches. After all, if there have been recommendations to establish a whole-school approach in this manner for almost three decades, why haven't more schools done it?

The researchers found a clear answer: It's not an easy process. In order for a whole-school approach to work, every member of a school (and a larger community) must be committed to both implementing and supporting the approach over a long-term period of time (Badger, 2020).

Fortunately, by comparing the length of time that different schools were able to sustain their whole-school wellness goals as well as the different implementation strategies that various schools implemented, the researchers were able to draw some conclusions about factors that led to a higher likelihood of success (Badger, 2020).

These included (Badger, 2020):

- Routine, ongoing assessment and evaluation of the way that schools were implementing their interventions
- Strong community, family, and school partnerships; not only did these increase the likelihood of enjoying academic performance benefits, but they also increased the longevity of the approach itself!
- Strong, routinely reconsidered and planned communication strategies

The schools that had exhibited these characteristics tended to employ the whole-school approach for longer and to see better results. The hardships of seeing benefits from these approaches also become clearer: It can be very difficult to sustain this type of rigorous investment and activity (Badger, 2020).

At the end of the meta-analysis, the researchers took some time to review the implications that their findings had for schools that wanted to invest in a whole-school approach to student social, behavioral, and emotional development. While the authors of this study were able to show the positive effects of a whole-school approach, they were also able to identify some of the major reasons why it often doesn't work (Badger, 2020).

In the next and final section of this course, we'll begin to discuss the various ways that schools, including both teachers and administrators, can work to both implement a whole-school approach and increase the efficacy of their aims (Badger, 2020).

Section 2 Key Points and Summary

- Whole-school, whole-child programs support both academic outcomes and students' ability to communicate well, deal with problems effectively, and practice their empathy.
- Happier, healthier students are better learners, but better learners are not necessarily happier or healthier.
- Extending the school beyond the borders of the campus into the community boosts student safety and success-related outcomes.
- Social-emotional instruction can lead to reduced absenteeism and other good results (such as better performance in math classes).
- When a school includes its entire surrounding community (e.g., parks, nearby businesses, even other close schools) in its whole-school social-emotional learning approach, the students involved had a much higher positive impact on their social-emotional adjustment.
- In order for a whole-school approach to work, every member of a school (and a larger community) must be committed to both implementing and supporting the approach over a long-term period of time.
- Some factors that can lead to a higher likelihood of success for whole-school programs include routine assessments, good communication, and strong community-school-family partnerships.

In the final part of this course, we'll examine practical ways that teachers and schools can implement these approaches.

Section 3: Relationships, Self-Care, and Classroom Strategies: Implementing a Whole-School Approach

A critical factor of whole-school wellbeing that was identified as vital in the success of these interventions is the concept of a strong community-teacher-family partnership.

What is the role of relationships between and among senior leadership, school staff, and students in creating a sense of belonging and enjoyment?

One of the most important things a school can do in order to boost social-emotional wellness is invest in its relationships—particularly the connections between school employees (including both administration and teachers) and the young students (Stinger, 2019).

As one source pointed out: Teachers who make a point of standing outside of their classrooms and happily waving and greeting their students on the way into their rooms aren't only adding a bit of joy to their interactions, but they are also building good relationships with their students. Additionally, they may be doing their part to make their students healthier and happier years into the future (Stinger, 2019).

A recent study out of Pediatrics journal found that children who have strong relationships with their families and schools enjoyed protection from a range of negative health outcomes well into adulthood. The negative health outcomes that these children avoided ranged from poor mental health outcomes, being involved in violence with their peers, and even substance abuse (Stinger, 2019).

The takeaway? These connections, early on, can help bolster a student's social-emotional skills and increase their chances of enjoying health for years. The studies that show this data don't go into precisely why these connections could confer such stark health benefits, but they do show a strong correlation. Some researchers have even suggested that strong peer and educator relationships in school could even mitigate some risky behaviors (Stinger, 2019).

Importantly, the researchers noted that the work to help create and sustain these relationships did not have to require intense amounts of effort. Instead, it was much more effective for educators to prioritize small but recurrent habits to help students learn that they could rely on the adults around them for comfort, mentorship, and formation (Stinger, 2019).

Here are some ways that educators can work to form these needed connections with their students and families (Stinger, 2019):

1. **Educators can perform frequent check-ins on their school's climate and culture.** It's hard to form a relationship with something you don't know. One educational expert recommends that educators first begin with administering a survey to the students, parents, and teachers at the beginning of each year or semester, just to get a pulse on the climate and culture in their area (or classroom, or even building). This survey can probe such data as the preferred frequency of email communications, whether students feel safe with their activities, and the types of popular subjects that students would like to have featured in their materials (e.g., the popular books and films that may be able to be incorporated into, say, math problems). Through this type of survey, you may also be able to get a sense of the types of resources that people in your school both have and need, which may, in turn, equip you to be a more helpful educator. After you administer this survey and take time to analyze the results, you and your school can work together to connect people with needed resources and further make your classroom a place where students feel comfortable, happy, and taken care of.
2. **Make it very easy for families to contact you or the person who is most likely to answer their questions.** It may be pragmatic to say that a school-family-community relationship should begin with practicality, but this is likely what families will require initially from your school in order to keep the lines of communication open. Based on the results of any surveys you're able to administer as well as your experience as a teacher, brainstorm the most common questions that parents are likely to ask. Assign a point of contact (or several) and, in the communications with your parents, make very clear who those points of contact are and make it very clear how to get in touch with them. This information should be included in every communication, even unrelated ones. (Think about parents who suddenly have, say, a health question about their student: If they're able to go to the very last email from you and quickly find the

phone number or email of the school nurse, their experience will be much better).

3. **Incorporate evidence-based methods for building relationships between students and staff.** In the past, the CDC has funded programs that work to build needed relationships through one-on-one mentoring programs for students (e.g., that connect students who have a specific need, such as tutoring, with a school staff member who happens to have that expertise), service-learning opportunities, strategic classroom management strategies, and high-quality, safe, and fun clubs (with a school staff member as an overseer) on campus. These types of programs help students on your school campus associate adult staff members with helpful resources and enjoyable experiences.
4. **Sometimes the best way is the simplest: As one of your professional education offerings for your staff, offer educators helpful training on how to invest in their relationships with other staff members, and with students.** This may be even more effective if you extend this training from simply educators to administration, service staff, and even student family members. Having a set of common language and values, as well as a consistent level of care and safety for students, will help your students feel more comfortable and less anxious. (Insofar as this training is extended to families, it'll be key to make it very clear that it's voluntary.) Moreover, you'll need to make sure that this training is high-quality. Elements included in effective programs include units on how to express care and compassion, how to challenge students appropriately, how to support students when they are feeling anxious, how to share power and responsibility effectively, and how to expand possibilities for all studies.
5. **Go out of your way to meet your families where they are.** As you work to improve your relationship with families and community members, make sure that you're offering resources (including timed ones, such as meetings) when they are able to attend. This may include offering meetings before work or in the evenings or on weekends, ideally with refreshments included. If deemed appropriate in your school district, a home visiting program may also work: Traveling to your families' homes, introducing yourself, and learning about their children directly from them can really help invest in your relationship.

What are some specific ways that a school can employ a whole-student, whole-school approach to wellness (Earp, 2021)?

1. First of all, it's important to narrow our focus as we begin to implement these measures. By its very nature, a whole-school approach will require rethinking learning strategies in many different aspects of the educational community. It can therefore be extremely overwhelming, which can lead to paralysis and inaction from the very beginning. It's in a school's best interest to establish its priorities, do the research, and decide from the very earliest days of implementation to spend most of its efforts on the interventions and updates that will have the most effect. This may depend upon the current status of your academic community. For example, in some schools, there may be a need to focus first on physical wellness. In others, the most pressing need might be mental health. This idea leads nicely into the next specific way a school can be effective in this area.
2. A school should establish a streamlined leadership team to make key decisions, drive implementation, and review the progress of these initiatives. Again, due to the nature of transforming a school with these wellness programs, planning meetings and even implementation itself can very quickly devolve into a too-many-cooks-in-the-kitchen scenario. It's a good idea to pull together a representative committee of interested individuals to serve as the central decision-making force. These individuals should represent a wide array of competencies and motives; for example, an effective committee would likely include at least one instructor, health professional, administrative member, and parent. This committee should be in charge of prioritizing community health decisions, initiating and delegating specific projects, and coming up with milestones at which to complete a review of the school's overall progress.
3. Although it's important that this committee serves as the ultimate authority for decision-making in order to drive effective progress, it's also key that the committee obtains buy-in from each member of the academic community. This is one reason that the committee should be representative of each member of the academic community.
4. Finally, this committee should prioritize finding ways to engage with and listen to students as the committee works to implement whole-health initiatives. Whether this means going so far as to invite a student to serve on the committee

itself or if this is just one of the higher-priority recurring actions the committee takes is a decision your school needs to make. However, it's key that the students feel heard. More than that, as the focus of the initiatives your school is engaging in, students can provide extremely valuable feedback regarding the efficacy of your aims.

What key actions educators can take to create a whole-school approach to promote emotional health and well-being?

When researchers propose massive changes and paradigm shifts influencing how educators should be teaching their students, it can be difficult to conceptualize how a teacher can do much without large amounts of support and increased budgets. While it's true that your administration is going to have to get on board in order for you to be able to support your students with a whole school approach in the best way possible, there are actions that teachers should be able to take in order to provide support without huge levels of investment.

A concrete and practical list of actions that teachers can complete to influence this whole-school approach right now includes the following (Elias, 2019):

1. **Try to be a positive role model for your students in both actions and in words, specifically with regards to mental and physical wellness.** Very likely, this is already something on your to-do list, but take a moment to consider specifically what your students see you doing most often—and what your colleagues see you doing. When you're upset, use visible coping mechanisms to show students that they can self-calm effectively. When you have a decision to make, use a demonstrably strategic problem-solving process, and speak about it with your students. Whenever possible, exhibit clear empathetic concern for every other member of your school's community, and act, particularly while on campus, according to the values that you have verbally espoused. This may feel performative, but it's a very real way to influence what others do in a beneficial manner and help demonstrate good behaviors for your impressionable students.
2. **Model responding to potentially frustrating real-life situations in a rational and reasoned way.** For example, when students are being difficult and when other students are clearly aware of or impacted by the difficulty, show a measured reaction. Offer your students the chance to have a voice in your classroom, even when you're aware of what they will say, and prioritize listening to your students'

feedback in tough situations (such as when you are mediating an interpersonal situation in your classroom). When you're having a teachable moment with your students, calmly explain to them what the consequences of their choices are, and, whenever possible, allow your students to have second chances while under your oversight.

3. **Use literature to model emotional and social awareness to your students whenever possible.** No matter what you're teaching—history, science, literature—you should be able to use biographies or autobiographies to highlight the good choices that people have made throughout history (or discuss the less-than-savory ways people have bottled up their feelings and acted out in unhelpful ways). Help your students select positive role models from your subject, have them participate in role-play exercises to help them understand the work that has shaped our culture, and emphasize the types of real-world problems that people are trying to solve today.
4. **Have your students practice writing as a way to think about what they say and communicate effectively.** Communication is important, and offering children a way to think first and speak second can help them invest in their relationships and empathetic skills. You can do this by making sure that your students have access to a wide variety of emotion words, for example, and helping them understand that writing things like “this made me feel sad” is a powerful way to understand their own feelings. You can also help students realize that processing their decisions and choices in writing can make those decisions and choices easier to make! Some good activities for helping students use writing to benefit their lives and your community might include having your students write down their aspirations and goals and spend time verbally connecting those goals to the things they do every day or setting aside time in your students' days to allow them to journal.
5. **Initiate frequent conversations about what it means to have character.** In academic communities, it was the trend for years to stick to objective facts when discussing literature and historical events. Today, you can likely help your students get more excited about your subject matter and promote more healthy classroom discussions by using the material you're already going over (just presented with more depth and subjectivity). If appropriate in your school environment, you could initiate these conversations by sharing personal stories, listening to students' experiences, discussing examples of kindness that you see

in school stories and around campus, discussing both fictional and real-world dilemmas and the types of values that might influence their central conflicts, and discussing the different motivations that we might all have to act the ways that we do. Not only will this help you promote emotional well-being in your classroom, but it'll also help your students invest in their communication, critical thinking, problem-solving, and ethical decision-making skills.

6. **Help your students see the importance of participation in school events and community activities, and give them the support they need to participate fully.** Your students should be part of your whole-school approach to wellness, and that starts with their participation in school and community events and activities! Make sure that you link opportunities for community participation into your classroom's daily activities, and you ensure (as much as possible) that your students have the bandwidth to become involved (e.g., not assigning them extensive amounts of homework in conjunction with school or community events). Take the time to notice and celebrate students who volunteer to help their peers, and encourage your students to take part in cultural events and share what they experienced with the class. The same goes for community service projects, special events, and exercise programs.
7. **Introduce mindfulness to your students.** You may have heard of mindfulness either as a stress-reducing tactic or as a component of a practice such as yoga. You can help your students experience the benefits of this practice without too much effort. For example, you could help your students have a short, quiet, mindful moment at the beginning and end of your class, which will ultimately help them have a more peaceful transition between the different parts of their day. This may help your students avoid stress and also have a more ready mind for studies. You can also give your students time to reflect on what was learned at the end of the day, or time to figure out what they liked most or least about their experiences. You can also get much more valuable feedback on how to support your students in this way. Finally, it can be a great idea to teach your students self-calming strategies. It'd be foolish to ignore the fact that school will be highly stressful for your students even in a best-case scenario. Accepting this and giving your students opportunities to self-soothe can forestall many unproductive and harmful ways that students might otherwise react to stress.
8. **Help your students feel better equipped to make good decisions about their relationships and their health.** Ultimately, the focus of a whole-school approach

to wellness is to help the student be healthier—but, as much as a whole-school healthy environment can help with this, students absolutely need to make the final choice themselves. You can empower them to do so by making this a consistent practice in your classroom. Have your students set frequent health goals, post them publicly in your classroom, and celebrate any forward motion toward those goals. You can also help your students set these goals for things they can do to improve their mental health and ways they treat each other—e.g., increasing their honesty, or working to help others more frequently. While these don't have to be publicly addressed, discussing them openly when appropriate can break down some of their stigmas.

As a teacher, how can I help my students learn to self-soothe?

We've learned that one of the big parts of embracing a student-centric whole school approach requires giving students the real-life strategies they need to pursue mentally healthy actions. You'll find that you can significantly contribute to a whole-school atmosphere of calm comfort and confidence by helping your students find ways to work through the intense emotions and experiences that school-age children are often navigating.

Students who are able to self-soothe and self-regulate are more likely to have the ability to focus on their studies, make better health and happiness choices, and leave other students alone (e.g., avoid antagonistic or bullying behaviors). It may seem like this should be an innate, known behavior, but many students come to school without knowing how or when to calm themselves down, or how to effectively transition their minds between two different topics or activities (Natalie Lynn Kindergarten, 2021).

Here are four effective ways that you can help students navigate stress and practice the calm-down process within your classroom (Natalie Lynn Kindergarten, 2021):

1. Give your students extremely practical methods for identifying their feelings. School-aged students experience many complex emotions. If confusion and frustration happen to be layered on top of those emotions simply because a student doesn't know how to label, react to, or respond effectively to their emotions, the negative aspects of difficult emotions can be amplified. As a result, an overwhelmed student may get angry or emotional, lash out, or shut down completely. In other cases, an overwhelmed student may even have headaches or migraines in response to their anxiety. The first step in learning effective self-

regulation techniques is to help our students figure out, very simply, how to finish the sentence “I am feeling...” It may feel rudimentary to have to teach this, but it is very important. Methods for teaching this could include spending time at the beginning of each year talking about what happiness, sadness, jealousy, pride, and other emotions look and feel like. Younger students could use flashcards or stickers to review or indicate the feelings that they have experienced in a day. This type of activity can go a long way toward helping boost a student’s ability to empathize as well. If you’d like to go the extra mile or gear this type of activity back toward more traditional studies, read books for each emotion, or discuss how historical characters may have felt in the moment as they completed landmark actions.

2. Teach your students to harness deep breathing. This, again, may not sound like a particularly necessary activity, but studies have shown precisely how effective deep breathing can be. In many ways, breathing deeply can represent a very quick way to reset the brain-body connection and help instantly mitigate any difficult emotions a student may be experiencing. If you’re looking for a way to get students out of fight or flight mode in a very quick amount of time, tell them (or sit down and help them) move through several deep breaths. These breaths will help their brains realize that they are not in danger, which can release students from the fight or flight response and allow them to have a more measured reaction to any given situation. This type of exercise could be as simple as having your students take 3-10 deep breaths when they are experiencing any type of stress.
3. Equip your classroom with a calm down corner or a calm down kit. This type of dedicated space or equipment used for calming purposes can help students realize the importance of serenity and teach them a fun and special way (instead of punitive) to calm down. If you have the space, creating a small area in your classroom where a student can specifically go to calm themselves could be beneficial. (This space could also easily double as a reading nook.) In the calm-down corner, you could have a poster or flashcard deck to help students identify the emotions that they’re experiencing. For younger students, it can often be helpful to include a mirror in this corner, so they can see their faces and begin to connect some of the outward signs of distress to an identifiable emotion. This can also help a student learn more about empathy, which will help them as they mature. In the calm down corner, students should know that after they identify their emotions, they should breathe deeply. You might post an infographic, for

older children, about the different types of breathing exercises they could utilize. Finally, students should have access to a few different types of calm-down activities or behaviors they could complete after first identifying their emotions and then breathing. These strategies or activities could include using a fidget toy, counting to a certain number, reading a book, spending ten minutes with a coloring book, or throwing cotton balls into a cup. If you don't have the space in your classroom to specifically set up and dedicate to a calm-down corner, you could instead put together a few different calm-down kits in boxes around your classroom for students to use as they need.

4. Finally, teach your students how to problem-solve effectively. Often, our students experience troublesome emotions when they encounter problems in their daily lives. Teaching our students how to thoughtfully meet these problems and mediate creative solutions is a skill that they will use for their entire lives. Once your students have worked to calm themselves down (an important step in effective problem-solving), give them different ways that they can go about solving the problems that they face. This will help your students feel more in control, and likely more equipped to make a positive, reasoned choice instead of a hasty one. The strategies you select for helping students solve problems will likely depend on their age, at least to some extent. Common strategies might include helping your students consider sharing, moving away from a stressor, reaching out to a trusted adult, or asking other students how they feel instead of making harmful assumptions. If your students are younger, you may be able to provide a classroom stuffed animal to "hold" their anxieties or worries for a time while they figure out an effective way to deal with their problems.

How can educators foster whole-school social and emotional wellbeing through either a large-scale disruption in education or with a sudden shift to remote education?

The past few years have shown the urgency of having strategies in place to support student and teacher wellness even though extremely unexpected and wide-scale disruptive events. Moreover, the simple concept of whole-school outcomes and initiatives can seem to be at odds with the very concept of remote education: If a student is at home, or if all students are at home, can they still reap the benefits of whole-school wellness efforts? What would those efforts look like?

Whether your school educates remotely now or you simply want to be prepared for any shifts that may occur in the future, it's a good idea to be prepared. Here are three distinct strategies you can use to help your students enjoy the benefits of whole-school wellness when they're not able to set foot on campus (Pitts, 2021):

1. **Create continuity.** If you're experiencing a shift from campus learning to distance learning, give your students the ability to enjoy just as much of the familiar structure they experience in your classroom as is possible. Researchers who examined the effects on general wellness that students experienced in the 2020-2021 shift to remote education that accompanied the COVID-19 pandemic found that mimicking the daily schedule and learning environment most familiar to the students (e.g., their classroom culture and atmosphere) as much as possible eased the transition for students. This investment had a correspondingly positive effect on students' ability to self-manage and be socially aware. Perhaps the most important consideration is the ability to continue the core relationship-building that occurred in the classroom in the remote learning environment—including close relationships with friends, but also the mentorship relationship with educators and teachers' aides as well as the good social effects of being around classmates that students didn't really know that well. This also presents several challenges, of course, not the least of which is that students socialize differently through a screen than they might in person. Educators may therefore need to think outside the box to recreate peer and mentor relationships for those in distance learning. Virtual recess, pen-pal programs, and classroom rhythms such as virtual circle time and check-ins have all been shown to at least begin to meet students' needs in this arena. Investing in peer relationships has also shown to be effective, although this may be significantly more difficult in an age of remote education or even social distancing. Using virtual conference rooms strategically may be one effective strategy that allows students some level of socialization (and accompanying trust and support) without needing to be in person. If your students have several different teachers in your remote learning setup, you may be able to work with their other teachers to establish common conventions across your remote classrooms and enjoy enhanced overall effects for everyone involved.
2. **Invest in models of metacognition for your students.** First of all, it's necessary to accept the fact that you as an educator are going to experience the stress of your sudden shift to remote learning (or even just the long-term effects of remote learning) in completely different ways from your students. Why is this important?

A recent study that sought to explore the way that we engage with other people showed that we engage with our own thoughts more—and the way we do this may matter even more than our engagement with other people. Educating your students about this connection and teaching them practical methods for understanding and evaluating their own thoughts can be a valuable way for students to take advantage of the fact they may be spending more time at home without the company of others. This is, of course, no substitute for proper socialization, but it may help students realize other benefits instead. Offering your students frameworks for self-reflection and emphasizing the importance of doing so can lead to meaningful outcomes. As you guide your students through your content, for example, you can ask them to think about and record why the content is valuable or enjoyable to them (or why they don't believe it's useful, or what was most challenging). Giving students the confidence and awareness that they can be critical and provide deep, thoughtful commentary is a skill they will use for the rest of their lives (Pitts, 2021).

3. **Find ways, however creative, to support a student's entire family from afar.** Having the support of the family is always important, but if your students are learning remotely, it's absolutely critical. As an instructor, you'll need to build ways to increase family connection in your teaching processes. Whether you connect with parents through email or in regularly scheduled conferences, you need to be able to determine what type of support a family needs and figure out how to offer at least some level of assistance whenever possible. On a relatively frequent basis, you should send out surveys to families to see what their specific needs are, and brainstorm on an administration level how you can work to meet those needs. You may also be able to hold recurring parent advocacy meetings, provide resources to parents about social and mental health for families, or ensure that teachers and administrators alike are constantly available to provide parent training and answer parent questions about their students' needs (Pitts, 2021).

Section 3 Key Points

- Teachers who make a point of greeting their kids in a positive way could be helping their students with their overall wellness.

- In order for school professionals to successfully implement a whole-school approach to wellness, they need to start by getting focused. Then, they need a streamlined leadership team to brainstorm and create a plan.
- While they are waiting for the plan to be implemented, instructors can begin to help their students by teaching and modeling coping mechanisms, self-regulation techniques, and other ways to self-soothe.

Conclusion

It's time to prioritize social and emotional wellness in our schools, as we know from the latest data findings and recommendations that there is more and more evidence that supports its importance. Investing in our communities, our relationships with our students and families, and in the ways we teach students to learn about their emotions and capacity for empathy will go a long way. At the end of the day, it's key to remember that a well-executed whole-school approach can support the whole child to become happier and healthier in every way possible!

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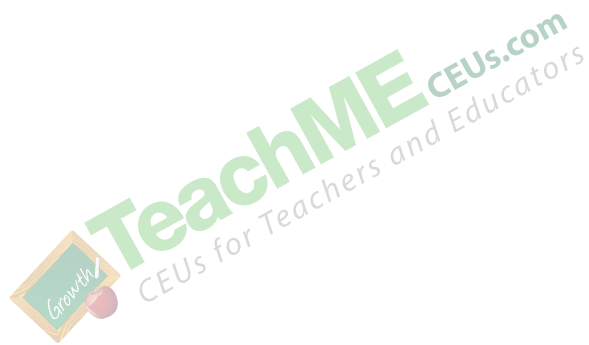


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Part 2:

Introduction	3
Section 1: Psychosocial Issues Faced by Youth Today	3
What are Psychosocial Issues?	4
Prevalence of Psychosocial Issues among School-Aged Youth	4
Why School-Age Youth are Vulnerable	6
Factors Contributing to Psychosocial Issues	7
Recognizing Psychosocial Issues in Students	11
Most Common Psychosocial Issues Among School-Age Youth	13
Section 1 Conclusion	21
Section 1 Key Terms	21
Section 1 Discussion Questions	22
Section 1 Activities	23
Section 2: The Impacts of Psychosocial Issues & Trauma	24
Trauma & Development	24
Impacts of Psychosocial Issues on Academic Performance	26
Impact of Psychosocial Issues on Social Functioning	28
Section 2 Conclusion	30
Section 2 Key Terms	31
Section 2 Discussion Questions	31
Section 2 Activities	32
Section 3: Supporting Students with Psychosocial Issues	33
Strategies for Creating a Safe and Supportive Environment	33
Effective Communication Strategies for Supporting Students	38
Supportive Teaching Strategies	40

Section 3 Conclusion	43
Section 3 Key Terms.....	44
Section 3 Discussion Questions	44
Section 3 Activities	45
Conclusion	46
Case Study	46
References	48



Introduction

As children and adolescents navigate their way through the school system, they are faced with a myriad of psychological and social challenges that can have a significant impact on their lives. Studies show that one in six U.S. children aged 6 to 17 years old experience a mental health disorder each year, with half of mental health conditions beginning by age 14 (NAMI, 2023). Thus, the majority of educators will encounter students struggling with psychosocial challenges. As such, it is crucial for educators to understand the complexity of these issues, how they can affect the academic, emotional, and social development of young people, and how to best support these students.

This course will explore a range of topics related to the psychosocial issues impacting school-aged youth. The modules will explore the most common psychosocial issues faced by youth today, mental health concerns, academic and learning challenges caused by psychosocial issues, and the role that teachers and schools can play in supporting students. By understanding these issues, educators can support young people in achieving their full potential.

Section 1: Psychosocial Issues Faced by Youth Today

Section 1 will introduce the concept of psychosocial issues and discuss their prevalence among children. We will explore the various factors that contribute to these struggles and how they can affect a child's academic performance and social development. In this section we will define psychosocial issues, identify common psychosocial issues faced by kids, discuss the impact of psychosocial issues on academic performance and social development, and explore factors that contribute to psychosocial issues.

What are Psychosocial Issues?

Psychosocial issues refer to a broad range of mental health problems that affect an individual's social, emotional, and psychological well-being. These issues are often interconnected and can impact a person's academic performance, social relationships, and daily functioning (Holland & Riley, 2018). Young people are particularly vulnerable to developing psychosocial issues due to the many challenges they face during their formative years, including academic pressures, social expectations, and family dynamics (Center for Mental Health in Schools, 2018). This section will explore the definition of psychosocial issues and their prevalence among children.

Definition of Psychosocial Issues

Psychosocial issues refer to a range of psychological and social problems that individuals face simultaneously. These issues can include anxiety, depression, trauma, behavioral issues, bullying, and social isolation (Center for Mental Health in Schools, 2018). These issues are often complex and can have multiple contributing factors, including genetic, environmental, and social factors (Center for Mental Health).

Prevalence of Psychosocial Issues among School-Aged Youth

Psychosocial issues are prevalent among school-aged youth, and the rates of these issues appear to be increasing. According to the National Institute of Mental Health (NIMH) (2021), approximately one in six U.S. children aged 2 to 8 years old has a diagnosed mental, behavioral, or developmental disorder. Furthermore, a recent study found that over 20% of adolescents aged 13 to 18 experienced a mental health disorder in the past year (Merikangas et al., 2018). More specifically, according to a national survey of children's health conducted by the Centers for Disease Control and Prevention (CDC) in 2019, approximately 7.7% of children aged 6-17 years (an estimated 4.4 million children) have a current

diagnosis of anxiety, and 3.2% (an estimated 1.8 million children) have a current diagnosis of depression (CDC, 2020). In addition, approximately 6% of children aged 2-17 years (an estimated 3.5 million children) have a current diagnosis of attention-deficit/hyperactivity disorder (ADHD) (CDC, 2020).

Seeking Support

The prevalence of school-aged youth seeking treatment for mental health issues has increased in recent years, highlighting the need for effective mental health support in schools. However, a large number of school-aged youth who require psychosocial support do not, or cannot, seek it. Several studies have examined the prevalence of mental health treatment seeking among school-aged youth. One study found that among U.S. children aged 6 to 17 years old who had a mental health disorder in the past year, only 50.6% received any treatment for their condition (Perou et al., 2018). Another study found that among adolescents with a past-year mental health disorder, only about 39% received treatment (Ghandour et al., 2019).

The reasons for not seeking treatment for mental health issues are varied and complex. Barriers to seeking and receiving mental health treatment include stigma, lack of access to services, and inadequate insurance coverage (Ghandour et al., 2019). Stigma associated with mental health disorders and treatment is a significant barrier for many individuals, including children and adolescents. In some cases, young people and their families may not recognize the signs of a mental health problem, or they may be hesitant to seek help due to concerns about confidentiality or cost. Access to mental health services can also be a challenge for some families, particularly in rural or low-income areas where resources may be limited.

Disparities in mental health treatment seeking among different populations are also a concern. Research suggests that children from racial/ethnic minority and

low-income backgrounds are less likely to receive mental health treatment than their peers (Perou et al., 2018; Ghandour et al., 2019).

These statistics highlight the importance of addressing psychosocial issues among school-aged youth. By providing targeted support and interventions, educators and other professionals can help students to manage their emotions and behaviors, improve academic performance, and enhance overall well-being.

Why School-Age Youth are Vulnerable

School-age youth are more vulnerable to psychosocial issues due to a combination of factors related to their physical, cognitive, and emotional development, as well as environmental stressors they face in their daily lives. According to a study by Hurrell et al. (2019), children and adolescents are at an increased risk of developing psychosocial issues due to the complexity and rapid pace of changes they undergo during their developmental years. These changes include physical, hormonal, and cognitive developments, which can contribute to heightened emotional sensitivity, mood instability, and behavioral changes.

Additionally, school-age youth are exposed to a variety of environmental stressors that can impact their mental health, such as academic pressure, social expectations, and family dynamics (Elmi et al., 2019). Academic pressure is one of the most significant stressors that school-age youth face, with many experiencing high levels of stress and anxiety related to academic performance and success (Lee et al., 2020). This pressure can contribute to the development of mental health disorders such as depression and anxiety. While depression, anxiety, ADHD, and other mental health problems in young people can be rooted in genetics, “many of their troubling symptoms would not have developed if their environmental circumstances had been appropriately different” (Center for Mental Health in Schools, 2018).

Social expectations and peer pressure are also significant stressors that school-age youth face. They can experience bullying and social isolation, which can contribute to the development of low self-esteem and other psychosocial issues (Elmi et al., 2019). Finally, family dynamics such as divorce, conflict, and abuse can also impact the mental health and well-being of school-age youth (Hurrell et al., 2019).

The combination of developmental changes and environmental stressors makes school-age youth particularly vulnerable to developing psychosocial issues. It is essential for educators and caregivers to be aware of these factors and provide appropriate support and resources to help children and adolescents navigate these challenges.

Factors Contributing to Psychosocial Issues

Psychosocial issues among school-aged youth can be caused by a range of factors, including biological, environmental, cultural, and familial factors. Several risk factors have been associated with psychosocial issues in students. These include:

- **Genetic predisposition** - Some psychosocial issues, such as ADHD, have a genetic component. Furthermore, research has found that genetics can play a role in the development of psychosocial issues, particularly when combined with environmental factors (Dekin, 2022).
- **Adverse Childhood Experiences (ACEs)** - ACEs, such as abuse, neglect, and household dysfunction, can have a lasting impact on a child's psychosocial development. Studies consistently show that exposure to ACEs was associated with an increased risk of depression, anxiety, and other psychosocial issues in adulthood (CDC, 2019).
- **Socioeconomic Status** - Children from low-income families are more likely to experience psychosocial issues than those from higher-income families. Research has found that poverty can contribute to stress, family conflict,

and other factors that impact psychosocial development (Francis et al., 2018).

- **Home and School Environment** - Parental mental health, parenting practices, and family dynamics can all impact a child's psychosocial development. Wolicki et al. (2018) found that children of parents with mental health issues were more likely to experience psychosocial issues themselves. Further, factors such as bullying, peer relationships, and academic stress can all contribute to psychosocial issues.

Students who experience one or more of these risk factors are more likely to develop psychosocial issues. Additionally, some students may be at higher risk due to their developmental stage or personal characteristics, such as gender or sexual orientation. Research also shows that certain subgroups of youth, some mentioned above, are at a higher risk for psychosocial issues due to a variety of factors, such as socioeconomic status, race/ethnicity, sexual orientation, and gender identity.

Socioeconomic Status

Adolescents from low-income families may experience more psychosocial issues such as depression, anxiety, and behavior problems. For example, a study by Veselska et al. (2019) found that low-income adolescents in the Czech Republic reported more psychosocial problems, including a higher prevalence of depressive symptoms and lower self-esteem compared to their peers from higher-income families. Likewise, a study of over 1,000 children in an urban school district found that nearly one-third of children from low-income families had symptoms of depression or anxiety (Lopez, Nussbaum, & O'Connor, 2018). Youth from low-income families are more likely to experience psychosocial issues due to a variety of factors, including increased stress and exposure to ACEs, limited access to

healthcare and mental health services, and social and environmental factors that may negatively affect their mental health.

Increased stress and exposure to ACEs

Children from low-income families are more likely to experience stress and adversity, such as exposure to violence, family conflict, and poverty, which can contribute to the development of psychosocial issues. A study by Chen and Paterson (2019) found that children from low-income families in the United States were more likely to experience ACEs, which in turn was associated with a higher risk for mental health problems.

Limited access to healthcare and mental health services

Low-income families may face barriers to accessing healthcare and mental health services due to factors such as lack of insurance, transportation, and availability of services. A study by Owens et al. (2018) found that low-income children in the United States were less likely to receive mental health services than their higher-income peers, even when they had similar levels of need.

Social and environmental factors. Children from low-income families may also be exposed to social and environmental factors that negatively affect their mental health, such as living in unsafe neighborhoods, experiencing food insecurity, and lacking access to quality education. A study by Casey et al. (2018) found that children from low-income families in the United States were more likely to experience chronic stress due to factors such as family conflict, discrimination, and community violence, which in turn was associated with higher rates of depression and anxiety.

Race/Ethnicity

Racism and discrimination have been linked to various psychosocial issues impacting youth. Specifically, research has shown that experiences of racism and

discrimination can negatively impact mental health, increase stress levels, and lead to various psychological problems such as depression, anxiety, and low self-esteem. A study by Martin et al. (2018) found that African American adolescents who experienced racism reported higher levels of depressive symptoms and lower levels of self-esteem. Another study by Huynh and Fuligni (2018) found that Asian American adolescents who reported higher levels of discrimination experienced more depressive symptoms and lower self-esteem.

Racism can also lead to internalized racism, where young people may start to believe negative stereotypes about their own racial or ethnic group. This can have a negative impact on their self-esteem and identity. Juang et al. (2019) found that experiences of racism were associated with higher levels of internalized racism among Asian American adolescents.

Gender & Sexual Orientation

LGBTQ+ youth are at higher risk for psychosocial issues such as depression and suicidal ideation. A study by Wang et al. (2019) found that LGBTQ+ youth in China reported higher levels of depression and anxiety compared to heterosexual youth. Another study by Mustanski et al. (2018) determined that LGBTQ+ youth in the United States had higher rates of suicidal ideation and attempts compared to their heterosexual peers. Transgender and gender non-conforming youth are also at higher risk for psychosocial issues. Clark et al. (2018) found that transgender youth in Canada reported higher levels of depression, anxiety, and suicidal ideation compared to their cisgender peers. Another study by Reisner et al. (2019) found that transgender and gender non-conforming youth in the United States had higher rates of depression, anxiety, and suicidal ideation compared to cisgender youth.

Recognizing Psychosocial Issues in Students

Psychosocial issues are complex and varied, and they can manifest in a variety of ways, making them difficult to identify. However, recognizing the signs and symptoms of psychosocial struggles is crucial for educators to provide appropriate support to students. Students experiencing psychosocial issues may exhibit a wide range of signs and symptoms. Teachers can play an important role in recognizing psychosocial issues in youth. Some ways that teachers can be there for students who may be struggling include the following:

- Observing Behavioral Changes: Teachers should observe changes in behavior, including changes in mood, social interactions, and academic performance (APA, 2019). For example, a student who was previously outgoing and talkative may suddenly become withdrawn and quiet. Teachers should be aware that such changes in behavior may indicate a psychosocial issue.
 - Changes may include sadness, increased irritability, aggression, or social withdrawal.
 - Research has found that mood and behavior changes are common in youth experiencing psychosocial issues, such as depression and anxiety (World Health Organization [WHO], 2021)
 - Difficulty concentrating or paying attention in class
 - Changes in academic performance
 - This may include poor grades, lack of participation, or difficulty with assignments. Research has found that psychosocial issues, such as ADHD, can impact academic performance in youth (WHO).

- Fatigue or low energy
- Physical complaints, such as headaches or stomach aches
 - These symptoms may be related to stress or anxiety. Research has found that youth experiencing psychosocial issues may report more physical symptoms than their peers (WHO).
- Substance use or abuse

It is important to note that these signs and symptoms may vary depending on the specific issue and the individual student. Furthermore, not all students with psychosocial issues exhibit obvious symptoms, making it challenging for educators to identify and support them.

- Listening to students: Teachers should listen to what their students have to say. Students may share information about their home life, relationships, or other personal issues that could be indicative of a psychosocial issue. Teachers should be aware that students may not always use direct language to express their concerns, so active listening is crucial (ED, 2019).
- Recognizing risk factors: Teachers should be aware of risk factors for psychosocial issues, such as trauma, abuse, neglect, and poverty. Students who experience these risk factors may be more likely to experience psychosocial issues, so teachers should be alert to signs of distress in these students (National Academies of Sciences, Engineering, and Medicine, 2019).
- Collaborating with school counselors: Teachers should collaborate with school counselors to identify and address psychosocial issues in their students. School counselors can provide valuable support and resources to both teachers and students (American School Counselor Association, 2018).

Most Common Psychosocial Issues Among School-Age Youth

School-aged youth face a range of psychosocial issues that can significantly impact their academic performance and overall wellbeing. The most common issues include anxiety and depression, attention and behavioral issues such as ADHD and conduct disorder, trauma, bullying, and social isolation.

Emotional Disorders in School-Aged Youth

Anxiety and depression are among the most prevalent mental health concerns among school-aged youth (Merikangas et al., 2018). These conditions are characterized by persistent feelings of sadness, hopelessness, and panic or excessive worrying, which can affect students' academic performance, social interactions, and overall well being. Left untreated, anxiety and depression can lead to serious consequences such as suicide and substance abuse.

Anxiety

Anxiety disorders are estimated to affect up to 20% of children and adolescents (Ghandour et al., 2019). Anxiety can manifest in a variety of ways, including excessive worry, physical symptoms such as headaches or stomach aches, avoidance of certain situations or activities, and difficulty sleeping (NIMH, 2022). Anxiety can be a normal and adaptive response to stress, but when it becomes chronic or interferes with daily functioning, it may require intervention.

Supporting Students with Anxiety. Teachers play an important role in identifying students who may be experiencing anxiety and helping to connect them with appropriate resources, as well as providing students with a learning environment that mitigates symptoms of anxiety. One effective strategy is to create a classroom environment that is supportive and fosters a sense of belonging. This can include regular check-ins with students, opportunities for peer interaction and collaboration, and clear expectations for behavior and academic performance

(Rimm-Kaufman & Sandilos, 2018). Teachers can also work with school counselors or mental health professionals to develop strategies for helping students cope with anxiety, such as relaxation techniques or cognitive-behavioral therapy (CBT) interventions.

In addition, there are several evidence-based interventions that teachers can implement to support students with anxiety. One such intervention is the FRIENDS program, which is a school-based CBT program designed to teach students coping strategies for managing anxiety and stress (Barrett et al., 2018). Another program, the Coping Power Program, focuses on building resilience and social-emotional skills in at-risk youth. These interventions are typically delivered in small group or individual settings and can be implemented by school counselors or mental health professionals.

It is also important for teachers to be aware of potential triggers for anxiety in the classroom. For example, students with anxiety may struggle with public speaking or large group activities, so it may be helpful to provide alternative assignments or accommodations. Teachers can also be mindful of the language they use when giving feedback to students, as overly critical or harsh feedback may exacerbate anxiety symptoms (Hart & Pellegrini, 2019). Finally, teachers can encourage students to seek out resources and support, such as talking to a trusted adult or seeking counseling services.

Depression in School-Aged Youth

Depression is a serious mental health disorder that affects a significant number of school-aged children and adolescents. According to the National Institute of Mental Health (NIMH), approximately 3% of children aged 6-12 and 12% of adolescents aged 13-18 experience major depressive disorder (NIMH, 2020). Depression can have a significant impact on a child's academic and social functioning, as well as their overall quality of life. There are several risk factors for

depression in children and adolescents, including family history of depression, stressful life events, and chronic illness (Luby, 2018). Teachers play a significant role in supporting students who are experiencing depression, as they spend a significant amount of time with students in the classroom.

Specific symptoms of depression in children and adolescents can include sadness, irritability, fatigue, difficulty sleeping or sleeping too much, changes in appetite or weight, difficulty concentrating, and thoughts of self-harm or suicide (NIMH, 2020). It is important for teachers to be aware of these symptoms and to have a plan in place for supporting students who may be experiencing depression.

Supporting Students with Depression. One important aspect of supporting students with depression is promoting a positive school climate that emphasizes social and emotional learning (SEL). SEL programs, which will be discussed in greater detail later, can help students develop coping skills and emotional regulation strategies that can help prevent depression and other mental health disorders (United States Department of Education [ED], 2021). Additionally, teachers can provide support to students by encouraging open communication, offering empathy and understanding, and connecting students and families to mental health resources when necessary.

Attention & Behavioral Issues in School-Aged Youth

Attention and behavioral issues such as ADHD and conduct disorder are also prevalent among school-aged youth (NIMH, 2021). ADHD is a neurodevelopmental disorder characterized by inattention, hyperactivity, and impulsivity, which can make it challenging for students to focus and complete tasks (NIMH). Conduct disorder, on the other hand, is a behavioral disorder characterized by aggressive and antisocial behaviors such as stealing, fighting, and lying, which can lead to academic and legal consequences (NIMH).

Behavioral issues can have a significant impact on a students' academic and social functioning, as well as their overall well-being. There are many factors that can contribute to behavioral issues in school-aged youth, including environmental factors such as poverty, trauma, and family conflict, as well as individual factors such as ADHD, learning disabilities, and mental health disorders (Miller, 2022). It is important for teachers to be aware of these risk factors and to have strategies in place for identifying and supporting students who may be experiencing behavioral issues.

Addressing Behavioral Issues

Behavioral issues are a common concern for teachers working with school-aged youth. These issues can range from minor disruptions in the classroom to more serious problems such as aggression, defiance, and substance abuse (WHO, 2021). When behavioral issues are not addressed, a classroom can become chaotic. Research-based strategies for addressing behavioral and attention issues include using a PBIS system, a trauma-informed approach, and collaborating with families and professionals.

PBIS. One effective strategy for addressing behavioral issues in school-aged youth is through the use of positive behavior interventions and supports (PBIS). PBIS is a proactive approach to behavior management that focuses on teaching and reinforcing positive behaviors rather than punishing negative behaviors (Sugai & Horner, 2020). PBIS has been shown to be effective in reducing problem behaviors and improving academic outcomes for students (Sugai & Horner, 2020).

PBIS involves a tiered system of support, with universal strategies for all students, targeted strategies for students who may be at risk for behavioral issues, and individualized strategies for students with more significant behavioral challenges (Sugai & Horner, 2020). The universal strategies include establishing clear behavior expectations, providing positive reinforcement for desired behavior, and regularly

acknowledging and celebrating positive behavior. Targeted strategies may include additional support and interventions for students who are at risk for behavioral issues, while individualized strategies involve developing individualized behavior plans and providing ongoing support and intervention for students with more significant behavioral challenges (Sugai & Horner).

Research has demonstrated the effectiveness of PBIS in reducing problem behaviors and improving academic outcomes for students. A meta-analysis of 96 studies on PBIS found that it had a significant effect on reducing problem behavior, increasing academic performance, and improving school climate (Waasdorp et al., 2018). Another study found that schools implementing PBIS had significantly lower rates of suspension and expulsion compared to schools without PBIS (Gage et al., 2020).

Trauma-Informed Practices

Another important aspect of addressing behavioral issues in school-aged youth is through the use of trauma-informed practices. Many students who exhibit behavioral issues have experienced trauma, which can have a significant impact on their behavior, academic performance and well-being (Peters et al., 2019). Teachers can support these students by creating a safe classroom environment, using trauma-informed language and strategies, and connecting students and families to appropriate resources for addressing trauma.

Trauma-informed practices involve understanding and responding to the impact of trauma on students' behavior and well-being. Trauma-informed practices emphasize the importance of building positive relationships with students, providing opportunities for choice and control, and creating a sense of safety and predictability in the classroom (Peters et al.). Trauma-informed practices also involve using language that is empowering and supportive rather than

stigmatizing, such as referring to students as "survivors" rather than "victims" of trauma (Peters et al.).

Research has demonstrated the effectiveness of trauma-informed practices in improving students' academic and behavioral outcomes. For example, a study of trauma-informed practices in an elementary school found that students who received trauma-informed support had significantly lower rates of office disciplinary referrals and higher rates of academic achievement compared to students who did not receive trauma-informed support (Kraatz et al., 2019).

Collaboration with Families and Professionals

Collaboration with families and professionals is an essential aspect of supporting students with behavioral issues. Effective collaboration with families involves building positive and respectful relationships, engaging families in the problem-solving process, and providing ongoing communication and support (Sheridan & Kratochwill, 2018). Likewise, this may involve working with school counselors or mental health professionals to address underlying mental health or behavioral concerns. Collaboration with mental health professionals may involve referring students to appropriate resources for mental health support, working collaboratively with mental health professionals to develop behavior plans, and incorporating evidence-based interventions for mental health concerns (Sheridan & Kratochwill). Research has demonstrated the effectiveness of collaboration with families and professionals in improving outcomes for students.

Trauma

Trauma is another psychosocial issue that can have a significant impact on students' academic and social functioning. A trauma response is a psychological and physiological response to an event or series of events that threaten a person's safety or sense of well-being (Leonard, 2020). Traumatic experiences can have a significant impact on school-aged youth and can lead to a variety of physical,

emotional, and behavioral symptoms. Trauma can result from a wide range of experiences, including abuse, neglect, violence, accidents, natural disasters, and medical procedures (American Psychological Association [APA], 2019). These experiences can lead to post-traumatic stress disorder (PTSD), depression, and other mental health issues that can interfere with students' academic and social lives, as well as overall development (National Child Traumatic Stress Network [NCTSN], 2018).

Common Types of Trauma in School-Age Youth

School-aged youth can experience various types of traumatic events that can have a significant impact on their psychosocial well-being. The NCTSN (2018) identifies and describes the following common types of trauma experienced by school-aged youth:

- Physical abuse: Physical abuse is the intentional use of physical force against a child that results in or has the potential to result in physical harm, injury, or even death. Physical abuse can include hitting, slapping, kicking, shaking, or burning.
- Sexual abuse: Sexual abuse is any sexual activity between an adult and a child, or between two children, where one of the children is significantly older or more powerful than the other. Sexual abuse can take many forms, including touching, fondling, penetration, and exposure to pornography.
- Emotional abuse: Emotional abuse involves acts or omissions by caregivers that cause or could cause serious behavioral, cognitive, or emotional problems in a child. This can include verbal abuse, such as belittling or criticizing the child, as well as withholding love, support, or attention.

- Neglect: Neglect is the failure of a caregiver to provide for the child's basic needs, such as food, shelter, clothing, medical care, and education. Neglect can be physical, emotional, or educational.
- Community violence: Exposure to community violence refers to the witnessing or experiencing of violence in the neighborhood or community. Community violence can include shootings, stabbings, and other forms of violence that occur outside the home.
- Natural disasters: Natural disasters, such as hurricanes, floods, earthquakes, and wildfires, can be traumatic for children who experience them. These events can cause physical harm, displacement, and loss of loved ones and possessions.

It is important for teachers to understand these common types of trauma and their impact on school-aged youth. By recognizing the signs and symptoms of trauma, teachers can provide support and help students cope with their experiences.

Bullying, Social Isolation, and Peer Pressure

Bullying and social isolation are other psychosocial issues that can significantly impact school-aged youth. Bullying refers to intentional and repeated aggressive behavior that involves an imbalance of power between the perpetrator and victim (NCTSN, 2018). Bullying can take many forms, including physical, verbal, and cyberbullying, and can lead to depression, anxiety, and other mental health issues (Centers for Disease Control and Prevention [CDC], 2021). Social isolation, on the other hand, refers to a lack of social connections and support, which can cause feelings of loneliness and rejection (Almeida et al., 2021). Social isolation can lead to feelings of loneliness, depression, and low self-esteem, and can make it challenging for students to form positive relationships with their peers and teachers (Almeida et al.).

Addressing Bullying and Social Isolation

Teachers play an essential role in addressing bullying and social isolation in their classrooms. By creating a safe and inclusive learning environment, teachers can promote positive social interactions and prevent the occurrence of bullying (Espelage et al., 2018). Teachers can also identify students who may be experiencing social isolation and provide opportunities for them to connect with their peers and feel a sense of belonging (Espelage et al.).

Interventions aimed at reducing bullying and social isolation have been developed and implemented in schools. For example, school-wide programs that promote positive behavior and encourage a sense of community have been shown to be effective in reducing bullying (Gaffney et al., 2021). Peer mentoring programs and social skills training have also been used to improve social connections and reduce social isolation (Tanyu, 2019).

Section 1 Conclusion

Psychosocial issues are a prevalent and complex problem faced by children today. These issues can have a significant impact on a child's academic performance, social relationships, and overall well-being. While the causes of psychosocial issues are multifaceted, it is crucial for teachers to be aware of the prevalence and potential impact of these issues on their students. With a deeper understanding of psychosocial issues, teachers can play a vital role in identifying and supporting children with mental health problems, promoting a positive and inclusive classroom environment, and facilitating early intervention and treatment for those in need.

Section 1 Key Terms

Cisgender - A person who has a gender identity that matches their sex assigned at birth

Psychosocial Issues - A broad range of mental health problems that affect an individual's social, emotional, and psychological well-being

Transgender - A person whose gender identity does not match with their sex assigned at birth

Trauma - Any experience that overwhelms a person's ability to cope and can include physical, emotional, or sexual abuse, neglect, or exposure to violence or natural disasters

Trauma-Informed Practices - Describes a framework for working with and relating to people who have experienced negative consequences after exposure to trauma

Trauma Response - A psychological and physiological response to an event or series of events that threaten a person's safety or sense of well-being (e.g. fight or flight)

Section 1 Discussion Questions

1. What role do you think parents and family dynamics play in contributing to psychosocial issues in children, and how can teachers work with families to address these issues?
2. In what ways do you see psychosocial issues impact a child's academic performance, and how can teachers create a supportive learning environment for these students?
3. In your practice, how do you identify and support students who have experienced trauma, and what resources are available in your school and community to help students cope with traumatic experiences?
4. What strategies do you implement to support students who identify as LGBTQ+ and may be at a higher risk for psychosocial issues due to societal stigma and discrimination?

5. What do you do to work collaboratively with families and community resources to support students who may be at a higher risk for psychosocial issues?

Section 1 Activities

1. Performing a Google search, find a trauma-informed practice self-assessment tool for teachers.
 - a. Complete the assessment to evaluate how trauma-informed your current teaching practices are.
 - b. Discuss your results with your colleagues, focusing on both areas of strength and areas of improvement. If you're working by yourself, write a short reflection on your results.
 - c. Brainstorm ideas of how to improve trauma-informed practices in your classroom and at your school. If you're working with others, share any strategies that have been effective in working with students that experienced trauma.
 - d. Create an action plan for improving in one area of your self-assessment
2. Read the following scenario and follow-up activities: Jenny is a 13-year-old student who has always been outgoing, talkative, and a high-achiever. However, in recent weeks, her teacher has noticed significant changes in her behavior. Samantha has become more withdrawn and quiet, and she seems to have lost interest in school and extracurricular activities. She is no longer participating in class discussions and is frequently absent. Jenny's teacher found out that her parents are going through a divorce, and Jenny has been having a difficult time coping with the changes at home.

- a. With a partner (if available) or independently, identify the psychosocial symptoms that Samantha is experiencing.
 - b. Discuss how observing behavioral changes, understanding risk factors and active listening might help support students like Jenny.
 - c. Discuss resources that Jenny's teacher can provide her with.
3. Perform research and create a folder of resources for students who
4. are going through various psychosocial issues, such as anxiety, depression, bullying, trauma, etc. You should include community resources such as mental health clinics, support groups, and counseling services, as well as school resources, contact information, and resources in the community. Inform students about the resource and make it anonymously accessible to them and their families.

Section 2: The Impacts of Psychosocial Issues & Trauma

Psychosocial issues and trauma can have a significant impact on school-age youth and their development, mental health, social functioning, and academic performance. These issues can range from behavioral and emotional difficulties to social and environmental stressors. This section provides an overview of the impacts of trauma and psychosocial issues on school-age youth and the importance of addressing these issues in an educational setting.

Trauma & Development

Trauma is defined as any experience that overwhelms a person's ability to cope and can include physical, emotional, or sexual abuse, neglect, or exposure to violence or natural disasters (NCTSN, 2019). Trauma actually impacts brain

structure and development, particularly in children and adolescents whose brains are still developing. The effects of trauma can be immediate and long-lasting and can impact emotional, behavioral, and cognitive functioning (APA, 2020).

In terms of brain development, trauma can disrupt the growth and functioning of key brain areas, including the prefrontal cortex, amygdala, and hippocampus (Maynard, 2020). The prefrontal cortex is responsible for executive functioning, decision-making, and emotional regulation, while the amygdala and hippocampus are involved in processing and regulating emotions and memories (Maynard). Trauma can alter the structure and functioning of these brain regions in several ways. For example, trauma can lead to a reduction in the volume of the prefrontal cortex, which can impair decision-making and emotional regulation; trauma can also lead to an overactive amygdala, which can result in heightened emotional reactivity and difficulty regulating emotions (Woo et al., 2021). These changes can cause children who have experienced trauma to have strong emotional reactions to situations, with less rationality. Additionally, trauma can impair the functioning of the hippocampus, which plays a critical role in memory processing and consolidation. Trauma can lead to a reduction in the volume of the hippocampus, as well as impairments in its functioning. This can result in difficulties with memory recall and emotional regulation (Woo et al.). Children who experience trauma may be at increased risk for a range of mental health conditions, including depression, anxiety, and post-traumatic stress disorder (PTSD) (NCTSN, 2019).

However, it is important to note that not all children who experience trauma will develop mental health problems. The severity and duration of the trauma, as well as a child's individual resilience and coping skills, can all influence the impact of trauma on brain development and mental health outcomes (NCTSN, 2019).

Resilient children who have supportive relationships with caring adults, a sense of competence and self-efficacy, and the ability to regulate their emotions and behavior are less likely to develop mental health problems (NCTSN). As educators,

it's important to be aware of the potential impact of trauma on children's development and to provide appropriate support and resources to help children cope and recover from traumatic experiences.

Impacts of Psychosocial Issues on Academic Performance

The psychosocial issues faced by school-aged youth can have a significant impact on their academic performance. One of the primary impacts of psychosocial issues on school-age youth is a decline in academic performance (Lloyd et al., 2018).

Anxiety & Depression

Children who experience anxiety, depression, trauma, and other psychosocial issues are often distracted, have difficulty concentrating, and struggle to complete tasks (Barrios, 2019). These issues can lead to poor grades, absenteeism, and low graduation rates (Barrios). Students with anxiety and depression may struggle with concentration, memory, and motivation, which can interfere with their ability to learn and retain information (International Board of Credentialing and Continuing Education Standards [IBCCES], 2019).

Studies have consistently shown that children who experience psychosocial issues are at a higher risk of school failure. According to a study published in the Journal of Educational Psychology (Suldo et al., 2019), psychosocial issues, such as anxiety, depression, and social isolation, significantly increase the risk of school dropout. Specifically, students who experience depression are three times more likely to drop out of high school than their peers without depression (NIMH, 2020). The study found that students who experienced these issues were more likely to drop out of school than their peers who were not identified with such struggles. The negative impact of psychosocial issues on academic performance can also contribute to dropout risk. When students experience psychosocial issues, they may struggle with academic performance, attendance, and engagement in school activities. Over time, these issues can escalate, leading to school disengagement

and eventually dropping out (Suldo et al.). Similarly, students who experience anxiety are more likely to miss school and have lower grades (NIMH). The impact of anxiety and depression on academic performance can also be cyclical. Students who struggle academically may experience increased feelings of anxiety and depression, leading to a further decline in academic performance (NIMH).

Schools can play an important role in supporting students with mental health conditions by providing access to mental health services and resources, creating a supportive and inclusive school environment, and promoting mental health literacy among staff and students (Altermann & Boyce, 2019). It is essential for teachers to recognize the impact of psychosocial issues on academic performance and create a supportive classroom environment that promotes overall success. Teachers can support students by providing accommodations and modifications, such as extended time on tests, frequent breaks, makeups, a classroom calm-down area, and access to mental health resources. Additionally, teachers can help students develop coping skills to manage their psychosocial issues and build resiliency. Teaching students stress management techniques, problem-solving skills, and healthy coping mechanisms can help them manage their psychosocial issues and improve their academic performance (Sontag et al., 2020).

Attention & Behavioral Issues

Behavioral and attention issues can have significant impacts on academic performance, as they can interfere with a student's ability to learn, participate in class, and build positive relationships with teachers and peers (Liu et al., 2020). Examples of behavioral issues include disruptive behavior, noncompliance with rules, and aggression toward others (Erwin, 2018). Research has consistently shown that behavioral issues are associated with lower academic achievement, higher rates of absenteeism, and a greater likelihood of dropping out of school (Erwin). Students with behavioral issues may struggle with attention and

concentration, which can also impact their ability to learn and retain information. Additionally, they may struggle to follow instructions and complete assignments, leading to poor grades and a lack of academic progress.

It is important to note that behavioral issues are often the result of underlying emotional, social, or cognitive difficulties. Addressing these underlying issues is essential for promoting positive behavior and improving academic performance. Intervention strategies may include behavior modification techniques, counseling, social skills training, and academic support (Erwin, 2018).

Impact of Psychosocial Issues on Social Functioning

Psychosocial issues can also have a significant impact on students' social functioning. Social functioning refers to an individual's ability to form and maintain relationships, participate in social activities, and engage in effective communication with others (Lieberman, 2019). For example, students who experience bullying may feel isolated and excluded from their peers, leading to low self-esteem and social withdrawal (Weisner & Mock, 2020). Similarly, students with social anxiety may struggle to form positive relationships with their peers and participate in social activities, resulting in feelings of loneliness and social isolation (NIMH, 2020). Further, children who struggle with mental health issues may have difficulty regulating their emotions and behavior, which can make it challenging for them to form positive relationships with peers and adults (APA, 2019).

Depression & Anxiety

Anxiety and depression are two common psychosocial issues that can have negative impacts on an individual's social functioning. Research has consistently shown that anxiety and depression are associated with impaired social functioning (World Health Organization [WHO], 2020). Individuals with anxiety or depression may experience social withdrawal, which can lead to a lack of social support and feelings of isolation. They may also have difficulty initiating and maintaining

conversations, which can make it challenging to form and maintain relationships. Additionally, anxiety and depression can impact an individual's ability to engage in social activities and enjoy free time, further contributing to social isolation and impaired functioning (WHO). Anxiety and depression can impact an individual's self-esteem and self-worth, which can further contribute to impaired social functioning. Individuals with anxiety or depression may engage in negative self-talk and have low self-confidence, which can make it challenging to participate in social situations and form positive relationships with others (WHO).

Attention & Behavioral Issues

Children and adolescents with behavioral and attention issues may have difficulty following social norms and rules, which can lead to social isolation and conflict with peers (Tucker et al., 2019). They may also struggle with communication and social cues, which can make it challenging to form and maintain friendships with peers. Additionally, behavioral and attention issues can impact an individual's ability to engage in activities, which causes further social isolation (Erwin, 2018).

Behavioral and attention issues can also impact an individual's self-esteem and self-worth, causing children and adolescents with these issues to focus on their deficits (Erwin, 2018). Students with behavioral issues often find it difficult to form positive relationships with teachers and peers, which can lead to withdrawal and feelings of alienation. They may also struggle with emotional regulation and impulse control, which can lead to further behavior problems and conflict with others (Erwin).

It is important to note that behavioral and attention issues are treatable conditions, and early intervention can lead to improved social functioning. In addition to various interventions and behavioral therapy, social skills training and participation in communal activities can help children and adolescents with these

issues improve their social functioning and build positive relationships with peers (Hoover & Bostic, 2020).

Trauma

Students who experience trauma or abuse may have difficulty forming trusting relationships with their peers and teachers, leading to social withdrawal and difficulty participating in group activities (Miller, 2023). Individuals who have experienced trauma may have difficulty trusting others, which can lead to isolation. They may also have difficulty regulating their emotions, which may cause conflict with peers and hinder their ability to form and maintain relationships. Trauma can also impact an individual's self-esteem and self-worth, which can further contribute to impaired social functioning and withdrawal. The negative self-talk and low self-confidence that trauma survivors may experience can make it challenging to engage in social situations (Miller).

Teachers can promote social skills development by providing opportunities for peer interaction, group activities, and social-emotional learning (SEL) programs. Additionally, teachers can provide support and intervention for students experiencing social difficulties. Peer mediation programs, conflict resolution training, and social skills groups can help students develop the skills necessary to navigate social interactions and build positive relationships with their peers.

Section 2 Conclusion

Psychosocial issues and trauma can have a major impact on the development, mental health, social functioning, and academic performance of school-age youth. Trauma can disrupt key brain areas responsible for executive functioning, emotional regulation, and memory processing, leading to mental health conditions such as depression, anxiety, and post-traumatic stress disorder. Psychosocial issues like anxiety and depression can significantly affect academic performance, leading to low grades, absenteeism, and a higher risk of dropping

out. As such, it is essential for educators to be aware of these impacts and provide appropriate support and resources to help students cope and recover from traumatic experiences and psychosocial issues. By creating a supportive and inclusive school environment and promoting mental health literacy, teachers can help ensure that school-age youth receive the care they need to succeed academically and emotionally.

Section 2 Key Terms

Amygdala - Region of the brain primarily associated with emotional processes

Hippocampus - A complex brain structure embedded deep into temporal lobe, which has a major role in learning and memory

Prefrontal Cortex - Part of the brain that plays a role in the regulation of complex cognitive, emotional, and behavioral functioning

Resilience - The capacity to withstand or to recover quickly from difficulties

Social Functioning - Refers to an individual's ability to form and maintain relationships, participate in social activities, and engage in effective communication with others

Section 2 Discussion Questions

1. How can teachers create a safe and supportive learning environment that takes into account the unique needs of students who have experienced trauma?
2. What role can schools play in addressing the impacts of psychosocial issues on academic performance, and what resources and support should be provided to students and teachers?

3. How can teachers work collaboratively with mental health professionals to support students with trauma and psychosocial issues, and what are some effective models of collaboration between educators and mental health providers?
4. What are some effective coping skills and techniques that you have used in your life or with your students that can be taught to students who are experiencing attention and behavioral issues? How can your school support these students in managing their behavior and improving their academic performance?

Section 2 Activities

1. Develop a plan to promote mental health literacy among students. This can include activities such as mindfulness exercises, informational videos about mental health conditions, discussions about mental health, and guest speakers who can share their experiences with mental health.
2. Create a list of accommodations and modifications that can support students who experience psychosocial issues, such as anxiety, depression, or trauma. This can include things like providing extra time on tests, offering alternative assignments, or creating a quiet space for students to take a break. The list should be realistic and reflect changes you can really make in your own classroom.
3. Create a student-led mental health awareness campaign for your school. This could include organizing events, creating posters or videos, or starting a social media campaign to raise awareness about mental health and reduce the stigma surrounding mental illness.

Section 3: Supporting Students with Psychosocial Issues

Once educators have recognized the signs and symptoms of psychosocial issues in students, they must take steps to support them effectively. This section will provide an overview of strategies that educators can use to create a supportive environment for students with psychosocial issues.

Strategies for Creating a Safe and Supportive Environment

Creating a safe and supportive environment is essential for students with psychosocial issues. Some strategies that educators can use to create such an environment include encouraging open communication, establishing clear boundaries, providing opportunities for social support, following the Platinum Rule, building relationships and trust, promoting a positive classroom culture, and providing a structured environment.

Encouraging Open Communication

Creating an environment where students feel comfortable talking about their thoughts and feelings can help them feel supported and understood. Open communication creates a safe environment for students by promoting trust, validation, and understanding. According to a study by Decker et al. (2019), open communication can help students feel heard, understood, and supported, which in turn can lead to increased feelings of safety and security in the classroom. Additionally, open communication can promote positive social-emotional development and can help reduce the negative impact of stressors, such as trauma, on students (Schonert-Reichl & Lawlor, 2018). Furthermore, open communication can foster a sense of community and belonging among students, which is important for their overall well-being and academic success (Crosnoe & Johnson, 2018). When students feel connected to their peers and teachers, they

are more likely to engage in the learning process, seek help when needed, and develop positive self-esteem and confidence (Crosnoe & Johnson).

In order to create a safe environment for students through open communication, educators can use active listening skills, encourage open-ended questions and discussion, validate students' experiences and feelings, and demonstrate empathy (Decker et al., 2019). They can also create opportunities for peer-to-peer communication and collaboration, which can further promote a sense of community and belonging (Crosnoe & Johnson, 2018).

Establishing Clear Boundaries

Establishing clear boundaries can help students with psychosocial issues feel safe and secure. Boundaries help students understand what is expected of them and what is not acceptable behavior in the classroom. This, in turn, helps to promote a sense of safety and predictability, allowing students to focus on learning and building positive relationships with their peers and teachers (Reyes et al., 2019). Research has shown that clear and consistent boundaries in the classroom can lead to improved academic performance, reduced disruptive behavior, and increased student engagement (Reyes et al.). In addition, boundaries can help to prevent misunderstandings and conflicts, promoting a sense of fairness and equity in the classroom. When boundaries are not clearly established, students may feel unsure of what is expected of them and may engage in disruptive or disrespectful behavior as a result (Osher, Bear, Sprague, & Doyle, 2018).

Clear boundaries can help students develop self-regulation skills and improve their overall social-emotional development. By establishing boundaries, teachers provide students with a framework for appropriate behavior, allowing them to develop self-control and decision-making skills (Reyes et al., 2019). This can lead to improved self-esteem and confidence, which can in turn contribute to a positive classroom environment. Educators should clearly communicate

expectations and consequences for behavior and consistently enforce them. Educators should also be consistent with their mood, tone, and responses to students. Basically, students should know what to expect from their teachers.

Teachers can establish clear boundaries with students by doing the following:

- Set clear expectations: Establishing clear expectations and guidelines for student behavior and academic performance can help create boundaries and provide structure in the classroom. Research suggests that clear expectations can improve student behavior and academic performance (Gates et al., 2020).
- Consistent enforcement: Teachers should consistently enforce rules and consequences to maintain boundaries and promote a sense of fairness in the classroom. Inconsistencies in enforcement can lead to confusion and undermine the teacher's authority (McDougall & Flatley, 2021).
- Use positive reinforcement: Praising students for good behavior and performance can reinforce boundaries and encourage positive behavior. Studies show that positive reinforcement can improve student behavior and motivation (Fontana & Fernández-Castillo, 2019).
- Encourage communication: Teachers should encourage open communication with their students to establish mutual respect and understanding. Encouraging students to ask questions and share their thoughts and feelings can help prevent boundary violations and promote a safe and positive classroom environment (Cruz et al., 2019).
- Address boundary violations: Teachers should promptly address any boundary violations and use appropriate consequences when necessary. Ignoring or minimizing boundary violations can send mixed messages and erode the teacher's authority (Gates et al., 2020).

Providing Opportunities For Social Support

Providing opportunities for social support, such as peer support groups or mentoring programs, can help students feel connected to others and reduce feelings of isolation. Opportunities for social support enhances a student's sense of belonging, reduces stress, and improves overall mental health. A study by Yang and colleagues (2019) found that social support provided by peers and teachers was positively associated with the sense of belonging of high school students. This sense of belonging was found to be a key factor in creating a safe school environment for students. Social support from teachers and peers is also a protective factor against stress and anxiety in middle school students; studies show social support as an important coping mechanism to reduce stress and enhance well-being (McCoey et al., 2020).

Following the Platinum Rule

People typically refer to the Golden Rule: Treat others how you want to be treated. However, to truly display empathy, teachers must instead follow the Platinum Rule: "Treat others the way they want — and need — to be treated" (Morin, 2019). The Platinum Rule puts the focus on understanding what students need from their teachers, rather than focusing on what we think they need (Morin).

Building Relationships and Trust

Building strong relationships with students is critical to creating a safe and supportive environment. Educators should take time to get to know their students and show an interest in their lives. This can involve asking about students' interests and hobbies, attending extracurricular activities, or simply taking time to chat with students before or after class. When students feel that their teachers care about them as individuals, they are more likely to feel supported and motivated to succeed.

In addition to building relationships, educators can also build trust with students by being consistent and reliable. This means following through on promises, being transparent about expectations, and being available to students when they need support. By demonstrating consistency and reliability, educators can help students feel safe and secure.

Promoting a Positive Classroom Culture

Creating a positive classroom culture can help students with psychosocial issues feel valued and included. This can involve promoting positive behavior through praise and recognition, encouraging collaboration and teamwork, and creating a sense of community in the classroom. When students feel that they are part of a supportive community, they are more likely to feel comfortable sharing their thoughts and feelings with their peers and teachers. “A sense of belonging at school means feeling a sense of acceptance, respect, inclusion and support in a learning environment” (Bowen, 2021). Moreover, when students feel a sense of belonging, they are more engaged with their work, display more on-task behavior, and more likely to choose to be in the school environment (Bowen). On the other hand, students who don't feel a sense of belonging have greater difficulty focusing on cognitive tasks because their brains are experiencing emotional difficulties; this can lead to frequent nurse visits, truancy, and an overall avoidance of the school environment (Bowen).

Educators can promote a positive classroom culture by modeling positive behavior themselves. This means being respectful, compassionate, and empathetic towards students, and demonstrating a willingness to learn from mistakes (Bowen). When educators model positive behavior, they create a safe and supportive environment that encourages students to do the same.

Providing a Structured and Predictable Environment

Students with psychosocial issues may feel overwhelmed or anxious in unstructured or unpredictable environments. Providing a structured and predictable environment can help students feel more comfortable and secure (Huang & Weisman, 2019). This can involve establishing clear routines and expectations for behavior, and providing clear instructions for assignments and activities. In addition, educators can help students feel more comfortable by providing a physical environment that is welcoming and comfortable. Overall, creating a safe and supportive environment requires educators to be intentional and thoughtful in their approach to teaching. By building relationships, promoting positive behavior, and providing structure and predictability, educators can create a classroom environment that supports the needs of all students.

Effective Communication Strategies for Supporting Students

Communication is key when it comes to building positive relationships with students, and making them feel safe and supported. Effective communication strategies are essential for supporting all students, but particularly those with psychosocial issues. Some effective communication strategies that educators can use include:

- **Using non-judgmental language:** Using non-judgmental language can help students feel heard and respected. Educators should avoid using stigmatizing language or making assumptions about students' experiences (Alvidrez, S., & O'Brien, 2019).
- **Encouraging self-expression:** Encouraging students to express themselves can help them process their feelings and develop coping strategies. Educators can provide opportunities for self-expression through activities such as journaling or art projects.

- Collaborating with other professionals: Collaborating with school counselors, psychologists, or social workers can help educators provide comprehensive support to students with psychosocial issues. Educators should communicate with these professionals regularly to ensure that students receive the support they need.
- Active listening: Active listening involves giving students your full attention and seeking to understand their perspective. This can involve paraphrasing what the student has said to demonstrate understanding and clarifying any misunderstandings (Sudderth, 2022).
- Nonverbal communication: Nonverbal communication, such as body language and tone of voice, can communicate a great deal to students. It's important for educators to be aware of their nonverbal communication and use it to convey empathy and support (Kim et al., 2019).
- Clear and concise language: Using clear and concise language can help students understand expectations and reduce confusion or frustration. Avoiding jargon or technical language can also be helpful for students who may struggle with processing language, as well as English Language Learners (ELLs).
- Collaborative problem-solving: When students experience challenges, collaborative problem-solving can help them feel supported and empowered. This involves working together to identify solutions and develop a plan of action (White et al., 2018).
- Provide regular feedback: Effective communication can also involve providing regular feedback to students. This can help students understand their progress and identify areas for improvement. Providing specific, actionable feedback can be particularly helpful for students with

psychosocial issues who may struggle with self-esteem and self-confidence (Hoover et al., 2018).

In addition, it's important for educators to be aware of their own biases and assumptions when communicating with students. Cultivating a mindset of empathy and understanding can help to build positive relationships with students and create a supportive classroom environment.

Supportive Teaching Strategies

Strategies that support the diverse learning needs of students with psychosocial issues require educators to be flexible and adaptable in their approach to teaching. By using differentiated instruction, SEL, and collaborative learning, teachers can create a learning environment that supports all learners.

Differentiated Instruction

Differentiated instruction is a teaching strategy that involves adapting instruction to meet the diverse learning needs of students (Tomlinson & Moon, 2020). For students with psychosocial issues, differentiated instruction can involve providing accommodations and modifications that support their emotional and behavioral needs; this might include providing additional time for assignments or assessments, allowing students to take breaks when needed, or providing visual aids to support learning (Solomon et al., 2018a). Differentiated instruction can also involve providing opportunities for students to demonstrate their learning in varied ways. For example, some students may struggle with written assignments but excel at oral presentations. By providing a range of options for demonstrating learning, educators can support the diverse needs of their students and create an inclusive classroom environment.

Differentiated instruction is effective because it acknowledges that not all students have the same learning styles and needs, and it provides individualized

instruction to support their learning (Solomon et al., 2018b). This helps to ensure that all students have the opportunity to succeed. While differentiated instruction is necessary for students with diverse learning needs to stay engaged, motivated, and to access the content, it can also benefit all students. Further, according to a 2019 study, differentiated instruction can also help to reduce students' anxiety and promote their emotional well-being. By providing instruction that is adapted to their needs, students may feel more comfortable and secure in the classroom (Nelson et al., 2019).

Social and Emotional Learning (SEL)

Social and emotional learning (SEL) is a process that helps students develop the skills and attitudes necessary to manage their emotions, build positive relationships, and make responsible decisions (CASEL, 2023). For students with psychosocial issues, SEL can be particularly important in helping them develop the attributes they need to succeed in school and in life. SEL can be integrated into daily instruction through a variety of activities and strategies, such as:

- Providing opportunities for students to practice social skills, such as communication, problem-solving, and conflict resolution.
- Teaching self-regulation skills, such as mindfulness and relaxation techniques.
- Encouraging students to reflect on their emotions and develop a positive self-concept.
- Providing opportunities for students to engage in service learning and community service projects, which can help build empathy and social awareness. (Durlak et al., 2018)

By integrating SEL into daily instruction, educators can create a supportive and inclusive classroom environment that promotes the social and emotional well-being of all students.

SEL instruction has been shown to be particularly beneficial for students with psychosocial issues, as it can help them to develop skills and strategies for managing their emotions and behaviors, building positive relationships, and making responsible decisions (Fernández-Batanero et al., 2019; Zins et al., 2020). For example, a 2019 study found that students with emotional and behavioral disorders who participated in an SEL program showed significant improvements in social skills, self-esteem, and academic performance (Fernández-Batanero et al.). Another study from 2020 found that SEL interventions can improve mental health outcomes for students with psychosocial issues, such as reducing anxiety and depression symptoms (Zins et al.).

SEL instruction can help students with psychosocial issues feel more connected and supported in the school community, which can in turn improve their overall well-being (Fernández-Batanero et al., 2019; Zins et al., 2020). By providing opportunities for students to practice social skills, develop positive relationships with peers and adults, and engage in service learning and community service projects, SEL instruction can help students to build a sense of belonging and purpose, which is particularly important for students who may struggle with social isolation or disconnection (Zins et al.).

Collaborative Learning

Collaborative learning is a teaching strategy that involves students working together to achieve a common goal. Collaborative learning has been found to be beneficial for students with psychosocial issues in several ways. One of the main benefits is that it can help these students build positive relationships with peers, which is important for their social and emotional development (Gennuso &

Blaschke, 2021). Collaborative learning can also support the development of social skills, such as communication and problem-solving, as students work together to achieve a common goal (Berkovich & Eyal, 2021). This type of learning can involve a range of activities, such as group projects, peer mentoring, and cooperative learning activities (Baird & Bridges, 2021). By working together, students can learn from each other and develop the skills they need to succeed in school and in life.

Collaborative learning can also provide students with opportunities to receive support and feedback from their peers, which can be particularly helpful for students who may struggle with self-esteem or confidence issues. For example, Gennuso and Blaschke (2021) found that collaborative learning activities that involved peer mentoring helped to improve the self-efficacy and academic performance of students with learning disabilities. Collaborative learning can also provide a sense of belonging and inclusion for students who may feel isolated or disconnected from the school community (Berkovich & Eyal, 2021).

In addition, collaborative learning can help students develop important skills for success in their future careers, such as teamwork and collaboration. By working together in a collaborative learning environment, students can learn to value and appreciate the contributions of others, which can help them to work effectively in a team setting in their future professions (Berkovich & Eyal, 2021). Overall, collaborative learning is a beneficial teaching strategy for students with psychosocial issues, as it can support their social and emotional development, provide opportunities for peer support and feedback, and help them to develop important skills for success in school and beyond.

Section 3 Conclusion

Creating a safe and supportive environment for students with psychosocial issues is essential for their well-being, social-functioning and academic success.

Establishing clear boundaries and open communication, providing opportunities

for social support, building relationships and trust, promoting a positive classroom culture, and providing a structured environment are some of the strategies that educators can use to create such an environment. Furthermore, using teaching strategies that promote fairness and equity, such as differentiated instruction, SEL, and collaborative learning helps to build a safe and supportive environment where all students can thrive.

Section 3 Key Terms

Active Listening - A communication technique where the listener focuses fully on what the speaker is saying, and shows understanding and engagement by using various verbal and nonverbal cues

Collaborative Learning - A teaching strategy that involves students working together to achieve a common goal

Differentiated Instruction - A teaching strategy that involves adapting instruction to meet the diverse learning needs of students

Empathy - The ability to understand and share the feelings of another.

Social-Emotional Learning (SEL) - A process that helps students develop the skills and attitudes necessary to manage their emotions, build positive relationships, and make responsible decisions

Section 3 Discussion Questions

1. How can teachers encourage open communication with students who may be hesitant to share personal experiences in a classroom setting? How do you personally break down barriers with students to establish trust?
2. What are some effective ways for educators to establish clear boundaries while also maintaining a supportive and compassionate learning environment for students with psychosocial issues?

- a. Discuss a time that you were forced to establish clear boundaries in school.
 - b. How did it make you and the student/s feel?
 - c. Do you feel like you successfully established the boundary, while maintaining empathy and compassion?
3. In what ways can teachers provide opportunities for social support for students with psychosocial issues, both in and out of the classroom? What are some specific strategies that you have used in your practice?

Section 3 Activities

1. Classroom observation: With a participating colleague, observe each other's classrooms for a class period or two, and then provide feedback for one another on how well the strategies discussed in this section are being implemented. Alternatively, set up a camera to record yourself during one of your class periods. Watch it back and assess yourself on how well you are implementing the strategies.
2. Research classroom management strategies that are effective in creating a safe and supportive environment for students, with a focus on students with psychosocial issues.
 - a. Make a list of these strategies and keep them for reference.
 - b. Choose 1-2 strategies to try to implement in your classroom.
 - c. Reflect on what works and what does not work.
3. Read the following scenario and then answer the questions: Bryson is a 10-year-old student who has a history of ADHD and anxiety disorder. Bryson has difficulty focusing on classwork and often becomes easily frustrated

with academic tasks. He struggles with transitions between activities and can become disruptive in the classroom. Bryson's social skills are also underdeveloped, and he struggles to form positive relationships with his peers.

- a. Develop strategies to create a safe and supportive learning environment for Bryson.
- b. Evaluate your strategies to see if you can implement them in your own classroom.

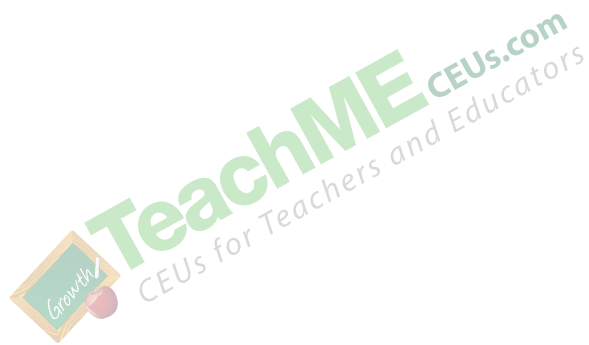
Conclusion

The psychosocial challenges that children and adolescents face in the school system can have a profound impact on their lives. The prevalence of mental health disorders among school-aged children is a significant concern, and educators must be equipped with the knowledge and skills to support their students in navigating these issues. This course provides valuable insights into the most common psychosocial issues facing young people today, the academic and learning challenges that can result, and the critical role that educators and schools can play in providing support. By understanding these issues and providing effective support, educators can help students achieve their full potential and succeed academically, emotionally, and socially.

Case Study

Ms. Maple is a middle school teacher who has noticed that students in her school are facing a range of psychological and social issues that are impacting their academic performance and well-being. She has observed students experiencing stress, anxiety, bullying, social isolation, and academic difficulties. Ms. Maple

recognizes that she needs to understand these issues better to support her students effectively. Further, Ms. Maple wants to help her school's administration to establish school wide initiatives to address the issues, but she does not know where to start. She decides to pursue professional development in the area of social and emotional support for all students, with specific focus on assisting those with psychosocial struggles.



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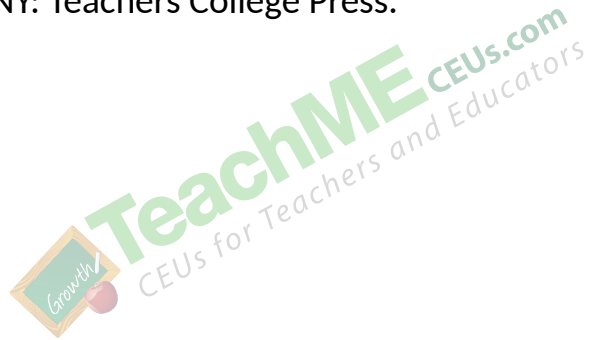
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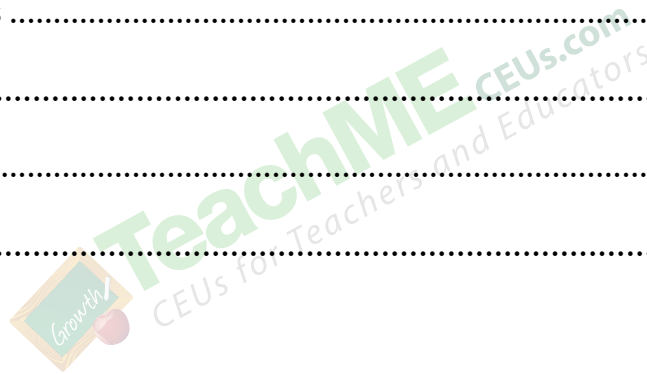


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Part 3:

Introduction	3
What is Youth Violence?	3
Section 1: Bullying.....	3
Types of Bullying.....	4
Why Do Some Children Bully Others?	6
Risk Factors & Protective Factors.....	6
Bullying Statistics	13
Effects of Bullying	13
Section 1 Key Terms.....	15
Section 1 Reflection Questions.....	15
Section 1 Activities	15
Section 2: Gang-Related Violence.....	16
Why Youth Join Gangs	17
Risk Factors & Protective Factors.....	18
Consequences of Gangs	22
Section 2 Key Terms.....	23
Section 2 Reflection Questions.....	23
Section 2 Activities	23
Section 3: Teen Dating Violence.....	24
Teen Dating Violence (TDV) Prevalence.....	26
Risk Factors & Protective Factors.....	26
Consequences of TDV.....	29
Section 3 Key Terms.....	31

Section 3 Discussion Questions	31
Section 3 Activities	31
Section 4: Youth Violence Prevention	32
Strengthen Youth Skills	32
Connect Youth to Caring Adults and Activities	34
Create Protective Community Environments	35
Additional Prevention Methods for Schools	36
Section 4 Key Terms	40
Section 4 Discussion Questions	40
Section 4 Activities	40
Conclusion	41
Case Study	41
References	42



Introduction

Violence and bullying behaviors are prevalent among school-aged youth. The term “youth violence” covers a wide range of behaviors, including bullying, fighting, teen dating violence, and gang related violence. Violence and bullying can cause emotional and physical harm to young people, and can have long-term negative impacts on their physical and emotional health. Because young people spend so much of their lives at school, educators are in the unique position to prevent youth violence by providing youth with guidance, resources, and other protective factors. In order to be advocates against youth violence and bullying, educators must know the prevalence of youth violence and bullying, be aware of specific risk and protective factors, know the impacts of violence and bullying, and be armed with specific strategies for addressing and preventing youth violence and bullying.

What is Youth Violence?

The Center for Disease Control and Prevention (CDC) (2022) defines youth violence as, “The intentional use of physical force or power to threaten or harm others by young people ages 10-24.” Youth violence comes in many forms, including **bullying, gang-related violence, and teen dating violence**. Youth violence is considered a global public health problem, with over 200,000 homicides among 10-29 year olds occurring worldwide per year, making it the fourth leading cause of death among this age group (World Health Organization [WHO], 2020). Further, for every young person that is killed, many more sustain injuries that require serious medical treatment. “When it is not fatal, youth violence has a serious, often lifelong, impact on a person's physical, psychological and social functioning” (WHO). In fact, youth violence is considered an Adverse Childhood Experience (ACE), which is defined as a “potentially traumatic event that occurs in childhood (0-17 years)” (CDC).

Section 1: Bullying

Bullying is a form of youth violence, as well as an ACE. The CDC (2022) defines bullying in the following way: “Any unwanted aggressive behavior(s) by another youth or group of youths, who are not siblings or current dating partners, that involves an observed or perceived power imbalance, and is repeated multiple times or is highly likely to be

repeated.” Bullying can inflict physical, psychological, social, or educational harm or distress on the targeted individual (CDC). While bullying can occur at any age, research shows that it increases in late childhood and peaks during early adolescence, and typically takes place in unstructured settings like the playground, cafeteria, bus, or the hallways at school (Children’s Hospital of Philadelphia, 2020).

Bullying does not only involve the person bullying and the victim being bullied. “Bullying is a social behavior that takes place mainly at school and involves everyone who witnesses it, even if they are not directly involved in it” (Navarro et al., 2018). For example, in the case of bullying on the school playground, there is often the “ringleader,” who initiates the bullying, the victim, who is being bullied, “reinforcers,” who join in and encourage the bullying, “defenders,” who try to help the victim, and “bystanders,” who see the bullying but ignore it (Navarro et al.). In addition to the roles listed above, there might also be what is referred to as a bully victim, which means that the individual is both a bully and victim (Navarro et al.).

Types of Bullying

There are four common categories of bullying: Physical, Verbal, Relational/Social, Cyberbullying.

Physical Bullying

Physical bullying involves inflicting any type of unwanted physical harm to a person’s body or the individual’s belongings (Stopbullying.gov, 2022). This includes but is not limited to hitting, kicking, pinching, tripping, spitting, or damaging someone’s personal possessions. Physical bullying does not necessarily mean that the target gets seriously injured, but can occur in a way that just causes that person to be uncomfortable.

Verbal Bullying

Verbal bullying is saying or writing mean things about someone. Verbal bullying includes teasing, name-calling, inappropriate sexual comments, taunting, or threatening (Stopbullying).

Social Bullying

Social bullying, also referred to as relational bullying, involves hurting someone's reputation of relationships (Stopbullying). Social bullying includes leaving someone out on purpose, spreading rumors, publicly embarrassing someone, and telling others not to be friends with someone.

Cyberbullying

Cyberbullying is bullying that takes place on digital devices, like cell phones, laptops, tablets, et cetera (Stopbullying). Cyberbullying can occur via text messages, social media, email, online forums, and gaming communities. Examples of cyberbullying include sending "hurtful, abusive, or threatening" messages, images, or videos to someone, spreading lies or posting embarrassing photos or videos of someone on social media or via messaging apps, or impersonating someone and making posts or sending messages to others through fake accounts (Unicef, 2022).

Special Concerns with Cyberbullying. The internet allows for quick, vast communication amongst its users. With more young people using social media, digital forums like Reddit, and various gaming platforms, content shared is not only viewed by friends and acquaintances, but can also be accessed by strangers (Unicef, 2022). The accessibility to posted content creates additional challenges when it comes to protecting the privacy of individuals, as well as protecting children from online predators. This can also lead to doxing, which is a form of online bullying meant to destroy individuals' privacy by "making their personal information public, including addresses, social security, credit card and phone numbers, links to social media accounts, and other private data" (Stopbullying, 2022). Obviously, this poses concerns not only for individuals' mental health but also for their safety.

Further, the content shared by individuals online "creates a kind of permanent public record of their views, activities, and behavior" (Unicef). Online posts are then often accessible to schools, jobs, colleges, clubs, or anyone else seeking information about an individual. Therefore, cyberbullying can damage the reputations of both the individuals being bullied and the ones doing the bullying. Unicef identifies unique concerns about cyberbullying, stating that it can be:

- **Persistent:** Technology allows for immediate communication and continuous communication 24-hours a day; therefore, it is difficult for someone experiencing cyberbullying to find an escape.

- **Permanent:** The majority of information posted online is “permanent and public, if not reported and removed,” meaning that anyone can see it, and it can’t really be gone, even if the user “deletes” the post.
- **Hard to Notice:** Sometimes teachers and parents do not have access to all of the digital platforms that their children use, so cyberbullying can go unnoticed.

Cyberbullying is particularly dangerous because it can happen quickly, reach a vast audience, and often fly under the radar of authority figures.

Why Do Some Children Bully Others?

One theory for why some children bully others is referred to as the dominance hypothesis. This theory states “that some children who bully are driven by the desire to have a dominant status in the peer group” (Navarro et al., 2018). In other words, bullies expect a positive outcome from their bullying, such as peer approval and popularity (Navarro et al.). Researchers have also found that bullies engage in behavior called moral disengagement, which describes “the process by which someone convinces himself/herself that standards of right and wrong (for example, that hurting people is negative and inappropriate) do not apply to them” (Navarro et al.).

Bully-Victims. Bully-victims are individuals that bully others but are also bullied themselves. Bully-victims “are highly rejected by their peers and show both externalising and internalising problems” (Menesini & Salmivalli, 2017). Bully-victims often come from the most difficult home environments, experiencing maltreatment and/or neglectful parenting (Menesini & Salmivalli).

Risk Factors & Protective Factors

There is no single factor that puts a child more at-risk for being bullied or for bullying other people. Instead, there are a number of factors that come into play that make someone more at-risk for either situation. It is important to note that just because individuals experience one or more of these risk factors, it does not mean that they will definitely be a bully or be bullied, but rather they are at an increased risk.

Risk Factors for Bullying Perpetration

Likewise, there is not one type of bully, or one reason why bullying occurs. Instead, it is usually a combination of reasons why someone chooses to bully other people. Gordon (2020) categorizes risk factors in the following way: 1) Family risk factors, 2) Personality risk factors, and 3) Behavioral risk factors.

Family Risk Factors. Family issues that can contribute to bullying include witnessing or experiencing abuse, having permissive parents, and seeing or experiencing bullying by siblings (Gordon, 2020).

Children that come from abusive homes are more likely to exhibit bullying behavior because “aggression, violence and manipulation” are modeled for them by trusted adults (Gordon). If children are dealing with abuse at home, they might not know how to interact with others in a non-aggressive way.

When parents do not establish rules or provide supervision for their children, young people are more likely to resort to bullying (Gordon). In this case, parents are also less likely to enforce consequences to stop the bullying. Lack of parental involvement “can create all types of issues, including bullying behavior” (Gordon).

When a child sees or experiences bullying by a sibling, that child is more likely to exhibit bullying behavior outside of the home. When a younger sibling is bullied by an older sibling, it creates a sense of “powerlessness”; “to regain that feeling of power, these kids may bully others, sometimes even emulating the older sibling” (Gordon).

Personality Risk Factors. There are certain personality traits that put an individual at a higher risk of becoming a bully including having low self esteem, relating negatively to others, craving power, showing a lack of empathy, and having a low frustration tolerance (Gordon, 2020). Kids with low self esteem are more likely to exhibit bullying behavior because it gives them a sense of power and control, which they often lack otherwise (Gordon). Gordon explains, “They may also brag about their exploits and abilities in order to cover for a low sense of self-worth.” For these children, even negative attention contributes to their need for recognition from others.

Another personality risk factor is relating to others negatively. This might present itself as making derogatory comments about another person’s appearance, abilities, or intelligence, or it might be an overall intolerance of other races, cultures, or lifestyles (Gordon). Gordon reports that “much of this prejudicial bullying comes from fear, a lack of understanding and is often learned at home.”

When children have not learned empathy, they might resort to bullying. “They are either unable or unwilling to understand how a person might feel when cruel things are said or done,” or they blame the victim rather than acknowledging their pain (Gordon, 2020). For instance, rather than apologizing for making a cruel joke, someone with a lack of empathy might defer blame to the victim by saying, “He needs to learn to take a joke!” Further, “when bullies ignore the feelings of others, it could be because they are not able to see that the victims are suffering, which might make the bullying behavior more likely” (Navarro et al., 2018).

Frustration tolerance is a skill that most children learn in early years, though it typically takes longer to be mastered. For most children, when something doesn’t go their way, they adapt to the situation and the frustration dissipates. However, for some children, not getting what they want feels “unbearable,” and “they bully others to force the desired outcome” (Gordon, 2020).

Behavioral Risk Factors. Gordon (2020) explains that sometimes kids “exhibit certain behaviors that put them at risk for solving issues through bullying rather than healthy forms of communication and collaboration.” Some of these behavioral risk factors include acting with aggression and impulsivity, using physical strength to intimidate others, excluding other children, and being picked on by others.

Children that exhibit aggression often have poor impulse control and a hot temper. Research shows that bullies are often “driven by impulsivity, meaning that they tend to act without prior reflection or thought” (Navarro et al., 2018). “Rather than using reasoning, they resort to coercion and dominance” (Gordon, 2020). Likewise, rather than having a discussion, they might resort to hitting, kicking, or yelling. Aggressive behavior often accompanies a low frustration tolerance because the child does not know how to express frustration in a healthy way. “Having attitudes and cognitions that favour aggression and low levels of empathy towards other people are associated with both general aggression and bullying” (Menesini & Salmivalli, 2017).

Children who use their size or strength to get what they want often do so through bullying. “They control situations by making other children feel weak or powerless” (Gordon, 2020). This type of behavior often occurs when children feel powerless in other ways, so they use their size and strength to control others.

Bully-prone children might try to isolate and exclude other children. “Not only do they refuse to let another person participate, but they encourage other kids to ignore the

person as well” (Gordon, 2020). Girls tend to exhibit this type of behavior more than boys do but it can happen with both sexes.

Finally, when a child is picked on by peers, he or she often bullies other people to deal with the painful feelings of being bullied. These children are referred to as “bully victims” and they “suffer from the same characteristics as a victim” (Gordon, 2020). These situations are often trickier because they cannot be solved with simple disciplinary action of the bully, but must also involve support and intervention for the bullying they experienced.

Risk Factors for Bullying Victimization

Understanding who is at the greatest risk of being bullied can help teachers and administrators in their efforts to prevent it. Stopbullying.gov (2021) explains that children that are bullied usually have one or more of the following risk factors: 1) Are perceived as different from their peers, 2) Are perceived as weak, anxious, or have low self esteem, 3) Are not accepted by peers.

Perceived as Different. “One of the most common reasons kids are bullied is because something about them makes them different from the majority” (Gordon, 2022). Children can be perceived as different for a number of reasons, including but not limited to being overweight or underweight, their clothing style, gender diversity and sexual preferences, having a disability, being unable to afford trendy clothes or toys, or even being the new kid at school. For instance, students with disabilities are two or three times more likely to be bullied than their non-disabled peers (Kids Included Together [Kit], 2021). Whether a child has a physical, emotional, or learning disability, a disability in itself leads to the perception that the child is different from peers. Further, results from the CDC’s 2019 Youth Risk Behavior Surveillance showed that LGBTQ+ youth are more likely to be bullied than cisgender youth (Roberts, 2020).

Perceived as Weak / Anxious / Low Self Esteem. Bullies will often prey on children that they perceive as weak because they are less likely to defend themselves. According to the dominance hypothesis, bullies target weaker students with fewer friends because “by dominating victims like this, bullies can repeatedly demonstrate their power to the rest of the group, reinforcing their popular position without the fear of being confronted by the victim” (Navarro et al., 2018).

Not Accepted by Peers. Research shows that kids who are bullied often are less popular and not accepted by their peers. “Long before the bullying begins, these kids might be rejected by their peers or left out of social situations” (Gordon, 2022). Likewise, for whatever reason, these students also struggle to make friends. Children with fewer friends are often targeted because they do not have a group of peers to stick up for them or stand up to the bully.

Warning Signs

It is important for educators to recognize the signs that a child is being bullied; however, there are not always obvious warning signs in a bullying situation. Stopbullying.gov (2022) shares signs that suggest a bullying problem:

- Unexplainable injuries
- Lost or destroyed property (e.g. books, clothing, electronics)
- Anxiety about attending school (Note: This might manifest as faking illness, frequent stomach aches or headaches, and other psychosomatic symptoms)
- Changes in eating habits
- Sudden loss of friends or avoidance of social situations
- Difficulty sleeping or frequent nightmares
- Declining grades
- Decreased self esteem
- Self-destructive behavior (e.g. harming themselves, talks of suicide)

Recognizing the warning signs is crucial because many kids will not come to an adult for help. In fact, statistics from the 2019 Indicators of School Crime and Safety show that only 20% of bullying incidents are reported (Stopbullying, 2022).

Protective Factors

Protective factors refer to conditions and attributes that help individuals deal with stressful events, and mitigate associated risks. Protective factors can exist at the individual, peer, family, and school/community levels.

Individual. At the individual level, there are important skills that serve as protective factors against bullying. Kids with "high self-esteem, assertiveness skills, and solid social skills" are less likely to be bullied than kids that are lacking such skills (Gordon, 2022). High self-esteem and positive self-concept in particular were associated with less bullying and cyberbullying (Zych et al., 2018). Further, kids who develop resilience skills and perseverance are typically able to handle bullying situations more effectively, and kids who are able to keep a positive attitude despite being bullied will fare much better than those who dwell on what is happening to them" (Gordon). It was also noted that "social competence, intelligence and problem solving protected against victimization, as did self-related cognitions" (Zych et al.). In addition, according to Zych et al, several studies showed that high academic achievement was related to low levels of bullying victimization, but not cyber victimization.

Peer. Bullying is less frequent for individuals that have a solid circle of friends, or even one friend "to spend time with . . . who helps you and offers you consolation" (Navarro et al., 2018). Bullying is less likely to occur when an individual has supportive friends for a number of reasons: 1) A friend can report the bullying to an adult or encourage the victim to do so, 2) friendship "helps the victim to feel included, wanted, and accepted, 3) bullies are less likely to target kids that are with friends, 4) a friend can stick up for the victim and tell the bully to stop when it's happening, and 5) a friend can involve others to show the bully that his/her actions are not cool (Navarro et al.). In addition, having "high peer status" and support were related to low bullying victimization (Zych et al., 2018).

Along with having friends and high peer status, studies also show that bystanders can make a difference in a bullying situation. Bystanders often don't get involved in the situation because they are scared to become targets, want to avoid confrontation, or they don't think they can stop it. However, Navarro et al. (2018) explain that "bystanders may play a key role in stopping bullying, or in allowing it to continue happening." For example, a bystander that either speaks up to the bully or even just disengages and walks away from the situation can "can shift the attention and power away from the bully and help put an end to the behavior"; however, a passive bystander that stays silent "can be perceived as giving permission to the bully to continue his actions" (Children's Hospital of Philadelphia, 2020). Students that experienced bullying reported that "allying" and supportive actions by peers (e.g. "such as spending time with the student, talking to him/her, helping him/her get away, or giving advice") were the most helpful responses from bystanders (Pacers, 2020).

Family. Zych et al. (2018) cite a number of family factors that studies associated with lower rates of bullying victimization: “high socioeconomic status, a positive family environment, parental interaction, mediation in technology use, parental supervision and monitoring, authoritative parenting, parental involvement, support, communication and warmth.” These same family protective factors that prevent bullying victimization also aid in preventing bullying perpetration.

School/Community. For adolescents, school becomes a “central arena” for socialization, creating a “microsystem” that can protect them against bullying victimization (Papamichalaki, 2021). Papamichalaki defines school connectedness as “the emotions a student may have towards his/her peers and teachers, but also a sense of safety and acceptance that is forged in such a setting.” A strong school connection can serve as a protective factor for negative experiences during childhood and adolescence, such as bullying. In addition to a strong school connection, a positive school climate is identified as one of the most critical protective factors for young people. When a school climate is “supportive and encouraging . . . with strong pastoral and nurturing characteristics,” it “functions as a preventative mechanism against a student being involved in bullying, becoming estranged from the school environment and eventually dropping out” (Papamichalaki).

While there is no agreed upon universal definition of a positive climate, researchers agree that a positive school climate includes “a supportive and caring attitude on the part of the teachers, support and respect amongst students, and student attachment and dedication to the school as well as a general sense of safety, deriving from an explicit and updated set of school rules” (Papamichalaki, 2021). In a positive school environment, children develop high levels of assertiveness, empathy, and socialization, decreasing the odds of being involved in bullying, while in a negative school climate “instances of bullying increase, become repetitive and become long-term engrained behaviors” (Papamichalaki).

School staff play an important role in supporting and maintaining a positive school climate for their students. Teachers (and all school staff) are in the position to promote an environment that “fosters inclusion, respect, and pride in academic achievement, as well as introducing non-violent alternatives to resolving conflict” (Philadelphia Children’s Hospital, 2020). Having school staff that are trained in building positive relationships, as well as defusing aggression and bullying behavior are essential to keeping a positive school climate (Philadelphia Children’s Hospital). Likewise, school staff must be vigilant

in identifying more covert forms of bullying, such as social bullying, to ensure that school is a safe space.

Bullying Statistics

Unfortunately, bullying is not uncommon and most school-aged children are exposed to it in one form or another. According to the National Center for Education Statistics (NCES) (2019), during the 2016-17 school year, about one in five students (20.2%) in the general population reported being bullied. A higher percentage of male students reported physical bullying, whereas a higher percentage of female students reported social bullying (NCES). The most frequent reasons reported for being bullied were physical appearance, race/ethnicity, gender, disability, religion, sexual orientation (NCES). The statistics are even more grim for some of the high-risk populations discussed above. According to the CDC (2021), nearly 40% of students who identify as lesbian, gay, or bisexual, and around 33% of those unsure about their sexual identity experienced bullying at school or online in the past year, compared to 22% of heterosexual, cisgender students.

Effects of Bullying

Bullying has been consistently associated with negative outcomes, impacting the physical, emotional, and social health of young people, and even extending into adulthood (Papamichalaki, 2021). The consequences of bullying affect the bully, the victim, and even children that are witnesses to the bullying.

Bullying Victims

Decades of studies show that children and adolescents who are victims of bullying miss more school, have poor school achievement, report higher loneliness and poorer health, and “greater levels of anxiety and depression than their non-victimised peers” (Menesini & Salmivalli, 2017). “Victimization is a major childhood risk factor that uniquely contributes to later depression, even controlling for many other major childhood risks” (Menesini & Salmivalli). Poor school achievement is often related to being anxious in the classroom due to victimization, or school avoidance altogether. In addition to depression and anxiety, students who are bullied are also at an increased risk for sleep difficulties and dropping out of school (CDC, 2021). Bullying victimization has also been linked to

the onset of eating disorders, sleep disorders, and post-traumatic stress disorder (PTSD) (Gordon, 2022). Gordon explains, “They also may start to show signs of emotional distress, such as difficulty managing emotions, being more irritable, acting out, or all-around just behaving differently than normal.” In extreme cases, victims of bullying become suicidal or develop suicidal ideations. The extent of these negative outcomes vary based on the severity of the victimization, as well as other risk and protective factors.

Children who are victims of bullying also have more frequent health complaints, such as stomach aches and headaches, which are often psychosomatic symptoms as a result of emotional distress. Bullying also changes the way children view themselves. As such, being bullied can lead to low self esteem and increased negative self-talk (Gordon, 2022). “Bullied students indicate that bullying has a negative effect on how they feel about themselves (27%), their relationships with friends and family (19%), their school work (19%), and physical health (14%)” (NCES, 2019). This type of internalization often makes children feel like they are less worthy and less deserving than their peers, and can lead to isolation from others.

Bullying Perpetrators

Young people who bully others are at an increased risk for substance misuse, academic problems, and experiencing violence in later adolescence and adulthood (CDC, 2021). In a 2011 meta-analysis of 28 longitudinal studies, researchers found that bullying perpetration is “a strong and a specific risk factor for later criminal offending and psychotic symptoms,” and a 2015 study added a dosed effect to this conclusion, “in which more frequent bullying involvement in childhood is more strongly associated with adult adversities” (Menesini & Salmivalli, 2017). Children who bully are also at an increased risk of getting into physical fights, verbal altercations, developing antisocial behaviors, and are less likely to take responsibility for their actions (McLean Hospital, 2022).

Bystanders

Stopbullying.gov (2022) reports that children who witness bullying are more likely to have increased use of tobacco, alcohol or other drugs, have increased mental health issues like anxiety and depression, and are more likely to miss or skip school. Likewise,

being a witness to bullying makes children feel uncomfortable and unsafe in their environment.

Section 1 Key Terms

Adverse Childhood Experience (ACE) - Potentially traumatic events that occur in childhood (0-17 years)

Bully Victim - Individuals who bully others but are also bullied themselves

Bystander - Individuals who see the bullying but ignore it

Cyberbullying - Bullying that takes place on digital devices

Doxing - Destroying other peoples' privacy by making their personal information public, including addresses, social security, credit card and phone numbers, links to social media accounts, and other private data

Psychosomatic Symptoms - Developed physical symptoms that have no clear medical cause and appear to be influenced by the person's emotional state

School Connectedness - The emotions a student may have toward his/her peers and teachers, but also a sense of safety and acceptance that is forged in such a setting Youth violence: The intentional use of physical force or power to threaten or harm others by young people ages 10-24.

Section 1 Reflection Questions

1. How do adults in your school address bullying? What interventions are used? Have you seen adults "look the other way" at a bullying situation?
2. What are some of the obstacles that you face as a teacher to overcome bullying and make everyone feel safe? What can be done to help teachers overcome such obstacles?

Section 1 Activities

1. Evaluate the anti-bullying plan at your school. Use anti-bullying websites to get more information on effective plans to compare.

- a. Using the anti-bullying websites, plan an anti-bullying program for your school. If your school already has a good one, brainstorm ways to improve it.
2. Familiarize yourself with your state's anti-bullying laws (bullying and cyberbullying).
 - a. How do these laws fit in with your school's anti-bullying policies?
 - b. Do you think they are fair and equitable?

Section 2: Gang-Related Violence

The United States Department of Justice (DOJ) defines a gang as “organized groups of three or more people with a collective identity surrounding criminal activity” (Sonterblum, 2022). According to the National Gang Center [YGC] (2020), the following criteria is typically used to classify groups as gangs:

- Three or more members, typically aged 12-24 years old
- Shared identity among members, typically linked with a name or other symbols
- Members view themselves as a gang and are recognized by others as a gang
- Group has “some permanence” and a degree of organization
- Group is involved criminal activity

Gang involvement has detrimental long-term and short-term effects on “gang-involved” youth, their loved ones, and the surrounding communities (Youth.gov, 2022). In the United States, over one million gang members are under the age of 18, and that number only seems to be growing (Sonterblum). In demographic studies of gangs, researchers found that the typical age range for a gang member is 12-24 years old, with the average age being 17-18 (Nonprofit Risk Management Center [NRMCC], 2022). However, children as young as elementary age are recruited into some gangs. In a 2010 national survey, 45% of high school students and 35% of middle school students said there were gangs in their schools, and one in 12 youth confessed to being in a gang themselves at some point during their teenage years (Ritter et al., 2019).

Why Youth Join Gangs

There are several different factors that attract some youth to gangs: economics, relationships, protection, status, and outlaw culture (Ritter et al., 2019). Youth join gangs for “protection, enjoyment, respect, money, or because a friend is in a gang” (Youth.gov, 2022). Some children and teenagers join gangs to find “a sense of connection to define a new sense of who they are” (American Academy of Child and Adolescent Psychiatry [AACAP], 2022). Children are also “motivated by peer pressure, a need to protect themselves and their family, because a family member also is in a gang, or to make money” (AACAP). Ritter et al. further explain that for some children, the expected benefits “outweigh the potentially life-destroying consequences of joining a gang.”

Economics

Some young people join gangs with the hopes that it will be financially lucrative for them. “For many young people who feel disconnected from the American dream, the economic opportunities of gang membership offer an acceptable alternative to a low-wage job in the legitimate-employment arena” (Ritter et al., 2019). Many gang-involved youth come from poverty (a risk factor discussed in more detail below), and are struggling to have their basic needs met, such as food and shelter. “Because legitimate means of income may not be accessible to youth under the legal working age of 14, or because the idea of working is unattractive due to the long hours and minimal pay, joining a gang may appeal to a youth in need of money” (Sonterblum, 2022).

Relationships

“Youth who feel marginalized, rejected or ignored — in the family, school or church — may join a gang to fill a need for support” (Ritter et al., 2019). Children yearn for connection and a sense of belonging, and view a gang as a substitute family. However, they don’t realize that the “connection” fulfilled by a gang is dangerous, unhealthy, and ultimately a relationship that they cannot escape. Likewise, some children join gangs due to peer pressure or because they have a friend or family member already involved (Ritter et al.).

Protection

Ritter et al. (2019) explain, “Although there is incontrovertible evidence that kids in a gang are more likely to be exposed to violence than kids who do not belong to a gang, this does not resonate with many young people who believe that joining a gang will protect them from violence in school or the community.” Children who live in high crime areas or experience bullying or violence at school might think that a gang will provide them with protection. Further, girls who experience physical or sexual abuse at home sometimes believe that a gang will provide the best means of protection (Ritter et al.). Gangs give their members a sense of protection “providing them with weapons and a sense of safety in numbers, or a sense that they have people who will fight with them if needed” (Sonterblum, 2022).

Status

“Gangs can be seen as a way to increase status among peers, a way to get respect, freedom and independence — self-empowerment factors that may be missing from some kids' lives” (Ritter et al., 2019). Being involved in a gang can create a false sense of grandiosity and power, which is appealing for some children.

Outlaw Culture

Some youth simply want to rebel against society. “During the cognitive-development stage of adolescence, being a part of an “outlaw culture” can, for some kids, be compelling” (Ritter et al., 2019).

Risk Factors & Protective Factors

Risk Factors

“A 13-year-old does not wake up one day and decide out of the blue to join a gang . . . The decision is a consequence of a particular life environment, behavior and way of thinking that leads a child to adopt the gang lifestyle later on” (as cited in Ritter et al., 2019). In other words, in the context of gang membership, risk factors are “forces” that “push youth toward gangs or increase the likelihood that affected youth will join a gang” (YGC, 2020). Risk factors appear across the many dimensions of a young person’s life and are grouped into five categories called domains: individual, family, school, peer, and

neighborhood/community (National Gang Center [NGC], 2020). Research shows that “the more likely he or she is to join a gang,” and “a youth’s risk for gang involvement significantly increases as he or she accrues more than two risk factors” (Youth.gov, 2022). In general, risk factors apply to both boys and girls and minorities and nonminorities, but more research has been done on male involvement in gangs than females; however, females seem to have unique risk factors.

Individual. Individual risk factors include personality traits, circumstances, and behavioral characteristics that put one at a higher risk for gang involvement. Aggression and antisocial behavior during childhood is a risk factor for crime, violence, and gang involvement later on (Ritter et al., 2019). Ritter et al. note that the “the earlier the onset of such behavior . . . the greater the severity.” While these behavioral characteristics are at the individual level, they are often the result of family dysfunctions. “Serious disruptions in parenting and family functioning are related to earlier onset of delinquent behavior, which is generally more severe and dangerous than when criminal activity begins later in adolescence” (Ritter et al.). Children whose antisocial behavior worsens with time are at a higher likelihood for joining a gang. “These behaviors include early involvement in delinquency, aggression, violence (without a weapon), alcohol or drug use, early dating, and precocious sexual activity” (Howell, 2010).

Certain mental health issues are also associated with an increased risk for joining a gang. Some of these issues include conduct disorders, externalizing behaviors, hyperactivity, depression, and alcohol and substance abuse (Howell, 2010). In interviews with gang members in juvenile detention facilities, many youth “are admitted with histories of physical and sexual abuse, substance abuse, psychiatric disturbances, posttraumatic stress disorder, cognitive deficits, poor self-esteem, and other problems” (Howell).

ACEs and traumatic stress responses increase the likelihood of youth gang involvement as well. Such circumstances can also be categorized in the family or community domains, as traumatic events typically involve another party in addition to the individual. For example, “A child who has been abused and neglected may not trust authority, schools, or other social institutions to protect or take care of people,” and might turn to a gang for this type of support instead (The National Child Traumatic Stress Network [NCTSN], n.d.). Gangs can offer children a sense of safety, control, and structure that might otherwise be missing in the lives of traumatized youth (NCTSN). Gangs also “provide a place for youth to re-enact learned patterns of behavior such as violence” (NCTSN).

Family. The majority of youth who join gangs lack positive support from “parents, schools, peers, and community” (Youth.gov, 2022). This pattern often begins at home, with low levels of parental involvement and supervision, issues within the home (abuse, drug use, mental illness, etc.), parent-child separation, parental criminality, or delinquent siblings (Youth.gov; Safeguarding Network, 2022). Oftentimes, young people who join gangs have no sense of safety in their own homes and have experienced adverse childhood experiences (ACEs). Approximately 71% of gang members have experienced family violence, 42% experienced physical abuse, and 22% experienced sexual abuse, often by caregivers (Sonterblum, 2022). ACEs “create emotional adjustment problems for kids . . . Those can be cumulative and increase the likelihood of gang joining very easily” (Perez, 2020). Violent family environments, including parental substance abuse, domestic violence, and child physical and sexual abuse have been consistently identified as strong indicators for female gang involvement (NGC, 2020).

Poverty and overall financial stress are also risk factors. Poverty causes food insecurity and unstable housing, making it difficult to meet the basic needs of shelter and food insecurity. “Hunger and housing (e.g. shelter from dangerous elements and weather) are related to gang membership where food insecurity and unstable housing are predictive of involvement” (Sonterblum, 2022). Likewise, financial struggles often keep parents away from the house for extended periods of time, as they are forced to work multiple jobs. As such, there is a lack of parental involvement, not due to their own choice. However, “low family involvement, poor communication, and low parental monitoring” have all been directly related to gang involvement (Sonterblum). A 2015 study found that numerous gang-involved youth came from single-parent households, often with the mother as the sole provider (Sonterblum). Sonterblum explains, “This correlation may exist because the single parent is the family’s only source of income and may have less time to spend with the child.”

Family involvement with gangs or criminal activity is a risk factor for youth gang membership as well. Perez (2020) discusses a young girl, Lucero Herrera, who moved to San Francisco from El Salvador at age 3, living in section 8 housing while her mother worked multiple jobs to support her and her brother. While Herrera’s mother was away, her brother, a gang member, fed her and took care of her. Due to her brother’s gang involvement, Herrera was frequently profiled and eventually fell into the gang lifestyle herself. This situation is not uncommon, as the combination of low parental involvement and the seemingly positive influence of an individual involved in a gang, can make the gang lifestyle seem lucrative.

Peer. One of the greatest risk factors for gang involvement is associating with peers who “engage in delinquency” (Howell, 2010). Peer rejection is also related to increased likelihood for joining a gang (Sonterblum, 2022). When children are rejected by peers at school it takes away their sense of belonging, which they then turn to a gang for. However, friendships formed in this context are dangerous. “Aggressive and antisocial youth begin to affiliate with one another in childhood, and this pattern of aggressive friendships continues through adolescence” (Howell).

Community/Neighborhood. Children who live in areas with high levels of gang activity and violence are at a higher risk of joining a gang themselves (Sonterblum, 2022). This might be because they are exposed to this lifestyle and then follow it as a result, or because they are seeking security for themselves. Dr. David Pyrooz, Professor at the University of Colorado, explains, “Juvenile gangs form in already violent environments that are characterized with marginality and oppression” because such environments lead kids to look for safety and protection, which they think they will get from gangs (Perez, 2020).

School. School-related problems, such as academic failures, negative labeling, low academic ambition, and overall trouble at school are key risk factors for gang membership, and may be more indicative for girls than boys (NGC, 2020). In addition, children who have a “low degree of commitment to and involvement in school and weak attachment to teachers” are at an increased risk (Howell, 2010). Studies also suggest that poorly functioning schools, with “high levels of student and teacher victimization, large student-teacher ratios, poor academic quality, poor school climates, and high rates of social sanctions (e.g., suspensions, expulsions, and referrals to juvenile court)” often have a higher percentage of students who join and form gangs (Howell). Further, many students who join gangs struggle in school academically, socially, and behaviorally. Howell explains, for instance, “nearly 8 of 10 gang-involved youth referred to juvenile court in Durham, NC, had been suspended, truant, expelled, or otherwise disconnected from school.” School safety concerns in general lead to gang membership for both boys and girls (NGC).

Protective Factors

Protective factors also exist across domains, including “prosocial family, school, neighborhood, and peer environments, and individual characteristics” (NGC, 2020). Protective factors against gang involvement include: interpersonal skills (individual), parental involvement (family), family support (family), positive social connections (peer

environments), peer support (peer environments), academic achievements and aspirations (school), and reducing delinquency, alcohol and drug use (individual/neighborhood) (Youth.gov, 2022). Research also suggests that “increasing the level of positive feelings youth have for themselves and their parents, and empowering parents to better supervise teenagers’ behavior and choice of friends, are important protective factors” (NGC). In the family domain, not living with or being close to a family member who is associated with gangs is an important protective factor.

Consequences of Gangs

Youth gang involvement impacts the health and wellbeing of the individuals involved, as well as their peers, family, and community. There are both short-term and long-term consequences of gang involvement, and these consequences range in severity.

Violence & Victimization

While youth often join gangs for protection, research consistently shows “the risk and rate of victimization, especially violent victimization, increases substantially while youth are in a gang” (NGC, 2020). Researchers explain that the reason for this is that “given the ‘choice’ between seemingly random acts of street violence when not in a gang versus the more structured and less random acts within the gang culture (including the sense of group protection that being part of a gang engenders), individuals are more likely to choose to belong to a gang” (NGC). Further, while in a gang, individuals perceive the risk of violence to be more predictable and manageable (e.g. violence from a rival gang), and that is preferable to the seemingly random risk that youth not involved in gangs endure (NGC).

High-Risk Behavior & Social Consequences

Youth involved with gangs are more likely to engage in substance abuse and high-risk sexual behavior (Ritter et al., 2019). Long-term consequences, likely related to some of the high-risk behavior, include dropping out of school, early parenthood, and lack of stable employment (NGC, 2020). Researchers also found that youth gang involvement is linked to public health issues including “alcohol and drug abuse and/or dependence, poor general health, and poor mental health during adulthood” (NGC).

Incarceration

Gang involvement puts youth at a higher risk for being arrested, having a criminal record, and incarceration, “which stems from the increased involvement in criminal offending while in a gang—which further reduces the probability of a successful transition from adolescence to adulthood” (NGC, 2020). This creates additional societal issues because incarceration often does not fix the problems associated with gang involvement, but exacerbates them. Perez (2020) explains that incarceration “intensifies their affiliation . . . in a way that would not have occurred but for their involvement in the system.” While incarcerated, youth don’t build supportive networks that will help them in the futures, but rather “they are pushed deeper into these criminal subcultures” (Perez).

Section 2 Key Terms

Gang - Organized groups of three or more people with a collective identity surrounding criminal activity

Incarceration - Imprisonment; state of being confined in prison

Section 2 Reflection Questions

1. Do you feel that you and the staff at your school know how to recognize warning signs of potential gang violence, and know when, where, and how to report such threats?
2. Do you think gangs are a problem in your school and/or your community? Are you satisfied with the current response to gangs by your school, community, law enforcement, etc.?
 - a. What would you do to improve the response to gangs at your school or within your community?
3. What issues do you think most contribute to gang activity in your school and
 - a. community?

Section 2 Activities

1. Create a Google Drive folder for students at-risk for gang involvement. Include school and community wide supports, and contact information for such supports. Post a link to the folder in your Google Classroom or in some other area that lets students know it is there.

Section 3: Teen Dating Violence

Teen dating violence (TDV) is a type of intimate partner violence (IPV), which is “abuse or aggression that occurs in a romantic relationship” (CDC, 2022b). TDV can happen in person, online, or through technology, and can include the following types of behavior:

- Physical Violence
- Sexual Violence
- Psychological Aggression
- Stalking (CDC)

Physical violence is any “any intentional, unwanted contact with you or something close to your body, or any behavior that causes or has the intention of causing you injury, disability, or death” (love is respect, 2022). Examples of physical abuse include:

- Hitting, kicking, punching, choking, biting, and scratching
- Throwing objects at the other person (e.g. book, phone, shoe)
- Pulling hair
- Threatening to use or using a weapon (e.g. gun, knife, bat)
- Preventing individuals from leaving, or forcing them to go somewhere (love is respect)

Sexual violence “forcing or attempting to force a partner to take part in a sex act and or sexual touching when the partner does not consent or is unable to consent or refuse” (CDC). Sexual violence can also be non-physical, such as posting or sharing sexual photos of someone without consent, or sexting someone without consent. Examples of sexual violence include:

- Unwanted kissing or touching
- Unwanted rough or violent sexual activity
- Refusing to use condoms or restricting access to birth control
- Sexual contact without informed consent
- Threatening, pressuring, or forcing someone into performing sexual acts (love is respect)

Psychological aggression, often called emotional abuse, is the use of communication, both verbal and non-verbal, with the intent to harm a partner mentally or emotional, and exert control over that person (CDC). This type of abuse can include “name calling, making a partner feel guilty, purposeful embarrassment, or controlling behaviors such as keeping him or her away from friends and family” (Debnam & Mauer, 2019). Other examples of psychological aggression include:

- Damaging the other person’s property
- Using online communications to control, intimidate, or humiliate
- Threatening to harm other persons, their loved ones, or their pets
- Threatening to harm oneself if the relationship ends
- Gaslighting
- Threatening to expose personal data (e.g. sexual orientation, immigration status) (love is respect)

Stalking is a “pattern of repeated, unwanted attention and contact by a current or former partner that causes fear or safety concern for an individual victim or someone close to the victim” (CDC). Examples of stalking include:

- Showing up at the other person’s home or workplace unannounced
- Sending unwanted texts, voicemails, messages, letters, or emails
- Leaving unwanted gifts
- Calling and hanging up repeatedly
- Using social media or technology to track the other person’s activities

- Waiting around at places where the person hangs out

Teen Dating Violence (TDV) Prevalence

TDV is not uncommon. Data from the CDC's 2019 Youth Behavior Risk Survey revealed that among U.S. high school students who reported dating within the 12-months before the survey, about 1 in 11 female students and 1 in 15 male students experienced physical dating violence, and about 1 in 9 female students and 1 in 36 male students experienced sexual dating violence (Prothero, 2019). Female students experience higher rates of both physical and sexual violence than male students, with young women between the ages of 18-24 experiencing the highest rate of intimate partner violence (CDC, 2022b; Break the Cycle). Further, more than half of adult women (69.5%) and men (53.6%) who have been physically or sexually abused, or stalked, first experienced some type of abuse between the ages of 11-24 years old (Break the Cycle).

Risk Factors & Protective Factors

Certain factors might increase teens' risk of experiencing or perpetrating TDV. Typically, teens experience community, family, peer, and individual risk factors for TDV. Due to a lack of "longitudinal data" and a reliance on self-reported data, the relationship between risk factors and TDV represent correlations more than causality (Youth.gov, 2022b).

Risk Factors

Individual. Teens who have experienced stressful life events or trauma, including past history of sexual abuse or sexual victimization, are at a higher risk for experiencing TDV (Youth.gov, 2022b). Research shows that girls who menstruate at an earlier age are also more susceptible to TDV victimization (Youth.gov). Behavioral characteristics that increase a teen's risk of TDV include participating in risky behaviors (e.g. substance abuse, alcohol use, violence, stealing, etc.), dating at an early age, engaging in sexual activity before age 16, exhibiting maladaptive or antisocial behaviors, and having aggressive conflict-management styles (Youth.gov).

Certain personality traits and mental health issues have also been observed as a risk factor for TDV. These include having low self esteem, anger, or depressed mood, using "emotional disengagement" and "confrontational blaming" as coping mechanisms, and

having less inclination to seek help (Youth.gov). Depressive symptoms, in particular, are strongly related to TDV perpetration and victimization for both boys and girls (OJJDP, 2022). In addition to depressive symptoms, studies show that suicidal behavior and low self esteem were associated with girls being victims of physical or sexual violence (OJJDP). Likewise, teens who believe that dating violence is acceptable, or are accepting of violence against women are more susceptible as well (Youth.gov).

Students who identify as LGBTQ+ or those unsure of their sexual identity experienced higher rates of physical and sexual dating violence compared to their heterosexual peers (CDC, 2022b). Male LGBTQ+ are at a higher risk than female LGBTQ+ and heterosexual teens (CDC). In fact, “males who are unsure of their sexual identity experience the highest rates of teen dating violence, compared with LGB males and heterosexual males” (CDC).

Family. Adverse family dynamics can impact decisions and tendencies of teenagers later in life. Teens who live in poverty, come from disadvantaged homes, or who are involved with child protective services (CPS) are at a higher risk for experiencing TDV (Youth.gov, 2022). Exposure to “interparental and family violence” has been identified as a risk factor for TDV (OJJDP, 2022). Teens who experienced harsh parenting, inconsistent discipline, or lack supervision, monitoring, or warmth from a caregiver are considered at-risk as well (Youth.gov, 2022b). In general, child maltreatment is linked to a number of negative outcomes later in life, and studies show that “childhood exposure to maltreatment was a statistically significant predictor of both victimization and perpetration of dating violence” (OJJDP). Both being a victim of child maltreatment, as well as witnessing domestic violence by parents in the home, were predictors of TDV perpetration (OJJDP).

Peer. Individuals who have friends involved in dating violence, participate in peer violence, or have violent friends are at a higher risk of experiencing TDV (Youth.gov, 2022b). The reason for this is because “social groups are commonly not diverse at the adolescent stage, it is easy for norms among the group to be unopposed and become commonplace” (OJJDP, 2022). Adolescents are easily influenced by their friends, including negative behaviors and associations.

Bullying is another antisocial behavior that has been linked to TDV. Multiple studies have found that bullies are at a higher risk for becoming perpetrators of TDV, and bullying victims are at a higher risk of becoming TDV victims (OJJDP, 2022). “Adolescents may

learn that bullying others in a peer relationship can improve the social status of the bully and then apply the same behavior to a romantic relationship” (OJJDP).

Community. “The community where adolescents grow up and the attitudes toward violence to which they are exposed can affect the occurrence of teen dating violence victimization and perpetration” (OJJDP, 2022). For instance, studies show that adolescents that grew up in communities that were more accepting of abuse were more likely to experience TDV in their lives (OJJDP). Specifically, teenagers who are exposed to community or neighborhood violence are considered at-risk for TDV (Youth.gov, 2022b). Further, “violent crime rates and lower neighborhood quality were also linked to an increased chance of experiencing teen dating violence” (OJJDP).

Protective Factors

Like risk factors, protective factors can be divided into the same four categories: Individual, Family, Peer, Community.

Individual. Self-regulation, or the ability to control one’s behavior, can serve as a protective factor for TDV (OJJDP, 2022). “Adolescents who have stronger self-regulation skills tend to exhibit fewer teen dating violence perpetration behaviors, compared with those who have trouble self-regulating” (OJJDP). Healthy coping skills also serve as a protective factor against TDV, most likely because “teens with strong coping skills are more likely to deal with romantic partner conflict with problem-focused strategies rather than with violence” (OJJDP).

A recent meta-analysis of 50 studies looked at the risk factors associated with physical victimization in teen dating relationships and found that “communication skills, higher levels of self-esteem, and good physical health” were protective factors against TDV victimization (OJJDP, 2022). Lastly, a 2020 qualitative study examined why adolescent girls who had been previously involved in TDV perpetration intended to stop such behavior, and found that the girls expressed the following desires: “1) achieve life goals without being involved in the criminal justice system, 2) avoid feelings of relationship fatigue and exhaustion, 3) avoid embarrassment among peers, 4) help their current relationship stay intact, and 5) learn how to better handle conflicts in future relationships” (OJJDP).

Family. “Maternal warmth and acceptance have been shown to serve as protective factors against later teen dating violence, and this effect is still seen when children are exposed to violence and maltreatment at home” (OJJDP, 2022). Maternal warmth and acceptance aids in development of skills like self-regulation, which is also a protective factor against TDV. Higher levels of parental monitoring, as well as “parental strictness and conservative sexual attitudes” also decreased the likelihood of TDV victimization (OJJDP). Overall, parental and familial support is a protective factor against all types of teen victimization, including TDV (OJJDP).

Peer. Having a strong social support system is a key protective factor against TDV victimization (OJJDP, 2022). Unfortunately, when a teen experiences TDV, they are unlikely to report it. OJJDP reports that only 8.6% of teens who reported being in a violent relationship also reported seeking help; however, of the individuals that did seek help, 77.2% reported turning to a friend, emphasizing the importance of strong friendships. Having a strong support system of peers who encourage help-seeking behaviors also protects against future TDV victimization. Having good social skills and positive peer relationships are also protective factors, particularly for girls (OJJDP). The reason for this is that “having these positive social skills and bonds helps reduce unhealthy behaviors later in life, including deviant behaviors and actions that would put an adolescent at risk for teen dating violence” (OJJDP).

Community. While there is limited research on protective factors for TDV within the community, one study found that “perceived neighborhood support was an important protective factor for female adolescents who had experienced sexual violence/abuse in their relationships” (OJJDP, 2022). Some research has also shown that “acculturation and cultural identity” can serve as protective factors for TDV (OJJDP).

Consequences of TDV

Experiencing TDV can have a serious impact on a young person’s life and such impact can last well into adulthood. Several studies have explored both the short-term and long-term consequences associated with TDV victimization. Results of these studies show that compared to teens who have not experienced TDV, teens who experience relationship violence “are at higher risk of a range of negative physical and behavioral health outcomes” (OJJDP, 2022).

Short-Term Consequences

There are short-term health and mental health outcomes associated with TDV, and these consequences span across a teen's entire life. Youth who are victims of TDV often experience anxiety and depression symptoms, as well as engage in unhealthy behaviors, like using drugs, alcohol, and tobacco (CDC, 2022b). In a study of teen girls who experienced TDV victimization, victims "were at increased risk of substance use, unhealthy weight control behaviors (such as using laxatives to lose weight), risky sexual behaviors, pregnancy, and suicidality (including suicide attempts)" (OJJDP, 2022). For male high school students who have experienced sexual or physical abuse by a significant other, more than 25% have seriously contemplated suicide, and almost that many have made suicide attempts; for female students who have experienced physical or sexual abuse by a significant other, more than half have contemplated suicide and over 25% have attempted suicide (Break the Cycle, 2017).

TDV can impact an individual's physical health as well. High school girls who experience TDV are 2.6 times more likely to report a sexually transmitted disease (STD) diagnosis, which could also be a potential long-term consequence (Break the Cycle, 2017). Another short-term consequence of TDV is the risk of physical injury. One study examining injuries related to TDV found that "the rate of injury for all physical teen dating violence episodes was 20 percent" (OJJDP).

High school students who have been physically abused by their significant other earned grades of Cs and Ds twice as often as they earned As and Bs (Break the Cycle, 2017). Further, victims of TDV might experience antisocial behaviors, such as lying or bullying (CDC, 2022b).

Long-Term Consequences

Violence in teen relationships starts a pattern for future relationship issues, including "intimate partner violence and sexual violence perpetration and/or victimization throughout life" (CDC, 2022b). Victims of TDV in high school are at a higher risk of being victimized in college (CDC). Studies show that males who reported psychological TDV reported "increased antisocial behaviors and increased odds of suicidal ideation, marijuana use, and adult intimate-partner victimization, compared with males who reported no victimization" (OJJDP, 2022). Females who reported both psychological and physical victimization "showed greater depressive symptomology and increased odds of suicidal ideation, smoking, and adult intimate-partner victimization" (OJJDP).

A study of 1,321 adolescents, conducted over a 10-year period, found that regardless of gender, teens who experienced TDV "were associated with declines in self-rated physical

health over time” (OJJDP, 2022). Further, studies consistently show that individuals who experienced TDV “were more likely to continue to experience physical intimate-partner violence about 12 years later, compared with individuals who reported no adolescent dating violence victimization” (OJJDP).

Section 3 Key Terms

Intimate Partner Violence (IPV) - Abuse or aggression that occurs in a romantic relationship

Physical Violence - any intentional, unwanted contact with you or something close to your body, or any behavior that causes or has the intention of causing you injury, disability, or death

Psychological Aggression - The use of communication, both verbal and non-verbal, with the intent to harm a partner mentally or emotional, and exert control over that individual

Sexual Violence - Forcing or attempting to force a partner to take part in a sex act and or sexual touching when the partner does not consent or is unable to consent or refuse

Stalking - Pattern of repeated, unwanted attention and contact by a current or former partner that causes fear or safety concern for an individual victim or someone close to the victim

Section 3 Discussion Questions

1. Prior to taking this course, were you familiar with Teen Dating Violence? Did its prevalence surprise you?
2. Have you witnessed any type of TDV as a teacher? What was your reaction?

Section 3 Activities

1. Create a Google Drive folder with TDV resources for students. This can include fliers that you will print, as well as informational resources to provide them. Your folder should include:

- a. TDV infographics explaining what it is
 - b. Websites, phone numbers, and other available resources
 - c. School provided resources (social workers, trauma response workers, etc)
- 2. Research your school's protocol for dealing with TDV. If your school does not have one, build one surrounding victim safety and perpetrator accountability.
 - a. Create a flowchart of roles and responsibilities of school personnel (include who to contact / when, and contact information)
 - b. Lay out the school's response plan
 - c. Discuss additional training needed for staff

Section 4: Youth Violence Prevention

Youth violence in all of its forms is a serious problem and can have detrimental effects on the youth involved, families, friends, and communities. Because young people spend a significant amount of their time at school, educators and school staff are in a position to lead youth violence prevention efforts. Likewise, communities as a whole can come together to support prevention efforts. The CDC (2021) identifies several strategies to reduce youth violence, along with research and rationale for each one. Some of these strategies include: Strengthening youth's skills, connecting youth to caring adults and activities, and creating protective community environments (CDC).

Strengthen Youth Skills

Strengthening youth's soft skills is a key component to violence prevention. Soft skills refer to "skills, behaviors, and personal qualities that help people to navigate their environment, relate well with others, perform well, and achieve their goals" (Soares et al., 2017). Examples of soft skills include self control, problem-solving, self-awareness, communication, self-regulation, conflict-management, and flexibility. "The likelihood of violence increases when youth have under-developed or ineffective skills in the areas of communication, problem-solving, conflict resolution and management, empathy, impulse control, and emotional regulation and management" (CDC, 2016). Research consistently shows that building youth's interpersonal, emotional, and behavioral skills

can help to prevent victimization and perpetration of violence, as well as achieve long-term positive outcomes in education, employment and health (Soares et al.).

Approaches

Universal school-based programs, sometimes referred to as Social-Emotional Learning (SEL) programs, are widely used in schools to help students develop the soft skills that they need to be successful. In addition to building and enhancing soft skills, SEL programs provide “information about violence, seek to change the way youth think and feel about violence, and provide opportunities to practice and reinforce skills” (CDC, 2016). Programs vary in terms of exact content and how it is delivered but approaches “often include guidance to teachers and other school personnel on ways to build youth’s skills, monitor and manage behavior, and build a positive school climate to reduce aggression and violence, such as bullying, and support academic success” (CDC). There are SEL programs for all age levels but they are predominantly used in elementary and middle school.

Evidence and Outcomes. Potential outcomes of school-based programs include: reductions in bullying and conduct problems, reductions in “involvement in violent and nonviolent crime in young adulthood,” reductions in substance use, reductions in depression and suicidal ideation, increases in “emotional regulation, understanding social situations, and developing effective and nonviolent solutions,” increases in academic proficiency, and increases in positive school climate (CDC,

2016). Years of research show that universal school-based programs demonstrate “beneficial impacts on youth’s skills and behaviors, including delinquency, aggression, bullying perpetration and victimization, and bystander skills that lower the likelihood of violence and support victims” (CDC). Benefits of these programs are strengthened when they are continuous throughout the school years.

Research-Based Programs. Some effective school-based programs include the Good Behavior Game (GBG), Promoting Alternative Thinking Strategies (PATHS), Life Skills Training (LST), and Steps to Respect (STR) (CDC, 2016). Participation in the GBG resulted in “lower levels of classroom aggression in elementary school, and some studies of the long-term effects of GBG showed significantly lower levels of aggression in middle school and lower prevalence of antisocial personality disorder and violent crime by age 19 to 21” (CDC). Participants also had lower levels of alcohol abuse, smoking, and suicidal ideation into young adulthood (CDC).

Evaluations of PATHS show impacts on “aggression, violent behaviors, and a number of developmental risk factors for violent behavior among participants in both regular and special education classrooms” (CDC, 2016). In randomized controlled trials of PATHS participants, individuals were “better able to regulate their emotions, understand social problems, develop effective solutions, and decrease their use of aggressive responses to conflict” (CDC). Further, compared to individuals in the controlled group, participants in PATHS demonstrated “greater reading and math proficiency in fourth grade and writing proficiency in fifth and sixth grade” (CDC).

Participation in STR demonstrated impacts on bullying and youth violence protective factors (CDC, 2016). One longitudinal study found that after two years of implementation, “participants had a 31% decrease in bullying and victimization, 36% decrease in non-bullying aggression, and 72% decrease in harmful bystander behavior” (CDC). Additional studies “found significantly lower levels of physical bullying perpetration among participants relative to controls, and significant increases in school anti-bullying policies, positive school climate, and positive bystander behavior” (CDC).

Connect Youth to Caring Adults and Activities

“Young people’s risk for violence can be buffered through strong connections to caring adults and involvement in activities that help young people grow and apply new skills” (CDC, 2016). Positive relationships with adults can influence a young person’s behavioral choices and reduce their risk for involvement in violence, substance use, and other risky behaviors (CDC). Caring adults can include teachers, school personnel, coaches, neighbors, or community volunteers. Exposure to positive adult role models helps young people learn appropriate behaviors, communication skills and positive relationship building. “Through positive interpersonal relationships and learning activities, youth can also develop broad and healthy life goals, improve their school engagement and skills, and establish networks and have experiences that improve their future schooling and employment opportunities” (CDC).

Positive adult relationships aid in overall healthy development. “Caring adult relationships promote motivation in school, lower rates of drug and alcohol abuse, reduce contact with the justice system, lower suicide rates and promote better overall mental health” (United Way, 2022). Young people with even one positive adult role model in their lives are more likely to grow into productive adults (United Way). Because

of the amount of time that teachers spend with their students and the relationships that they build, teachers are often the caring adults in a child's life.

Create Protective Community Environments

"Creating protective community environments in which young people develop is a necessary step toward achieving population-level reductions in youth violence" (CDC, 2016). Community environments might include schools, youth-serving organizations, or parks. Making changes to community environments are considered community-level approaches. "Such approaches can involve, for example, changes to policies or the physical and social aspects of settings in order to reduce risk factors and increase protective factors for youth violence" (CDC). Even small changes can influence youth behavior by "creating a context that promotes social norms that protect against violence" (CDC). "These approaches can improve perceived and actual safety and reduce opportunities for violence and crime and, in turn, increase protective factors, such as residents having more prosocial interactions and opportunities to support youth" (CDC).

Approaches

Modify the physical and social environment. Modifying the physical and social environment prevents youth violence "by enhancing and maintaining the physical characteristics of settings where people come together in order to foster social interaction, strengthen connectedness, and increase collective efficacy (e.g., shared trust among residents and willingness to intervene)" (CDC, 2016). Some examples of these modifications include increased lighting, managing accessibility to public spaces, creating green space, and sponsoring community events (CDC).

Reduce exposure to community level risks. "Youth violence is associated with a number of community-level risks, such as concentrated poverty, residential instability, and density of alcohol outlets" (CDC, 2016). Reducing such risks can also reduce the potential violent outcomes that they cause. Prevention approaches to reduce such risks include "changing, enacting, or enforcing laws, city ordinances and local regulations, and policies to improve household financial security, safe and affordable housing, and the social and economic sustainability of neighborhoods" (CDC).

Street outreach and community norm change. These approaches "connect trained outreach staff with residents to mediate conflicts, promote norms of nonviolence, and connect youth to community supports to reduce risks and build buffers against violence"

(CDC, 2016). These programs will vary based on the model used, staff training, and community resources. “Outreach staff typically connect with residents with known histories of engaging in criminal and violence-related activities or who are at heightened risk to engage in violence (e.g., had a recent argument, family member or friend recently harmed by violence)” (CDC). However, such approaches can also be used at a universal level as preventative measures. Further, this approach “uses public education and neighborhood events to change norms about the acceptability of violence and willingness of community members to act in ways to reduce the likelihood of violence” (CDC).

Outcomes and Evidence

Potential outcomes of protective community environments include reductions in violence-related injuries among youth, reductions in gang-related violence, reductions in community risk factors for youth violence, and increases in “normative beliefs that violence is unacceptable” (CDC, 2016). There are several different street outreach and community norm change programs available, and some are evidence-based for preventing violence. Programs like Cure Violence and Safe Streets are “associated with reductions in gun violence, homicides, gang related violence, and nonfatal assault-related injuries in some but not all implementation areas where studied” (CDC).

Additional Prevention Methods for Schools

In addition to schoolwide prevention programs, Stein and Taylor (2018) explain that conducting staff training is crucial in preventing youth violence. “All faculty members and staff should understand the magnitude of the problem of sexual harassment and assault among teens and how to implement evidence-based strategies” (Stein & Taylor). Further, staff should be trained to identify red flag behavior and warning signs of youth violence, including but not limited to physical injuries, sudden changes in behavior or student absenteeism (MAEC, 2022).

Strategies that do not work. There are some strategies that schools turn to that are just ineffective. Punitive punishments, such as suspensions, for bullies are ineffective if they are not accompanied by a long-term safety plan for the target, and further intervention for the bully (education world, 2022). Although it might seem tempting to implement zero-tolerance policies and one-size-fits-all punishments, they won’t improve the situation without additional support for the perpetrator. All of the parties involved in a bullying situation need follow-up support, though those supports will differ.

“Using peer mediation to address bullying, or any approach that puts bully and victim in the same room to ‘work it out,’ is ineffective because “bullying is an abuse-of-power dynamic, not a disagreement between equals” (education world, 2022). For this same reason, telling a victim to ignore a bully is not helpful. Adult intervention is always necessary in a bullying situation.

Schools as a Safe Space

Creating safe and supportive environments (SSE) emphasizes “aspects of the school environment that encourage students to be more engaged in their school life and feel connected to important adults at school and at home” (CDC, 2020). When schools are a safe space for students, connectedness is built, which is a protective factor against “high-risk substance use and mental health issues, and helps keep students from committing or being victims of violence” (CDC). A safe and supportive school environment is successful in “connecting adolescents to a network of caring peers and adults, including parents, other primary caregivers, and teachers” (CDC).

Having a feeling of school connectedness, “which is the belief held by students that adults and peers in the school care about their learning and about them as individuals,” is a key protective factor against youth violence, as well as a key component of a SSE (CDC, 2016). When youth feel school connectedness, they are less likely to experience poor mental health, sexual health risks, substance abuse, and violence (CDC). School connectedness is important for all students, but it is especially important for youth “who report experiencing racism, youth from racial and ethnic minority groups, and youth who identify as LGBTQ+,” as they often feel less connected at school (CDC).

Schools can help build connectedness at school through specific classroom management strategies, inclusive practices, and positive youth development programs (CDC, 2020). Classroom management approaches that promote school connectedness include teacher caring and support, peer connection and encouragement, student autonomy and empowerment, management of classroom social dynamics, consistent teacher expectations, and behavior management (CDC). At the building level, “school programs and practices that promote inclusion, such as gender and sexuality alliances (GSAs) and multi-cultural groups/clubs, increase all students’ sense of safety and connectedness” (CDC). Positive youth development (PYD) programs “provide youth with networks of supportive adults and opportunities for connectedness” (CDC). Such programs don’t focus solely on risky behaviors, but rather prioritize building positive behaviors and characteristics.

Schools as a Resource

Schools can educate students and the community on youth violence prevention and identification. When students are aware of the warning signs they are more likely to encourage victims to report an incident, or they will tell a trusted adult themselves. Schools can also “provide effective support to traumatized youth or to address the behavior and needs of perpetrators, adopt a comprehensive approach that takes into account the unique challenges that these offenses present, such as victim reluctance to report and trauma from sexual violence” (Office of Elementary and Secondary Education [OESE], 2022).

Specifics for Bullying Prevention

Schools must be upfront with their rules and policies, ensuring that students, staff, families, and the community are aware of them. Such rules and policies should be inclusive and have clearly identified anti-bullying procedures. Teachers must be able to recognize bullying in all of its forms and know how to effectively intervene when they see it. In addition to specific training, staff must monitor known bullying “hot spots,” (e.g. bathrooms, hallways, cafeteria), where frequent bullying incidents take place (education world, 2022).

Equally as important as teacher training is student training; students often witness more than teachers do and also have a greater influence on peers, so they are key in bullying prevention. Students should be taught what bullying is, what behaviors are considered bullying, and what the consequences of bullying are. Student training should also include “what to do when they witness bullying (mainly REPORT the incident and SUPPORT the target in a safe way); peer intervention, if done right, can be more powerful than adult intervention” (education world).

It is important for schools to create an “environment where students feel that if they are bullied, they will receive support from adults and peers; such an environment cannot be created via external mandate and must be a ‘grassroots’ effort that grows from internal commitment” (education world, 2022). If students believe that they will be supported then they will be more likely to report incidents of bullying.

Specifics for Teen Dating Violence Prevention

Educator Training. Educators need training in TDV and best practices for prevention and intervention. This includes learning about the risk factors, protective factors, and the appropriate language to use when talking about TDV. “Educators must be prepared to address warning signs such as physical injuries or absenteeism in students, but more subtle indicators of abuse may exist,” such as using public displays of affection (PDA) to exercise control (MAEC, 2022).

Responding to TDV. It’s important for students to know that they can turn to their teachers for help. In addition to following the school’s protocol, teachers can “give warm referrals to youth. A warm referral is when an adult introduces the youth to the service provider directly, or calls the service with them” (MAEC, 2022). Likewise, MAEC recommends using neutral language when talking about TDV with a victim because it encourages them to communicate more openly; first, name observable behavior (i.e. “I saw her scream in your face”), and then proceed with “compassionate curiosity” (“What’s going on here?”) (MAEC). “This approach prevents students from disputing what we have witnessed, while communicating our willingness to hear their perspective” (MAEC).

Teachers can explain to students why the behavior is concerning, provide them with resources and referrals, encourage them to come back and talk, and then follow up later. However, it is important not to promise secrecy since teachers are mandated reporters.

Educate Students. Students need to know what TDV is, and how to recognize it in their own relationships and their friends’ relationships. Likewise, students need to be aware of what a healthy relationship looks like. They should know that “violence is not part of affection. Students need to know how to distinguish between acts of abuse and acts of love” (Youth Dating Violence, 2022). Teachers can provide students with examples of TDV and explain how it manifests in relationships. “Educating students who aren’t currently in romantic relationships increases their capacity to help their friends and peer groups who may be involved in YDV” (Youth Dating Violence).

Youth should also be educated in consent, boundaries, and “individual agency” (Youth Dating Violence, 2022). “Students need to know that they and their potential romantic partners have control over their own body, decisions, and actions in a relationship” (Youth Dating Violence). Youth should also be educated in cyber dating violence, as this type of aggression is becoming more common. “Learning to recognize cyber dating violence is especially important, as teens may not be aware of appropriate online

relationship behaviour and boundaries” (Youth Dating Violence). Students need to know how to recognize cyber dating violence, and how to report it to an adult.

Explicit TDV Policies. “An explicit policy on Teen Dating Violence communicates to staff and students that these are issues the school district takes seriously” (MAEC, 2022). Research shows that accessible and effective policies ensure that both staff and students recognize violations and know when and how to report it (MAEC). In addition, Title IX under the Civil Rights Act protects students from discrimination based on sex, including dating violence, in any educational setting receiving federal funding (MAEC). “Schools are required to initiate a prompt, adequate, and impartial investigation of any complaint brought to school district personnel—even those that occur off-campus, such as on the school bus or online” (MAEC). Schools might also be required to give impacted students accommodations, such as counseling services, assignment extensions, or schedule changes.

Section 4 Key Terms

School connectedness - The belief held by students that adults and peers in the school care about their learning and about them as individuals

Social-Emotional Learning (SEL) - An educational method that aims to foster social and emotional skills within school curricula

Soft Skills - Skills, behaviors, and personal qualities that help people to navigate their environment, relate well with others, perform well, and achieve their goals

Section 4 Discussion Questions

1. What role do you think a school plays in youth violence prevention? Do you think schools can really make an impact on this problem?
2. Does your school use any type of SEL program? Do you think it is effective? If not, what do you think would make it better?
3. Are you familiar with your district’s Title IX policies? Do you think students know that these protections exist? Why or why not?

Section 4 Activities

1. Create a Google Doc with the district's protocols for reporting Title IX violations, including the Title IX coordinator's contact information. (All districts are required to have these protocols and an appointed person)
2. Conduct a needs evaluation for your school to adopt a new SEL program. Determine your school's major needs and then compare a few programs to determine which would be the best fit.

Conclusion

Youth violence is a significant public health problem that affects thousands of young people each day. In order to be advocates against youth violence and bullying, educators must understand the magnitude of youth violence and the bullying problem, be aware of specific risk and protective factors, and have specific strategies for addressing and preventing youth violence and bullying.

Case Study

Mr. Downing is an 8th grade teacher at Hershey Middle School. Hershey has had high turnover of teachers and administration, so consistent implementation of norms, policies, and procedures has been difficult to implement. Recently, Jess, a popular 8th grade girl reported instances of students bullying Lizzie, a transgender female, also in 8th grade. Jess wants to support Lizzie but does not know where to start besides telling bullies to stop in the moment. Mr. Downing wants to help Jess and Lizzie, and also wants to help to promote kindness and inclusion for the entire school. Mr. Downing will investigate the situation further to ensure that Lizzie is protected and that those exhibiting bullying behaviors receive consequences and education about the negative impact of bullying. In addition, Mr. Downing will advocate for the review of school wide anti-bullying measures to see what improvements need to be made. Finally, Mr. Downing recognizes that Jess will be a valuable asset to assist with anti-bullying interventions, as she is a popular and well-liked student who has demonstrated compassion and the ability to intervene when necessary.

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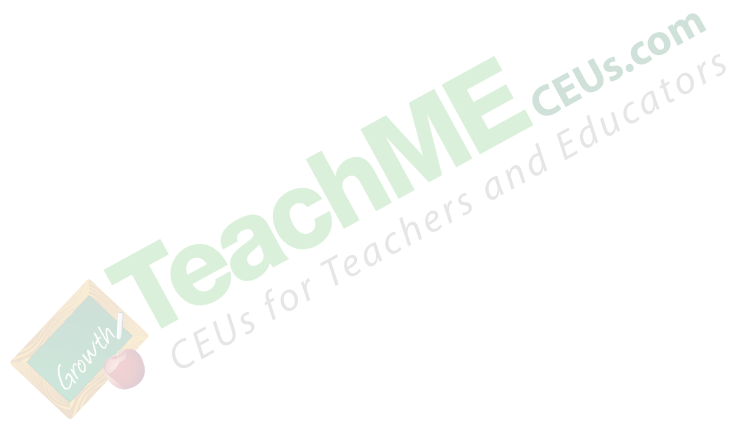


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Part 4:

Introduction	3
Section 1: What is Neuroeducation?	3
History of Neuroeducation	3
Disciplines in Neuroeducation	4
Goals.....	5
Challenges	5
Principles of Neuroeducation	7
Section 1 Key Terms.....	11
Section 1 Reflection Questions.....	11
Section 1 Activities	12
Section 2: The Brain and Learning	12
Brain Development.....	12
The Brain's Mental Processes	16
The Role of Emotions	22
Section 2 Key Terms.....	23
Section 2 Reflection Questions.....	23
Section 2 Activities	23
Section 3: Neuroeducation in the Classroom	24
Why it's Important.....	24
Ideal Learning Conditions	26
Social-Emotional Factors	30
Teaching Practices	33
Section 3 Key Terms.....	38

Section 3 Reflection Questions	38
Section 3 Activities	39
Conclusion	39
Case Study	39
References	40



Introduction

Neuroeducation is an interdisciplinary field, uniting experts from the fields of neuroscience, psychology, and education (namely pedagogy), to explore how children learn and how to apply brain-based teaching and best practices to the classroom. There is growing interest in the field of neuroeducation with the hope that applying neuroscientific research in the classroom will promote better learning, social-emotional experiences, and as a result, improved outcomes for students.

Section 1: What is Neuroeducation?

Neuroeducation, also referred to as “*educational neuroscience (EN)*,” “*Mind, Brain, and Education (MBE)*,” and “*Brain-Based Learning (BBL)*,” is an interdisciplinary field of “inquiry [that] looks at how what we are learning about the human brain can affect the curricular, instructional, and assessment decisions that teachers make every day” (Sousa, 2022, p. 5). Neuroeducation brings together the disciplines of neuroscience, education, and psychology, to “figure out the links between education and brain processes,” and ultimately improve learning and teaching practices (Le Cunff, 2022).

History of Neuroeducation

The connection between neurobiology and education was first publicly discussed in the first half of the 1900s by Educational Psychologist E.L. Thorndike, who “attempted to show how the science of learning and instruction could be informed by neuroscience” (Mayer, 2017). Thorndike published a three-volume series called *Educational Psychology*, and devoted the entire first volume to “the physical basis of learning,” to show “the physiologic changes in synapses that correspond to learning” (Mayer). Thorndike attempted to explain neuronal connections and how they are strengthened or weakened by a person’s experience. While Thorndike planted the seed for what would eventually become neuroeducation, and other researchers attempted to elaborate on it throughout the 20th century, it did not gain much momentum until the 1990s.

Moving into the 21st century, “important advances in the technology underlying cognitive neuroscience -- particularly, the widespread use of fMRI and EEG methodology -- have yielded an explosion in research aimed at connecting neuroscience and education” (Mayer, 2017). Throughout the 2000s and 2010s, interest in the field of neuroeducation has only continued to grow exponentially. New groups and societies

have formed, such as the International Mind, Brain, and Education Society (IMBES) in 2004 and the European Association for Research on Learning and Instruction's (EARLI) 'Neuroscience and Education' group, which has been holding biannual meetings on the subject since 2010 (Thomas et al., 2018). There are now thousands of articles, dozens of books, and entire scientific journals dedicated to this research. Likewise, there "has been a growth in postgraduate courses in educational neuroscience at leading international universities such as Harvard and the Universities of London and Bristol" (Thomas et al.).

Disciplines in Neuroeducation

Neuroeducation combines neuroscience, pedagogy, and psychology to bring "the current research from how the brain learns, behaves, and relates to instructional practices in the classroom" (Marian University [MU], 2022). Most educators on the frontline (teachers, paraprofessionals, related service providers (RSP), and even administrators) receive little formal training in how the brain learns best. In fact, learning about the brain can seem downright intimidating for people that are not specifically trained in neuroscience; however, neuroeducation creates a bridge between neuroscience, education, and psychology that allows individuals that are not neuroscientists to gain insight into how the brain functions. "Understanding how the brain processes information into learning and knowing more about what it takes for students' brains to be engaged, responsive, and alert are fundamental to the teaching and learning process" (MU).

Neuroscience

Neuroscience is the study of the brain's "development, structure, and function" (MU, 2022). If the goal of educators is to promote learning and success for students, understanding the basic functions of the brain and learning process is critical. The learning process actually changes the brain, both structurally and functionally. Teachers can use more effective instructional practices and design optimal lesson plans by "understanding how the brain responds and through applying principles from the neuroscience research in the classrooms" (MU).

Education (Pedagogy)

“Pedagogy is the study of the art and science of the teaching and learning process” (MU, 2022). Educators need to have a solid understanding of how factors, including but not limited to, “the environment, poverty, boredom, support systems, substance abuse, and all emotional, social, and cognitive facets,” affect the brain and how it learns (MU). As such, educators are urged to use principles from the field of neuroeducation to inform their pedagogical practices. The hope is that if educators use pedagogy that is informed by actual brain science, it will result in improved academic and social-emotional outcomes for students.

Psychology

Educational psychology “is the study of developmental mental processes responsible for cognition and behavior” (MU, 2022). To work with students effectively, teachers need to have a basic understanding of brain development and how factors such as the environment, genetics, and personal experiences affect learning and behavior. Likewise, the educational psychology component informs teachers of “how stress affects the brain’s ability to process information,” to aid in designing instruction to address “the critical emotional, social, and cognitive developmental stages in every classroom” (MU).

Goals

“The implicit goal of all education is to change students’ brains, by improving both their knowledge base and their understanding of information they acquire” (MU, 2022). Neuroeducation “is the active engagement of purposeful strategies based on principles derived from research” in the areas of neuroscience, pedagogy, and educational psychology (MU). Thus, the goal of neuroeducation is to bridge the gap between neuroscience, pedagogy, and educational psychology, to inform classroom practices and teaching strategies, and ultimately optimize student learning.

Challenges

Despite widespread research on the brain and learning, “a considerable gap continues to separate research on how people learn from classroom practice” (Conyers, 2017). The reasons for this disconnect include lack of training in teacher prep programs, ineffective translation of information, and the question of whether or not neuroscience has any place in the classroom.

Teacher Preparation Programs

Teacher preparation programs focus mainly on teaching methods and content areas, with some possible dabbling in an educational psychology course. Conyers cites a study by the American National Council for Accreditation of Teacher Education “finding a dearth of content in teacher education programmes about how children learn and little application of that research in practice.” Further, most teacher preparation programs do not have courses dedicated specifically to cognition and learning, let alone neuroeducation. In a report by Wellcome Trust, out of 1,000 teachers who were surveyed, over 90% “said their understanding of neuroscience is affecting them and 80% of teachers said they would cooperate with neuroscientists on educational research” (Cui & Zhang, 2021). In other words, the desire to learn about neuroeducation and allow it to inform teaching practice is present but the training options are limited.

Lost in Translation

Much of the information related to neuroeducation gets lost in translation, and never makes it into policy or practice. There is a need for “improvement of scientific dialogue and creation of a more widely shared language in educational and neuroscientific circles” (Elouafi et al., 2021). Essentially, there is a great demand for professionals who are proficient across the disciplines to translate information, and help with getting research into practice. Further, it is not a straightforward process to take laboratory research and turn it into teaching practices. “The real challenge, then, is to translate laboratory results into strategies to improve learning when establishing links between research and practice is not always easy” (Elouafi et al.).

Since policymakers and educators are eager to bring neuroeducation concepts into the classroom, researchers fear that this will be done prematurely. “The complexity of learning in the brain and the state of current scientific knowledge mean that there is a risk of premature translation before the foundation is established. The risk is heightened by the legitimate desire of policymakers to use scientific evidence to inform their education policies” (Thomas et al., 2018). Not only are educators eager to bring neuro-based practices into the classroom but commercial companies are also eager to sell products based on neuroscience findings, which can be problematic if the information is not translated correctly. When information about the brain is incorrectly translated or not entirely grounded in research, neuromyths are born.

Neuroscience is Irrelevant in Education

Although it is generally believed that neuroeducation is beneficial for educators, some argue that it is irrelevant. One famous conclusion made in 1977 by Bruer is that the “distance between neuroscience laboratory and classroom is a ‘bridge too far,’” (as cited in Cui & Zhang, 2021). Other skeptics believe that “only evidence from psychological experiments that examine behavior is relevant to education,” or that “social problems require social solutions, not reduction to neural mechanisms” (as cited in Jolles & Jolles, 2021). As a result, neuroeducation topics do not yet have a home in teacher prep programs.

Principles of Neuroeducation

Author, educational researcher, and professor of Harvard's Neuroscience for Learning program, Tracey Tokuhama-Espinosa (2018), led a Delphi Panel in 2006, with experts in psychology, neuroscience, and education, to determine “what, if anything, was worthy of making it out of the brain lab and into our classrooms” (p. 1). The Delphi Panel methodology is a “a process used to generate group decisions that genuinely represent the opinions of a panel. In order to reach a decision, a panel of experts undergoes several rounds of questions,” and they are allowed to adjust their answers after reading the aggregated results of each round (Indeed, 2022). Tokuhama-Espinosa's panel consisted of experts from 11 different countries, who “provided studies and peer-reviewed articles to support their viewpoints as they argued for the inclusion or exclusion of ideas” (p. 1). The goal of Tokuhama-Espinosa's panel was to establish principles for neuroeducation, that is truths that “without exception, all human brains, independent of age, subject matter, or culture” adhere to (p.1). Tokuhama-Espinosa conducted a 10-year follow up of this study, which ended in 2017, and established only six neuroeducation principles that the experts agreed upon:

1. Human brains are as unique as human faces
2. Each person's brain is differently prepared to learn different tasks
3. New learning is influenced by prior experiences
4. The brain changes constantly with experience
5. The brain is plastic
6. There is no new learning without some form of memory and attention (p. 2).

The panel also identified 21 concepts about the brain that are also true, but vary greatly between individuals. Some of these concepts will be discussed in more detail below.

Principle 1: Human brains are as unique as human faces

Brains are like fingerprints, with no two people having the exact same one. While the basic structure (e.g. parts, and regions) is the same in most humans, no two are ever identical. The reason for this is that people's genetic makeup, as well as their personal experiences and freewill, "shape neural pathways" (Tokuhamma-Espinosa, 2018, p. 2). In other words, each person's individual experiences in the world change the anatomy of the brain. For example, "Professional musicians, golfers or chess players . . . have particular characteristics in the regions of the brain which they use the most for their skilled activity" (University of Zurich, 2018). Short-term experiences affect the brain as well. If someone does not use a certain body part for multiple weeks, the part of the brain responsible for moving that body part will decrease in size (University of Zurich). Essentially, the concept of "use it or lose it" is true, as areas of the brain that are used more frequently have stronger neural pathways than those that go unused. Professor of neuropsychology, Lutz Jäncke, explains, "We suspected that those experiences having an effect on the brain interact with the genetic make-up so that over the course of years every person develops a completely individual brain anatomy" (as cited in University of Zurich).

Principle 2: Each person's brain is differently prepared to learn different tasks

The ITSI team (2018) puts it simply: "All brains are not equal because context and ability influence learning." A child's environment and interpersonal relationships have a great effect on brain development. "Brain architecture is developed by the presence of warm, consistent, attuned relationships; positive experiences; and positive perceptions of these experiences" (Darling-Hammond, et al., 2019). Tokuhamma-Espinosa (2018) explains, "Learning capacities are shaped by the context of the learning, prior learning experiences, personal choice, an individual's biology and genetic makeup, pre-and perinatal events, and environmental exposures (p. 2). Therefore, a child with average intelligence learning in an enriched, nurturing environment will often excel more than a very bright child that is in an impoverished, unsupportive environment.

Principle 3: New learning is influenced by prior experiences

“Our mind learns and makes sense of experiences by finding old patterns to relate to before creating new ones” (ITSI, 2018). ITSI further explains, “By connecting the new information with the old information, new neural connections will appear that will anchor the new concepts to the already existing ones.” Students connect new information to old information in order to build a solid understanding of a concept. “New information that relies on old information cannot be absorbed if the old information is missing, or not completely understood” (ITSI). The quantity of what individuals learn, as well as the quality, will depend greatly on their past experiences and what they already know about a topic.

The Cognitive Load Theory (CLT) states that “the less familiar” a task is, the more an individual relies on working memory to “help juggle the relevant information,” while an individual with prior knowledge or expertise is able to focus more on learning engagement (Jarrett, 2020). “Students with low prior knowledge need more assistance to decrease cognitive load, while those with high prior knowledge more easily form new schema and perceive a lower cognitive load” (Dong et al., 2020). Schemas are “categories of information stored in long-term memory,” containing “linked memories, concepts, or words” (Loveless, 2022). Schemas can be compared to mental graphic organizers, grouping concepts in long-term memory to solidify understanding, and make it more retrievable. When students have prior knowledge, they are able to take new learning experiences and add to their existing schema, as well as build new ones around the new learning experiences. Essentially, CLT supports that “because short-term memory is limited, learning experiences should be designed to reduce working memory ‘load’ in order to promote schema acquisition” (Heick, 2022).

Principle 4 & 5: The brain changes constantly with experience / The brain is plastic

Neuroplasticity or brain plasticity refers to “brain’s ability to modify, change, and adapt both structure and function throughout life and in response to experience” (Voss et al., 2017). The brain is constantly changing as a result of individual experiences, and this happens throughout a person’s life. “These changes occur at a molecular level, whether simultaneously, in parallel, or even before they are visible in behavior” (Tokuhamas-Espinosa, 2018, p. 2). The physical changes are not seen but the effects of such changes are visible. When an individual experiences something new, the brain reacts to it. “When you learn something new, the neurons involved in the learning episode grow

new projections and form new connections. Your brain may even produce new neurons” (eLife Sciences Publication Ltd., 2020).

While neuroplasticity occurs at all stages of development, there are critical periods (CP) during early development, in which “brain plasticity is maximal . . . during which sensory experience is necessary to establish optimal cortical representations of the surrounding environment” (Cisneros-Franco et al., 2020). In simple terms, CPs refer to a time when the brain is in an optimal state to acquire new information or develop new skills. It doesn’t mean that it is impossible to acquire such skills after the CP ends but it is much more difficult. Once the CP is over, “a range of functional and structural elements prevent passive experience from eliciting significant plastic changes in the brain” (Cisneros-Franco, et al.). As such, “young brains tend to be more sensitive and responsive to experiences than much older brains. But this does not mean that adult brains are not capable of adaptation” (Cherry, 2022). Neuroplasticity will be discussed in greater detail in Section 2.

Principle 6: There is no new learning without some form of memory and attention

“Attention is the process that allows us to take information in. It also helps us select useful information” (Rosen, 2022). Rosen identifies four key parts of paying attention: alertness, selection, sustaining, and shifting. Alertness is straightforward and refers to an individual’s readiness to pay attention. Selection means that “kids must be able to identify what deserves attention,” such as focusing on the teacher versus focusing on sounds from the hallway (Rosen). Sustaining refers to one’s attention span and being able to pay attention for a duration of time, whether for a 3-minute video or a 40-minute lecture. Shifting attention refers to the ability to redirect attention when necessary; for example, students must shift their attention when an announcement is made over the intercom, and then back to their teacher for the lesson.

After new information is learned, the “attention funnel feeds” it into the brain’s working memory (Rosen, 2020). Also referred to as encoding, the working memory process “manipulates new information so it’s useful,” allowing “us to use new and learned information while we are in the middle of an activity” (Rosen). While a student’s attention brings in the information, it is their memory that makes the information meaningful and relevant. With consistent practice and exposure to a topic or skill, it ideally goes into long-term memory to be retrieved at a later time. However, there are a number of outside elements that might impact both attention and memory: disabilities

(learning, or attention), social-emotional issues, and physiological issues, to name a few. Because there are so many elements that can affect attention and memory, and attention and memory are critical for learning, it is important to ensure that a classroom is set up for optimal learning conditions.

Section 1 Key Terms

Attention - The process that allows us to take information in. It also helps us select useful information (Rosen, 2022)

Cognitive Load Theory (CLT) - Theory that states because short-term memory is limited, learning experiences should be designed to reduce working memory 'load' in order to promote schema acquisition

Delphi Panel Method - A process used to generate group decisions that genuinely represent the opinions of a panel. In order to reach a decision, a panel of experts undergoes several rounds of questions

Neuroeducation - An interdisciplinary field of "inquiry [that] looks at how what we are learning about the human brain can affect the curricular, instructional, and assessment decisions that teachers make every day

Neuroplasticity - Brain's ability to modify, change, and adapt both structure and function throughout life and in response to experience

Pedagogy - The study of the art and science of the teaching and learning process

Working Memory - The capacity to store information for short periods of time while engaging in cognitively demanding activities

Section 1 Reflection Questions

1. What is your opinion on the role of neuroscience in the classroom? Do you think it can be helpful, or do you think it's "a bridge too far"?
2. Do you feel that your teacher preparation program gave you enough insight into the learning process? Were there specific courses dedicated to this?
3. If you could take a professional development course about neuroeducation, what would you want to learn and why?

4. What do you think is the biggest challenge of getting neuroeducation practices into policy and practice?

Section 1 Activities

1. Define neuroeducation in your own words and then write an explanation for each of the principles in your own words.
2. Conduct an action research project (*a method of systematic enquiry that teachers undertake as researchers of their own practice*) surrounding one of the principles of neuroeducation. Follow these steps:
 - a. Select the research question
 - b. Collect data
 - c. Analyze data
 - d. Share data
 - e. Try new practice

Example research question: *How does the chunking of material affect a student's retention?* This can be measured by a short quiz. (Sousa, 2022, p. 12)

Section 2: The Brain and Learning

Brain Development

Early brain development - discussed here as birth to roughly age eight - is a hot topic in education because of the critical impacts it has on future health, learning, and life outcomes. One of the reasons why this period of development is so important is because the brain makes exponential growth at a rapid pace (Centers for Disease Control and Prevention [CDC], 2022). Specifically, "from birth to age 5, a child's brain develops more than at any other time in life," with 90% of brain growth happening before kindergarten (First Things First, 2022). A child's early experiences, positive or negative, actually change the architecture and function of their brains, which has lifelong implications. While the brain is especially susceptible to change in early years, which is the focus in this section, it is important to note that it will continue to change with

learning experiences throughout a person's life. Children are not “stuck with” the brain that they are born with and can improve their academic and executive function skills through learning. Learning, very literally, changes the brain!

In the Womb

Brain development begins in the womb, with both genetics and factors like proper nutrition during pregnancy, stress, prenatal care, and exposure to toxins and infections playing a role in healthy development (CDC, 2022). The brain begins to develop during the first trimester and does so throughout gestation. “In the first trimester, nerve connections are built that enable your baby to move around in the womb, while in the second trimester, more nerve connections and brain tissue are formed” (Pregnancy, Birth & Baby, 2019). By the last trimester of pregnancy, a fetus’ brain “increases in size, folding of the brain’s outer layer (cortex), and the development of connections between neurons” (Psychology Today, 2022).

Early Years

During infancy, relationships and experiences lay the foundation for future brain function (Lally & Mangione, 2017). As such, healthy brain development is largely dependent on positive, nurturing relationships with caregivers. “Infants come into the world with a set of neural reflexes that serve as primitive entry-points for regulating themselves in their environment (such as breathing, eating, and maintaining a steady body temperature) and for interacting with physical objects and other people” (Immordino-Yang et al., 2018). Engaging with caregivers allows infants to “notice patterns of actions, language use, and emotional expression,” which form neural connections in their brain (Immordino-Yang et al.). As such, responsive relationships build neural connections that support a sense of safety and self-regulation, which is foundational for later learning.

Rather than looking at development from a nature versus nurture standpoint, development is more appropriately looked at through the lens of nature via nurture. While “genes provide essential information for establishing basic patterns of neuronal growth and connectivity, our individual experiences can affect gene expression and the trajectory of brain development” (Bick & Nelson, 2017). As such, caring, responsive, and stimulating environments are optimal for healthy brain development. On the other hand, “in less ideal environmental conditions, the foundational structure of the brain can

be compromised, causing abnormalities in systems sub-serving healthy physical, cognitive, and social development” (Bick & Nelson).

Why are early experiences so critical for later development? As mentioned above, during the first few years of life, the brain grows more than it will during any other period of life, with at least “one million new neural connections (synapses) made every second,” and developmental plasticity, or the brain’s ability to change and adapt, at its highest (First Things First, 2022; Moore et al., 2017). Thus, a young child’s brain is literally primed to respond to everyday experiences and interactions, and the brain’s architecture is built accordingly.

Brain Connections. “The early years of a child’s life are the best opportunity for their brain to develop the connections they need to be healthy, capable, successful adults” (First Things First, 2022). Research shows that the brain connections needed for critical skills, such as motivation, self-regulation, problem solving, communication, and self esteem, are formed, or not, during the first few years of life, and it is much more difficult to form these “essential” connections later in life (First Things First). For babies and toddlers, these connections are mostly built through positive experiences with caregivers. “Each new experience, each piece of information releases chemicals called hormones that create a new connection, or synapse, in the brain,” and later on, “connections that are not used as frequently will be pruned, or removed, to allow for more useful connections to grow stronger” (Head Start, 2022). For example, when a baby cries and a caregiver provides comfort, “the synapses in the brain that respond to and expect caring behavior from others will grow strong,” leading the baby to feel safe, secure, and open to positive learning experiences (Head Start). On the other hand, if a baby’s needs are not met, then they experience stress and their brain builds stronger connections in areas wired for survival, closing them off to learning experiences.

Caring Relationships. “A baby’s early experiences in relationships, whether at home or in an early education environment, set the stage for future brain functioning” (Lally & Mangione, 2017). Babies are entirely dependent on their caregivers for survival, protection, comfort, and happiness. As such, when their needs are fulfilled, their brains signal happiness. “These pleasurable early interactions stimulate the brain, motivating the baby to relate to those who care for them with confidence and ease” (Lally & Mangione). On the other hand, if a baby’s needs are not met, “emotional and social development suffer, and, because babies’ emotional base is the foundation for all other learning, so do intellectual and language development” (Lally & Mangione). Infancy is a critical time for building secure attachments with caregivers, including parents,

guardians, and teachers. Secure attachment is “when children know they can depend on adults to respond sensitively to their needs” (Pahigiannis, Rosanbalm, & Murray, 2019). Secure attachment promotes feelings of safety, security, and confidence in babies, which are foundational for self-regulation, relationships, and future learning. When babies do not experience secure attachment, but rather insecure attachment, “the body’s stress response is activated, flooding the developing brain with potentially harmful stress hormones” (Center on the Developing Child).

Experiences. One of the reasons why the human brain is as unique as a fingerprint is because much of the structure and function is based on individual experiences. “Brain development mainly involves the generation, pruning, and reorganization of neural connections to form brain networks that reflect a person’s experiences and help him or her adapt to the world in which they live” (Immordino-Yang et al., 2018). As an individual engages with the world, including encountering challenges, relationships, formal education, et cetera, their experiences “influence patterns of brain structure and function that undergird a person’s changing skills and inclinations over time” (Immordino-Yang et al.).

Adverse Experiences & Toxic Stress. Persistent, prolonged adversity and toxic stress can disrupt healthy brain development in children. Toxic stress is “when the stress children feel is strong, frequent, or prolonged, and it can disrupt healthy brain development and impact the way they think, feel, and grow well into adulthood” (Resilient Wisconsin, 2022). The human body has a stress response, often called “fight-or-flight,” which evolved as a survival mechanism. The stress response triggers physiological changes, including a quickened pulse, a burst of adrenaline, “redirection of blood away from extremities and instead to major organs,” and the release of cortisol (Scott, 2020). The stress response is meant to help people survive in life-threatening situations, which was necessary for ancestors. However, when children experience toxic stress, their bodies are constantly experiencing the stress response, which alters architecture and chemical makeup of the brain. Likewise, when a particular part of the developing brain is consistently used - in this case, the stress response - the synaptic connections in that area grow stronger; for example, if children are threatened by gang violence, their brains form stronger connections in the “fight or flight” area of the brain, causing them to be in a constant state of hyperarousal. “The brains of children and adolescents who experience persistent adversity respond by strengthening circuits that promote aggressive and anxious tendencies at the expense of circuits for cognition, reasoning, and memory” (Immordino-Yang et al., 2018). In addition to disrupting healthy development, frequent toxic stress makes “individuals more likely to develop health

problems, including mental health disorders such as addiction, anxiety, and depression, and physical health problems, such as heart disease, obesity, and cancer” (Immordino-Yang et al.).

For the brain to be ready to learn, children need to feel safe and calm. When feelings of safety and security are disrupted by toxic stress, “the child’s brain places an emphasis on developing neuronal pathways that are associated with survival, before those that are essential to future learning and growth” (Moore et al., 2017). When the brain perceives a threat or elicits the stress response, the parts of the brain associated with learning and memory are basically unavailable.

Critical & Sensitive Periods. Critical periods refer to brief times throughout a person’s development in “which a system or organ has to mature” (Moore et al., 2017). Critical periods occur at different times for different systems of the body, and most of these happen during gestation. When referring to the brain and central nervous system, experts usually refer to “sensitive periods,” which are “time windows during which the effect of experiences on brain development is unusually profound and can strongly shape the neural circuits” (Moore et al.). During sensitive periods, sensory experiences will have a greater impact on brain and behavioral development, but the door doesn’t entirely “close” once the sensitive period is over, like it does during critical periods. Sensitive periods occur in childhood because a child’s brain has “neuroplasticity responses that are not evident in adults, and which allow the young brain to develop appropriately and adapt constantly to environmental experiences and exposures” (Moore et al.). While neuroplasticity exists throughout the lifespan, it is less apparent in later years. As the brain matures, the connections become more permanent. “The brain’s transitions from a more plastic to a more fixed state advantageously allows it to retain new and complex processes, such as perceptual, motor, and cognitive functions,” but on the other hand, is less adept to change (Nickerson, 2021). As such, the brain’s versatility during sensitive periods creates both opportunity and vulnerability for young children. This presents educators with the critical responsibility to create rich educational experiences for children, as these experiences can alter the brain’s development and impact future learning, health, and overall life outcomes

The Brain’s Mental Processes

In the past, researchers were interested in which individual parts of the brain were responsible for specific mental processes. More recently, there has been a shift to “focus on the networks of connectivity between regions that facilitate different activity

modes important for thinking and learning” (Immordino-Yang et al., 2018). In other words, rather than individual parts, researchers have identified networks - that is, different parts of the brain working together - that are responsible for important mental processes. There are three major brain networks: Executive Control Network, Default Mode Network, and Salience Network (Immordino-Yang). “Through their co-regulation and coordination, each of these networks contributes to social, emotional, and cognitive functioning, allowing a person to operate well in the world and to take advantage of learning opportunities” (Immordino-Yang).

Executive Control Network

The Executive Control Network (ECN), unsurprisingly, deals with executive function (EF) skills and is activated during engaging, goal-directed activities. EF skills, sometimes referred to as “the management system of the brain,” is a “set of mental skills that include working memory, flexible thinking, and self-control” (Belsky, 2022). EF skills include paying attention, organization and planning, starting tasks and staying focused, taking different perspectives, regulating emotions, and self-monitoring (Belsky). As such, the ECN “facilitates attention, allowing people to hold information in mind, shift strategies or approaches as necessary, and focus on the completion of goal directed tasks” (Immordino-Yang et al., 2018). Being able to focus, stay on task, and self-regulate are essential skills for school, work, and life success. Anatomically, much of this network is located in the prefrontal cortex, which is not fully developed until individuals are in their mid twenties. Thus, while EF skills begin to develop in early childhood, they continue to evolve all the way into early adulthood. This is why children often need support in developing executive function skills.

Working Memory. Working memory refers to “the capacity to store information for short periods of time while engaging in cognitively demanding activities” (Peng et al., 2018). Essentially, working memory is the ability to keep information in mind while using it to complete a task. Belsky (2022) compares working memory to a temporary sticky note in the brain, as “it holds new information in place so the brain can work with it briefly and connect it with other information.” For example, children use working memory when they recall the steps of long division while working on a long division problem, or while reading a story to find answers to comprehension questions. Working memory has limited capacity, and this capacity increases with age. In general, researchers believe that “preschool infants can deal with about two items of information at once. Preadolescents can handle three or more. Through adolescence, further cognitive expansion occurs, and the capacity increases to five or more” (Sousa, 2022, p.

44). However, Sousa notes that “variables such as interest, mental time delays, and distractions may undermine and invalidate experimental attempts to find a reliable capacity limit” (p. 44). Similarly, the exact amount of time that something stays in working memory will depend on age, as well as interest, motivation, and distraction.

Working memory then uses certain criteria to determine if information should be encoded into long-term storage for future recall. While information pertaining to survival (e.g. don't walk into oncoming traffic) and strong emotional experiences have a higher likelihood of being stored, learning experiences in the classroom are less straightforward (Sousa, 2022, p. 46). Working memory “connects with the learner's past experiences and asks just two questions to determine whether an item is saved or rejected: ‘Does this make sense?’ and ‘Does this have meaning?’ (Sousa, p. 46). The first question refers to whether the learner understands the information, which is based entirely on past personal experiences. The second question refers to the relevance of the information for the learner, which is also very personal. “Whenever the learner's working memory perceives that an item does not make sense or have meaning, the probability of it being stored is extremely low,” whereas the addition of sense, meaning, or ideally, both, increases the likelihood of retention (Sousa, 2022, p. 46). Sousa explains the reason for this, “Brain scans and other studies have shown that when new learning is readily comprehensible (sense) and can be connected to past experiences (meaning), there is substantially more cerebral activity followed by dramatically improved retention” (p. 47). Between sense and meaning, meaning has a higher likelihood for remembering than sense; this is probably due to the emotional impact of something meaningful.

Implications for Teachers: Kids are not born with EF skills, but are born with the tools to develop such skills. Teachers should find opportunities to help students develop these skills. “Teachers can offer explicit opportunities to learn executive functions by providing tools and modeling to help students learn to organize themselves, think ahead, plan their actions, and decide on what behaviors they will pursue, rather than reacting impulsively” (Darling-Hammond et al., 2022). Teachers can model EF skills through think alouds, sharing their own mental process as they go. The idea is to scaffold these skills through modeling, gradually allowing students to complete the activities independently.

Knowing that working memory capacity is limited for all age groups, and keeping age-specific capacities in mind, teachers should limit learning objectives in their lessons. For example, expecting elementary students to remember four different types of sentence structures and how to use them, in one lesson, is unreasonable. Less is more when it

comes to key takeaways of a lesson; teachers should plan learning activities that will emphasize a couple of the key elements, rather than trying to make children remember more than their mental capacity can handle.

When working memory opts to not store information, relearning it is basically like learning brand new information, which is frustrating for both students and teachers. While teachers almost always plan with the goal of student understanding, sometimes the goal of making meaning is on the backburner. “To convince a learner’s brain to persist with that objective, teachers need to be more mindful of helping students establish meaning” (Sousa, 2022, p. 48). Principle 3 tells us that new learning is influenced by prior experiences, which means that teachers must use lessons and curriculum that students can connect with their own past experiences, thus making meaning.

Closure. Closure in this case does not refer to an ending, or a “closing” in its traditional sense. Closure “describes the covert process whereby the learner’s working memory summarizes for itself its perception of what has been learned” (Sousa, 2022, p. 64). Closure is important because it is during this time that a student “often completes the rehearsal process and attaches sense and meaning to the new learning, thereby increasing the probability that it will be retained in long-term storage” (Sousa, p. 64). Rehearsal “refers to the learner’s reprocessing of new information in an attempt to determine sense and meaning” (Sousa, p. 107). Rehearsal aids in retention. Teachers initiate the closure process, which can occur at any point in a lesson, but they don’t do the work like they would during review; students do “most of the work by mentally rehearsing and summarizing those concepts and deciding whether they make sense and have meaning” (Sousa, p. 64). Teachers can initiate closure in the following way:

- Give specific directions that focus on the new learning: “You will have two minutes to think about the three causes of global warming that we discussed today. Be prepared to turn and talk to your partner after the two-minutes is up.”

These directions indicate “much quiet time they have for the cerebral summarizing to occur and identifies the overt activity (discussion) that will be used for student accountability” (Sousa, p. 64). During the discussions, teachers can gauge the accuracy of the students’ closure processes, and correct any major errors.

Primacy-Recency Effect: When learning new information, “the amount of information retained depends, among other things, on when it is presented during the learning episode” (Sousa, 2022, p. 81). In this case, a learning episode refers to a class period, or

a specific lesson within the class period. At certain points within the lesson, students will remember more than they will at other points in the lesson. The primacy-recency effect states, “We tend to remember best that which comes first and remember second best that which comes last” (Sousa, p. 82). We remember the least about what comes in the middle of a lesson. The reason for this is because the first items that we learn are within the working memory’s “functional capacity,” so “they command our attention and are likely to be retained in semantic memory” (Sousa, p. 82). Later information, in the middle of the lesson, typically exceeds working memory capacity, and is often lost. Near the end, “items in working memory are sorted or chunked to allow for additional processing of the arriving final items, which are likely held in working memory and will decay unless further rehearsed” (Sousa, p. 82). As such, there are prime times during a class period where new learning will occur more easily, and times where it will be more difficult. Thus, lessons should be planned accordingly.

Primacy-Recency Use in the Classroom

- **Timing:** Sousa (2022) approximates prime time 1 and prime time 2 (the times where optimal learning and retention take place) in a 40-minute lesson. Prime time 1 builds up from 0-5 minutes, peaks from 5-15 minutes, and then trends down from 15-20 minutes. There is “down-time” from 20-25 minutes, and then it begins rising from 25-35 minutes, and peaks to the 2nd highest point at 35-40 minutes (p. 82). These are approximations of a 40-minute period and are not exact but can be used for reference.
- **Teach new material first:** New information should be taught during prime time 1. New information or skills should be taught at this time because it is most likely to be remembered. *It is important to remember that only correct information should be taught during this time; in other words, asking students what they know about a new topic is NOT effective during prime time, as wrong answers could be mentioned and remembered.*
- **Practice or Review:** Practice/review should come after the new material is taught. “At this point, the information is no longer new, and the practice helps the learner organize it for further processing” (Sousa, p. 82). Likewise, this normally leads into a “downtime” where retention is more difficult, so new information should not be taught during this time.

- **Closure:** Closure should take place during the 2nd prime time because this is when retention is at the second highest in a lesson. This is an “important opportunity for the learner to determine sense and meaning” (Sousa, p. 83).

Many teachers are unfamiliar with the primacy-recency effect and lose out on prime learning time with things like attendance, collecting homework, discussing objectives, or reading announcements. By the time teachers actually introduce the new material, students are in their down time, and retention is much more difficult.

Default Mode Network

The Default Mode Network (DMN) is activated during resting-awake states (think opposite of engaging, goal-directed states), including “tasks that involve internally directed, interpretive, and reflective thought, for example when remembering past experiences, imagining hypothetical or future scenarios, or deliberating on inferred, abstract, or morally relevant information” (Immordino-Yang et al., 2018). Immordino-Yang et al. explains that the DMN is important for “conceptual understanding, reading comprehension, creativity, nonlinear and ‘out-of-the-box’ thinking, feelings of inspiration, social emotions like admiration and compassion.” It also seems that the DMN is activated during “assigned tasks such as future planning involving the self, autobiographical memory, and interpreting social interactions,” all of which have a reflective element to them (Anderson & Davidson, 2019). The DMN is not useless, or only activated during non-cognitive tasks. Instead, it is “activated in situations that require broad situational awareness over time and is deactivated during task situations requiring focused attention” (Anderson & Davidson, 2019). Anderson and Davidson explain, “The DMN is strongly implicated in the processing, comprehension and memory of narrative receptive media including aural, audiovisual, and text media.” In terms of a classroom setting, it is likely that the DMN is activated during lectures as well, as students are receiving information but not actively engaging in an activity.

Salience Network

Salience is a term used to describe “the quality of being noticeable, or standing out,” where salient elements, “are described as such because they attract attention and are meaningful or behaviorally relevant” (Uddin, 2017). As such, the Salience Network “weighs emotional relevance and perceived importance and urgency of information to facilitate switching between mindsets” (Immordino-Yang et al., 2018). This network helps the brain to focus on what is important in a given moment. The Salience Network

switches modes using “external signals from the environment and internal bodily signals, such as from hunger and anxiety” (Immordino-Yang). This network is “critical for detecting behaviorally relevant stimuli and for coordinating the brain’s neural resources in response to these stimuli” (Uddin). In other words, the salience network detects and analyzes stimuli, and then determines what the brain’s response should be, which is then translated to actions and behavior. Dysfunction in the salience network can lead to neuropsychiatric disorders like autism spectrum disorder (ASD), psychosis, and dementia (Uddin).

The Role of Emotions

How a person ‘feels’ about a teaching or learning situation determines the amount of attention devoted to it” (Sousa, 2022, p. 42). As such, emotions can either inhibit or support the learning experience. “Positive learning emotions include interest, curiosity, wonder, passion, creativity, engagement and joy. These activate the reward system of the brain, make the experience desirable, and aid in focus and attention” (Osiko et al., 2022). When students feel positive emotions during a learning experience, they are better able to overcome challenges, broaden their perspectives, and fully engage in the learning. Likewise, positive emotions promote motivation. On the other hand, “negative emotional states such as anxiety, stress, sadness, disinterest, disengagement, worry and fear can impede learning processes and the motivation to learn” (Osiko et al.).

Implications for Teachers: Teachers can make their classrooms conducive learning environments by making the classroom a safe space through a positive classroom climate, positive relationships, and attention to student emotions (discussed in greater detail in section 3). Also, to promote positive learning emotions, teachers can always utilize humor. “Research shows that humor has many benefits when used frequently and appropriately in the classroom and other school settings” (Sousa, 2022, p. 58). There are physiological benefits to humor, including increased oxygen in the blood, a result of laughing, as well as the release of endorphins (Sousa, p. 58). In addition to the physical benefits, using humor and laughter also get students’ attention, creates a positive climate, and increases retention. The reason for increased retention is because strong emotions enhance retention, so “the positive feelings that result from laughter increase the probability that students will remember what they learned and be able to recall it later” (Sousa, p. 58). While humor can be used as an opening joke or an “attention-getter” it can also be used within a lesson. This could be using humorous examples, videos, or pictures to relay an idea from the lesson. When using humor, be careful not to use sarcasm, which can end up negatively affecting students. Sarcasm, which comes

from the Greek “to bite flesh . . . is one of the factors that can undermine that support and turn students against their peers, the teacher, and the school” (Sousa, p. 59).

Section 2 Key Terms

Closure - Describes the covert process whereby the learner’s working memory summarizes for itself its perception of what has been learned

Rehearsal - This continuing reprocessing of information (Sousa, p. 79)

Scaffolding - A method where teachers offer support to students as they learn and develop a new concept or skill

Toxic Stress - When the stress children feel is strong, frequent, or prolonged, and it can disrupt healthy brain development and impact the way they think, feel, and grow well into adulthood

Long-Term Memory - Storage of information over an extended period of time

Section 2 Reflection Questions

1. What are some examples of ways that you already use closure in your classroom?
2. What strategies do you use in the classroom to promote positive emotions during lessons?
3. Think about a time that one of your students really struggled to focus and engage with the lesson. What negative emotions do you think this student was dealing with that interrupted his/her cognitive functioning?
4. What are some activities that you think would be effective during the “down time” of primacy-recency effect?
5. What specific difficulties might students have if they have working memory deficits?

Section 2 Activities

1. Take an existing lesson plan (or create a new one), and design it with the primacy-recency effect in mind. Organize it by times, noting prime time 1, prime time 2, and down time, and indicate the activities for each portion of the class.

2. Create a Slides presentation to teach students how their brains change with learning. This should promote a growth mindset, while explaining how learning and experiences change the brain. (Note: Create something that you would really share with your students; believe it or not, students love learning about how their brains work)
3. Create a diagram or picture that represents how working memory functions.
4. Design a closure activity for one of your lessons. This activity can take place at any point in the lesson but most promote rehearsal of concepts.

Section 3: Neuroeducation in the Classroom

Why it's Important

Neuroeducation is an emerging research field in which cognitive scientists, educators, and neuroscientists “collaborate to apply neuroscience research to change education . . . and [neuroeducation] also better reflects a knowledge field centered on education, characterized by neuroscience and technology, and based on experiential, social, and biological evidence” (Cui & Zhang, 2021). Neuroeducation encompasses all of the factors that influence learning, starting with how the brain typically develops, and how factors such as genetics, environment, social-emotional state, and personal experiences impact development and learning. The demand for neuroeducation and its subsequent growth in the last decade comes from two directions: “neuroscientists emphasize that their work has the potential to improve education, and educators are keen to understand what neuroscience can provide for their practice” (Cui & Zhang). “The establishment of the field . . . marks the arrival of an era that focuses on human brain learning models and mechanisms, which gives researchers, leaders, and teachers specific opportunities to reexamine educational practice and research,” opening the door for better experiences for all students, as well as improved educational outcomes (Cui & Zhang). As of now, neuroeducation does not translate directly into policy or practice in the field of education; however, “educational policies and practices that are consistent with how the brain develops are more likely to promote learning and development than those that undermine or are inconsistent with brain science” (Immordino-Yang et al., 2018).

Improved Teaching, Improved Learning. If teachers understand how the brain learns and how various factors affect learning, then they can plan for optimal classroom conditions. Neuroeducation “can help teachers understand the brain operating mechanism, promote teachers to change teaching strategies, and optimize teaching design, to implement better teaching activities” (Cui & Zhang, 2021). Equally important is understanding barriers that get in the way of learning, including “physiological data . . . such as heart rate, respiration, and pupil, [which] can be used to judge learners’ physical discomfort, fear, or reluctance to help better understand learning and teaching” (Cui & Zhang). Understanding barriers to learning, including but not limited to anxiety, depression, and distractibility, and having strategies to work through such barriers, are major focus areas of neuroeducation, and are key in improving learning experiences.

Neuroeducation also aims to improve the quality of learning experiences to increase retention. Neuroeducation research presents important principles to follow, and suggests that “correctly dealing with obstacles and correcting mistakes in the learning process will help to connect nerves and promote the transformation of knowledge, and retrieving information with consistent patterns leads to stronger neural connections” (Cui & Zhang, 2022). Understanding these concepts, as well as establishing classroom routines that utilize them, will improve learning experiences. Teachers can also use neuroeducation research in their “curriculum design and learning process and they can try to avoid asking mechanical, trivial, and non-challenging questions but put forward multi-dimensional methods to consider a concept or idea, and the neural pathways and learning results will also be strengthened in return” (Cui & Zhang). As a result, students will also feel more motivated and engaged in their learning.

Neuroeducation practices can also help teachers to better understand students with disabilities, such as dyslexia, attention deficit hyperactivity disorder (ADHD), and Autism Spectrum Disorder (ASD). For example, brain imaging technology (e.g. fMRI, MRI, EEG), “help find the differences in the brain structure of dyslexia children, such as reduced brain functional plasticity, and insufficient neural network activation,” which can provide “good educational guidance and teaching intervention to alleviate children’s dyslexia and improve their attention” (Cui & Zhang, 2022). Through brain imaging, researchers know that readers with dyslexia use different neural pathways while reading compared to strong readers, and have determined the need for explicit phonics instruction as a result. Neuroeducation aims to provide teachers with detailed information on the brain to help struggling learners.

Ideal Learning Conditions

“The factors that influence a child's learning outcomes, which operate at vastly different degrees of proximity to the learning process, should be seen as an interactive, interconnected system” (Thomas et al., 2018). Neuroeducation tells us that while the brain is doing the actual learning, there are several factors that influence what, and how much, the brain will learn. It is important for teachers to use what is known about the brain and learning to create an environment that is more conducive to learning.

Physiological

For individuals to engage in meaningful learning opportunities, certain physiological needs must be met. Some of these needs include sleep/rest, nutrition and low exposure to toxins, and physical activity and green space (Immordino-Yang et al., 2018).

Adequate Sleep. “Both physical and mental health, and the ability to think well, depend on getting an adequate amount of quality sleep” (Immordino-Yang et al.). In addition to feeling better overall, sleep is actually fundamental for long-term memory consolidation. “The encoding of information and motor learning into the long-term memory sites occurs during sleep—more specifically, during the rapid-eye-movement (REM) stage” (Sousa, 2022, p. 92). This means that when kids and adolescents aren’t sleeping enough, or aren’t reaching their REM cycles, their learning is not being consolidated into long-term memory. As such, they will have trouble remembering what they learned and using that information for new learning.

Studies also show that students that get less sleep often have lower grades than students that get more sleep; this is probably due in some part to the changes in circadian rhythms that affect focus, which is discussed in more detail below. However, lower grades due to lack of sleep can also happen because drowsiness makes it difficult to focus, and difficult to complete complex tasks. Sleep deprivation can also cause depressed moods and other unpleasant feelings. Furthermore, the “performance of complex and abstract tasks that involve higher-order brain functions declines more strongly after sleep deprivation than their performance of simple memory tasks” (Sousa, p. 94). This means that while students might be able to “function” on a very basic level with a lack of sleep, they will not be able to fully engage in learning tasks. Long-term sleep deprivation can cause more serious issues. Immordino-Yang et al. (2018) explains, “Over time, chronic sleep deprivation leads to impairments in mood, emotion

regulation, memory, cognition, creative thinking, and situational awareness,” as well as the development of new neuronal growth.

Circadian Rhythms. “The daily pattern of body functions” including breathing, digestion, “hormone concentration,” “the sleep-wake cycle, and body temperature” are referred to as circadian rhythms (Sousa, 2022, p. 289). Sousa explains that the timing of these cycles is determined by the brain’s exposure to daylight, which means that they are controlled largely by the sleep-wake cycle (p. 90). One circadian rhythm, referred to as the psychological-cognitive cycle, “regulates our ability to focus on incoming information with intent to learn” (Sousa, p. 91). Research shows that this circadian rhythm is about the same for preadolescents and adults, but starts later for adolescents due to the onset of puberty. For pre- and post-adolescents, the focus cycle peaks from about 7 AM until noon, and then starts to dip from noon to 1 PM, before escalating again. For adolescents, the cycle peaks about an hour later at 8 AM until 1 PM and then starts to dip until its low point at 3 PM. During these low points of focus, while learning technically can occur, it will take a lot more effort (Sousa, p. 91). It is also important to note that for adolescents, their “second wind” for focus peaks again around 4 PM and stays relatively high until 10 PM, which is why adolescents are often more tired in the morning and more awake at night.

Implications for Teachers: Taking these biological factors into account at the district level could result in later start times for middle and high schools, as this could be beneficial for adolescent learners. During a normal sleep time of eight to nine hours, it is believed that five REM cycles occur. Sousa (2022) explains, “Adolescents getting just five to six hours of sleep lose out on the last two REM cycles, thereby reducing the amount of time the brain has to consolidate information and skills for long-term storage” (p. 93). Sleep deprivation can cause additional problems, such as irritability, tiredness during the day, a lack of focus, and even anxiety and depression (Sousa).

Later start times is a more macro solution to this problem, but teachers can make little changes in their classroom settings to accommodate these changes as well. For example, teachers can schedule important tests or projects during times when students are at their peaks for focus, rather than during dips. Likewise, particularly middle and high school teachers, can be cognizant that their own dips will occur when their students are still at their peaks, and plan classroom activities accordingly. Teachers should also discuss the importance of sleep with their students, explaining how it directly affects memory, focus, and mood. While it might not seem intuitive in nature, students actually enjoy learning how their brains work.

Nutrition and Low Exposure to Toxins. Adequate nutrition is critical for healthy brain development, particularly for young children. Likewise, nutrition directly affects “mental processes” for school-aged children (Just, 2019). For example, deficiencies in nutrients, such as iron, “can decrease dopamine transmission, thus negatively impacting cognition” (Just). Decreased dopamine can also negatively impact a child’s mood. Also, Just explains, “Amino acid and carbohydrate supplementation can improve perception, intuition, and reasoning.” While specific vitamins and nutrients are important for various brain functions, a balanced diet is crucial for overall health. Because a balanced diet directly affects health, “students are likely to have fewer absences and attend class more frequently,” thus having fewer interruptions to their learning (Just). “Studies show that malnutrition leads to behavior problems, and that sugar has a negative impact on child behavior,” while hunger inhibits focus (Just).

Exposure to environmental toxins, drugs, and alcohol, can have a permanent, negative effect on brain development (Immordino-Yang et al., 2018). It’s also important to note that “children’s diets contain increasing amounts of substances that can affect brain and body functions,” including caffeine (Sousa, 2022, p. 28). Caffeine is found in many snacks and drinks that teenagers, adolescents, and shockingly, some pre-adolescents, eat and drink regularly. Too much caffeine can cause nausea, anxiety, and insomnia, in both children and adults (Sousa, p. 28). In addition, the body can become dependent on caffeine, meaning that students experience withdrawal symptoms when they don’t have it. Withdrawal symptoms include headaches, trouble concentrating, fatigue, and increased irritability (Gavin, 2022). It is no surprise that “eliminating the sale of soft drinks in vending machines in schools and replacing them with other drinks had a positive effect on behavioral outcomes such as tardiness and disciplinary referrals” (Just, 2019).

Implications for Teachers: Unfortunately, teachers cannot control what their students eat, or don’t eat, when they are at home. Teachers can educate students and parents on the importance of a healthy diet, including sending home newsletters with healthy snack suggestions, recipes, or “easy” healthy foods, but obviously control here is limited. Within the classroom, teachers can offer healthy snacks to their students; this isn’t to say that students should be snacking the entire time, but if students are hungry, learning doesn’t occur. Hunger impedes a child’s ability to focus, and also causes physical discomfort, such as stomachaches, headaches, and nausea. This is an example of Maslow > Bloom’s, in that if children feel the physiological effects of hunger, they won’t be able to concentrate on learning. “Roaring stomachs cause children to be cranky,

hyperactive, and aggressive. These behavioral issues can distract kids from their school work,” leading children to fall behind in school (Waite & Thielke, 2021).

Hunger is a bigger issue than a student simply needing a snack. There are approximately 13 million American children who live with or are at high risk of hunger, meaning that they aren’t sure when or where their next meal will be (Snack Pak 4 Kids, 2022).

Imagine coming into school, not only hungry, but also not knowing the next time that food will even be available. It is not only physically debilitating but it is a root cause of anxiety. Likewise, without adequate vitamins and nutrients, concentration issues aside, the brain will not develop normally. As educators, and sometimes the only consistent adult in a child’s life, ensuring that children have food available to them throughout the school day is a responsibility that may not be in the job description, but is extremely important. As such, teachers should be familiar with common signs that a child is facing hunger:

- Constantly asking about food
- Suddenly losing or gaining weight with no major changes (activity level, medications, etc.)
- Hoarding food
- Bullying
- Poor attention span, memory, or trouble concentrating
- Hyperactive or impulsive
- Aggressive or antisocial (Schoen, 2018)

It is important to remember not to single out any children if they exhibit one or more of these signs, as this can be embarrassing. Instead, it is best to discuss concerns with the school social worker or counselor, who can help connect students and families with resources for the issue. Program Manager of Children and Families at Feeding America, Christina Martinez, said, “Children need nutrients so that they can grow, develop and focus on learning instead of thinking about the food they need . . . Ultimately, they need to be able to concentrate in the classroom, so they can succeed and reach their full potential” (Schoen).

Social-Emotional Factors

Relationships. Neuroeducation research shows that “warm, caring, supportive student-teacher relationships, as well as other child–adult relationships, are linked to better school performance and engagement, greater emotional regulation, social competence, and willingness to take on challenges” (Darling-Hammond et al., 2019). Positive relationships actually affect the architecture and function of the brain, particularly during early childhood. Brain architecture is developed through the “presence of warm, consistent, attuned relationships; positive experiences; and positive perceptions of these experiences,” and these relationships “help develop the emotional, social, behavioral and cognitive competencies foundational to learning” (Darling-Hammond et al.). As such, these same relationships aid in learning in the classroom setting.

Physical & Emotional Safety. In order for learning to occur, students need to feel safe, both physically and emotionally. Stress and anxiety disrupt cognitive functioning because the brain enters survival mode. The brain has a hierarchy of response to sensory input; this means that higher priority input overrides data of lower priority (Sousa, 2022, p. 42). At the top of the hierarchy is sensory input that threatens survival. The brain is primed to keep its vessel alive, so “it will process immediately any data that past experience interprets as posing a threat to the survival of the individual, such as a burning odor, a snarling dog, or someone threatening bodily injury” (Sousa, p. 42). Once the brain perceives a threat, it releases adrenaline (i.e. the stress response) and essentially shuts off any activity that is not pertinent to survival. Because the brain is designed to keep us alive, survival is at the top of the hierarchy, and new learning is at the bottom; this means that survival input will always override new learning input. To put this information into classroom practice, when a student feels threatened or unsafe, the primitive parts of the brain take over and completely override the parts of the brain available for learning. As Sousa puts it, “Before students will turn their attention to cognitive learning (the curriculum), they must feel physically safe and emotionally secure in the school environment” (p. 42).

Emotions Impact Learning. Emotions can be defined as “an embodied response to a stimulus (whether real or perceived, external or internal) and are experienced along a continuum from positive to negative” (Osiko et al., 2022). Learning and emotion are not separate entities, but rather very much connected. At the top of the brain’s sensory input hierarchy is data threatening survival, followed by emotional data, and lastly, data for new learning (Sousa, p. 43). Therefore, how individuals feel emotionally will affect the quality and the quantity of their learning. Sousa explains, “When an individual

responds emotionally to a situation, the older limbic system (stimulated by the amygdala) takes a major role, and the complex cognitive processes are suspended” (p. 42). Most people have experienced this brain response when fear, sadness, anger, or joy took precedence over any rational thought. As such, if children are experiencing emotions like sadness or anxiety, their brains are not ready to learn new information. Even if they are able to sit through the class, they are unlikely to retain the information because their “learning brain” is turned off. “When learners generate positive emotions, their scope of attention broadens and their critical thinking skills are enhanced. Neutral and negative emotions, on the other hand, narrow the scope of attention and thinking” (Sousa, p. 241). As such, activities that challenge students and increase engagement are more likely to stick with them.

Implications for Teachers: “How the student feels about being in that classroom and about the lesson content itself can make all the difference between mental withdrawal or active participation and achievement” (Sousa, 2022, p. 78). Teachers must make social and emotional needs a priority in their classrooms. This means that “teachers create classroom communities grounded in respect, in which all students are affirmed for their value, with shared norms and responsibilities for all members” (Immordino-Yang et al., 2018). A safe and positive classroom climate will:

1. promote positive relationships between students, “so they are kind to each other, listen to each other, and respect different viewpoints,”
2. build positive relationships between teachers and students, so students know “feel you not only care about their academic success but also care about them as individuals,” and
3. develop and implement classroom “norms” and “rules” that “are simple, clear, and provide a physically and emotionally safe learning environment” (Sousa, p. 105).

Keeping a positive classroom climate is an ongoing task and teachers should make changes as they see fit. “Teachers’ abilities to maintain a supportive, culturally responsive environment with consistent routines support student learning by reducing hyper-vigilance, anxiety, and extraneous cognitive load” (Darling-Hammond et al., 2022).

Content knowledge and teaching skills matter, but relationships must come first. It’s important that teachers let students know that they are on the same team, and that they are there for support. Creating positive rapport and building relationships with students, from day one, is key in providing a supportive environment. Building

relationships takes time and effort but some ways to start include correctly pronouncing students' names and using correct pronouns. "You might be the only adult in school in that student's day to use their name in a positive way, so there's great power in learning names quickly," and correctly (Hager & Arenz, 2022). One way to ensure that names are being pronounced correctly and correct pronouns are being used is to give students a survey (Google Forms works great) at the beginning of the year, explicitly asking for preferred pronouns and names, if these should be used in class (and if not, what do they prefer in class), and how to phonetically pronounce names. This gesture lets students know that they are accepted for who they are and that the classroom is a safe space to be themselves. Using this same type of survey, teachers can also ask students about their interests, favorites, what makes them tick, and how they learn successfully. Not only does this show that teachers are taking interest in their students, but it creates a safe space for students to express themselves.

In addition to creating a safe space and building relationships, teachers need to be cognizant of their students' emotional states, and to have tools to de-escalate problematic internalized or externalized behavior. One way to simply see how students are doing is to do daily check-ins, ideally at the beginning of class. "Check-ins at the beginning of class honor experiences that students bring into the room before we ask them to think about something else" (Porosoff, 2021). Check-ins can and should be done at all ages but they will obviously not look the same.

- **Elementary Level Check-ins:** Feelings Chart, Students put their clip on the chart to indicate how they're feeling; Color Chart, Similar to the feelings chart but colors indicate feelings (red=mad, blue=sad, green=happy, yellow=anxious, etc.); Morning Meetings, Verbally discuss how students are feeling and/or if anyone needs supports.
- **Middle/High School Level Check-ins:** Google Forms, Students fill out a form when they get to class indicating their moods/feelings; Post-Its, Designate colored post-its for students to indicate if they need support, or if they just need understanding for that day (e.g. Red= I need support, Yellow= I have something going on or am disengaged), follow up with students as needed.

It's also important that teachers are able to recognize when there is a more serious emotional issue going on. This means that teachers need to be aware of warning signs that a student is in need of emotional support:

1. Acting sad or withdrawn for 2+ weeks

2. Overwhelming fear or anxiety for no apparent reason (including physiological symptoms)
3. Difficulty concentrating or sitting still
4. Severe mood swings (Zimmerman-Leizerov & Jerome, 2022)

If a teacher sees one or more of these signs, it is appropriate to not only talk to the students themselves (if they have a good relationship), but also to seek help from a school social worker or guidance counselor.

Teaching Practices

Not all teaching practices are created equal. There are some teaching practices that will aid in better retention, increase higher quality learning experiences, and enhance overall enjoyment by students, and we know this through research in neuroeducation.

“Productive learning environments and teaching practices “support age-appropriate exploration and discovery, followed by reflection and discussion for deeper understanding” (Immordino-Yang et al., 2018). Best teaching practices will challenge students, while taking into account their zone of proximal development (ZPD). ZPD is defined as “the space between what a learner can do without assistance and what a learner can do with adult guidance or in collaboration with more capable peers” (Billings & Walqui, N.D.). Effective teaching practices “attend to the trade-off between plasticity and efficiency in brain development, offering activities that encourage both flexible thinking and mastery of necessary building-block skills and knowledge” (Immordino-Yang et al.).

Teaching to Multiple Senses Increases Retention. There is a long-standing neuromyth that if students are taught in their preferred “learning style” then they will learn better and achieve better outcomes; however, there is no scientific research indicating that teaching to a specific learning style will improve outcomes. Rather, it is through multisensory teaching and multisensory learning (MSL), or teaching/learning information through more than one sense, that improves retention. There is strong research on “the effectiveness of simultaneous use of visual, auditory, tactile-kinesthetic, and articulatory motor strategies during instruction,” particularly for students with disabilities (Colorado Department of Education, 2020). Additionally, research shows that when an “activity engages multiple areas of the brain, it can help students develop stronger memories around how to do it,” which aids in retention and future retrieval of the information (Waterford.org, 2019). When information is learned through more than

one sense, the brain is more likely to encode it in long-term memory. MSL allows students to engage with the content in more than one way, which also increases engagement.

The left and right hemispheres process information differently but people learn best when both hemispheres are engaged. Sousa (2022) explains, “Just as we would catch more balls with both hands, we catch more information with both hemispheres processing and integrating the learning” (p. 170). Further, research indicates more connections are made in the brain when multiple senses are activated. “If more brain stimulation promotes growth of synapses and dendrites and more areas of the brain are stimulated when information is presented through MSL, then multisensory lessons can stimulate the growth of more brain connections” (McIver, 2017).

Implications for Teachers: When possible, it is beneficial to engage multiple senses in lessons. When teaching new ideas, aim to present information both visually and auditorily. “Write key words on the board that represent the critical attributes of the concept, then use a simple diagram to show relationships among the key ideas within and between concepts” (Sousa, 2022, p. 170). Doing this attaches both “auditory and visual cues” to the information, which helps students to create sense and meaning, and ultimately aid in later retrieval of the information (Sousa, p. 170). Concept mapping is another way to implement a visual representation of information that was previously taught verbally. “Concept mapping consists of extracting ideas and terms from curriculum content and plotting them visually to show and name the relationships among them” (Sousa, p. 174). Concept mapping is especially helpful for students with disabilities.

While the combination of visual and auditory teaching is often the most simple to implement, the multisensory teaching options are endless. In math class, students can use base ten blocks to represent numbers, and even to solve math problems. Likewise, using manipulatives, like beads or buttons, to count or solve problems is beneficial. “By moving these items around and seeing how the quantities change, kids have a concrete way of understanding how these math operations work” (Hodnett, 2022). For struggling readers, multisensory approaches like writing words in sand or shaving cream have been shown to be effective as well. Science labs use MSL naturally, as students observe phenomena, conduct experiments, write down results, and make reports.

Physical Activity. Movement and physical activity improve brain performance. “Movement throughout the day helps students to re-energize their bodies and their brains, helping them to focus and concentrate better . . . [Additionally,] movement

during the school day benefits academic performance and improves behavior” (Ferlazzo, 2020). Improvement of behavior makes sense, as sitting behind a desk all day gets boring, and students grow restless. Movement increases engagement, which decreases unwanted behaviors. When students are engaged, they are more excited to learn, and more motivated as a result.

The benefits of physical activity for learning do not stop at increased motivation and engagement. Studies consistently show that kids that are able to be active have “faster cognitive processing, and more successful memory retention than kids who spend the day sitting still,” as well as more mental clarity, due to increased blood flow to the brain (Abdelbary, 2017). In addition, exercise “strengthens both the prefrontal cortex (which is involved in executive functioning) and the hippocampus (which plays a key role in memory and learning),” while also promoting creative thinking, focus, and retrieval of information (Kris, 2019). Physical activity also improves mental health. The reason for this is because physical activity increases levels of serotonin, norepinephrine, dopamine and endorphins, which support motivation, response to stress, and well-being (Kris, 2019). Movement does not have to be a hardcore workout in order to be beneficial. Adding components of movement within the academic classroom, PE class, or outside at recess, can all be beneficial for students.

Implications for Teachers: Despite knowing the benefits of physical activity, schools seem to be cutting back on physical education time, as well as recess. Likewise, despite the research behind physical activity and the brain, most classrooms still have students spending the majority of the time sitting at their desks and listening. Sometimes teachers prefer this method because they fear that movement will cause chaos in the classroom. However, “effective classroom movement is not chaotic nor is it necessarily unstructured . . . Effective classroom movement simply acknowledges that there is a direct connection between physical movement and things like attention, memory, and learning” (Ferlazzo, 2020).

Recess. At most schools, recess is considered a privilege, and might be withheld as punishment for bad behavior, or for falling behind academically. Sometimes it is eliminated to make more time for academics or practice for standardized tests. Withholding recess for any reason, especially as a form of punishment, is ultimately ignoring what we know about physical activity and the brain. The Center for Disease Control (CDC) says, “Exclusion from recess for bad behavior in a classroom deprives students of physical activity that can contribute toward improved behavior in the classroom” (Dendy, 2022). Physical activity leads to improved behavior of all students,

but this is especially important for students with disabilities such as Attention Deficit Hyperactivity Disorder (ADHD). A study in *School Psychology Quarterly* emphasized the importance of physical activity and recess, explaining, “Results showed that levels of inappropriate behavior were consistently higher on days when participants [with ADHD] did not have recess, compared to days when they did have it” (As cited in Dendy).

It is understandable that administrators and teachers want additional time for academics, particularly in a culture where high stakes tests are so important, but eliminating recess is not a good tradeoff. “If productivity, accountability, and scores on high-stakes tests are a major concern, would it not make sense to ensure that students are in the best mind-brain shape they can be in when taking these and other tests?” (Sousa, 2022, p. 227). Recess is like a workout for the brain, keeping it sharp and focused, which is necessary for productivity in the classroom and good scores on high-stakes tests. “When you cut down recess, you are removing time that kids can run around. And when they run around, their brains are getting a bubble bath of good neurochemicals, neurotransmitters and endorphins. These help memory and mood. A simple burst of exercise helps students focus better” (as cited in Kris, 2019).

Incorporating Movement in Lessons. “When teachers weave in purposeful movement, they enhance students’ comprehension and retention” (Kris, 2021). Incorporating movement into a lesson is not just for fun but it actually helps students remember the material. One study showed that students who used movement in their learning strategy remembered 76% of the material, while those who used only thinking techniques without movement only remembered 37% (Kris). Movement does not have to be a class dance party - though that can be an effective brain break; movement can be seamlessly integrated into lessons all while students reap the benefits. Below are some practical strategies to incorporate movement into classroom lessons.

Conga Line (Ferlazzo, 2020): The conga line can be used with any subject and any unit. Students are numbered off as 1s and 2s, and then the 1s face the 2s. This can be in lines or in two circles. Teachers pose a discussion question for the class and determine which group will answer first (e.g. the 2s answer and then the 1s answer). When the music plays, one group moves to the right, and when the music stops everyone has a new partner. These steps can be repeated several times to maximize movement, and so students hear a number of different perspectives. Some possible discussion questions based on subject area include:

- Math: Explain two ways to solve this problem; How do you know your answer is reasonable?; Which strategy is the most effective for solving this problem?

- Social Studies: What was the leading cause of ____?; How did ____ impact the world we live in today?; Who was the most influential person during ____?
- Science: What are the benefits and limitations of this model?; What is the cause/effect of ____?; Discuss your initial hypothesis and your reasoning behind it.
- English Language Arts: Have students react to a quote from a novel or short story; How did the character change from the beginning of the story to the end?; How did the setting help to move the plot forward?

The prompts listed are very general, whereas teachers can be as specific as they want to with the content that they are covering. The congo line can be used at any point in a unit but it does work well as an opening activity to get students thinking about common themes.

Gallery Walks: A gallery walk is when students walk around to view different items around the room related to a lesson. Gallery walks are beneficial because they not only get students moving around the room, but they can also be multisensory (which also aids in retention). Displays might include photos, cartoons, articles, poems, videos, graphics, or audio recordings. Students can walk around and discuss the items with classmates, or they can write their reactions on sticky notes and leave them in each area.

Congruent / Novel / Self-Referential Movement: “Congruent movement involves engaging in physical activity that matches a concept” (Kris, 2021). This might be kids forming a number line to add/subtract, or counting steps around the edge of the classroom to learn perimeter. “Novel movement asks students to do something unfamiliar to acquaint them with a new concept – such as physics students holding on to a tilting, spinning wheel to experience torque” (Kris). “Self-referential movements involve students casting themselves as a character in the story of a concept” (Kris). Self-referential movement might have the most flexibility, as it allows for some creativity on the part of the participants. Examples of self-referential movement include students acting out photosynthesis in science class, or multiplication in math. “According to research, role-playing in science helped students achieve a more accurate understanding of a concept” (Kris).

Total Physical Response (Gonzalez, 2019): “Developed for use with second-language learners in the 1960’s, Total Physical Response (TPR) simply has students act out physical gestures to represent vocabulary words” (Gonzalez). TPR forces students to think outside of the box, as they must use their bodies to define a word or concept. Further,

students must come up with the gesture themselves, which gives them ownership and helps them to remember the word. TPR has been shown to be extremely effective with both children and adults. TPR can be used in any content area and actually, in any language.

Section 3 Key Terms

Attention Deficit Hyperactivity Disorder (ADHD) - A chronic condition including attention difficulty, hyperactivity, and impulsiveness

Hippocampus - Structure in temporal lobe; plays a key role in learning and memory

Multisensory Learning - The assumption that individuals learn better if they are taught using more than one sense

Prefrontal Cortex - The cerebral cortex covering the front part of the frontal lobe; brain region associated with EF skills

Zone of Proximal Development (ZPD) - The space between what a learner can do without assistance and what a learner can do with adult guidance or in collaboration with more capable peers

Section 3 Reflection Questions

1. How do you think your classroom climate is affected when students are in the “downtime” of their circadian rhythm? What can you do to promote learning during this time?
2. Before this lesson, what were your thoughts on taking away recess as a punishment? Have your views changed? Why or why not?
3. What are the risks of teaching below or above a student’s zone of proximal development?
4. What responsibility do you feel that you have as a teacher to promote the positive mental health of students?

Section 3 Activities

1. Take an old lesson plan, or create one for an upcoming unit, and add a multisensory component. That is, as part of the lesson or practice, include multisensory learning options.
 - a. Follow the same directions but include an activity that utilizes movement.
2. Create a formative assessment choice board with multisensory options (e.g. Create a one-pager, record a podcast, construct a model, etc).
3. Design an age-appropriate daily check-in activity for your class.

Conclusion

Neuroeducation is an interdisciplinary research field, combining the disciplines of education, neuroscience, and psychology. While research in the field has not been formally implemented into educational practice or policy, neuroeducation explores how children learn and how to apply brain-based teaching and best practices to the classroom. There is growing interest in the field of neuroeducation with the goal of applying neuroscientific research in the classroom to promote better learning, social-emotional experiences, and overall improved outcomes for students.

Case Study

Mr. Parsons is a math teacher at Howard High School. Mr. Parsons teaches all grade levels at the high school and is an overall effective teacher. Students like Mr. Parsons and they look forward to his class. However, Mr. Parsons is struggling with engagement and achievement in his 5th period (12:30 PM) sophomore algebra class. He starts each class by reviewing homework from the night before, and then he teaches the new material. At the end of class, he tries to give “choice time,” with the options of math games, math art (algebraic color-by-numbers), or partner review. During instruction, Mr. Parsons does the majority of the talking, and then students have time to practice. Mr. Parsons’ colleague told him about neuroeducation and how it offers strategies to improve his classroom practices. Mr. Parsons is willing to try anything, and is particularly interested in learning more about the prime time for learning during the class period, and whether or not he should adjust the way he structures the teaching of new material.

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