

QUALITY OF K-12 EDUCATION

Overview

It has long been known that education has a significant positive impact on health and wellbeing, including at the individual level, the community level, and the broader societal level. In an Evidence Briefing from the Economic and Social Research Council, the authors describe education as one of the strongest predictors of life outcomes (compared with age, gender, income, employment status and marital status) — a consistent finding for some 25 years of study.¹ They note that as individuals attain higher levels of education, they also tend to have greater social trust and are more interested in and less cynical about politics. “Education is often used by people to shape their ‘social identity’, framing their understanding of themselves and their relationships with other people. A positive, affirming social identity is associated with a range of positive outcomes in life, such as increased wellbeing, health, social trust and political engagement.”²

In 2007, the National Policy Center presented a brief based on work by Cutler and Lleras-Muney that demonstrated the connection between education and health on a variety of health behaviors (see Table 1 below). The brief explains, “There is a direct relationship between education and health—better educated individuals have more positive health outcomes. This association remains substantial and significant even after controlling for job characteristics, income, and family background. This suggests that educational policies have the potential to substantially improve health.” This includes policies for improving the quality of schools,³ especially since “when students find their school environment to be supportive and caring, they are less likely to become involved in substance abuse, violence, and other problem behaviors.”⁴ They are also more likely to have positive attitudes about themselves and about others and, have a greater sense of connectedness, belonging, and community while at school. Ultimately, when students feel safe and satisfied, they are more likely to become engaged in school, act in accord with school values, develop better social skills, and be better contributors to the school community.⁶

¹ “The Wellbeing Effect of Education, Evidence Briefing, Economic and Social Research Council”, July 2014, <http://www.esrc.ac.uk/news-events-and-publications/evidence-briefings/the-wellbeing-effect-of-education/>

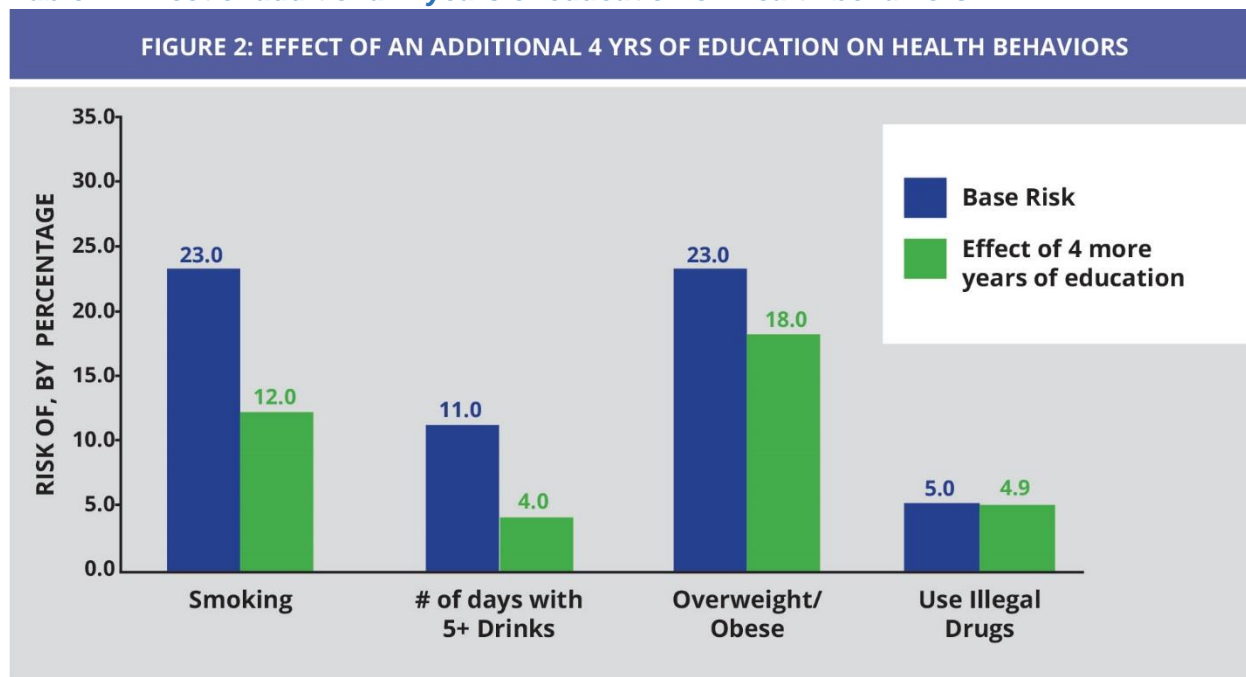
² Ibid

³ David M. Cutler and Adriana Lleras-Muney, “Policy Brief #9: Education and Health,” *National Poverty Center*, 2007, http://www.npc.umich.edu/publications/policy_briefs/brief9/policy_brief9.pdf

⁴ Eric Schaps, “The Role of Supportive School Environments in Promoting Academic Success,” *Center for the Collaborative Classroom*, accessed May 15, 2017, <https://www.collaborativeclassroom.org/research-articles-and-papers-the-role-of-supportive-school-environments-in-promoting-academic-success>.

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Table 1: Effect of additional 4 years of education on health behaviors



Source: NPC Policy Brief #9, 2007, http://www.npc.umich.edu/publications/policy_briefs/brief9/policy_brief9.pdf

For example, Zimmerman, Woolf and Haley found that 35 percent of individuals who did not graduate from high school were found to be smokers, while 30 percent of those who graduated from high school said they smoked, and only 13 percent college graduates were smokers. Similarly, college graduates are more likely to engage in regular exercise than those with only a high-school degree, who exercise more than those who did not graduate from high school. They note that more education exposes individuals to more opportunities to learn about health and health risks from the perspective of both the coursework they study, as well as the greater learned ability to process and absorb information and apply critical thinking skills to make important healthy lifestyle choices. “Adults with higher levels of education tend to have lower exposure to stress related to economic deprivation or relative deprivation, and may therefore be less inclined than those with lower levels of education to adopt unhealthy coping behaviors for stress.”^{5,6}

Obesity and weight are also connected to a child’s educational outcomes. It has been shown that normal-weight children have better academic performance than their overweight or obese peers.⁷ Similarly, one study found that higher-than average fast-food consumption — a factor for many overweight and obese children — was associated with significantly lower test scores in both reading and math.⁸ This is bolstered by other studies that have shown that a lack of adequate consumption of specific foods, namely

⁵ Emily Zimmerman, Steven Woolf, and Amber Haley, “Understanding the Relationship Between Education and Health”, *Agency for Healthcare Research and Quality*, Rockville, MD: September, 2015, <http://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>

⁶ Emily Zimmerman and Steven Woolf, “Understanding the Relationship Between Education and Health,” *Institute of Medicine Roundtable on Population Health Improvement*, June 5, 2014, <https://nam.edu/wp-content/uploads/2015/06/BPH-UnderstandingTheRelationship1.pdf>

⁷ K.J. Tobin, "Fast-food consumption and educational test scores in the USA." *Child: Care, Health and Development* 39(2011): 118-24. doi:10.1111/j.1365-2214.2011.01349.x.

⁸ Ashlesha Datar, Roland Sturm, and Jennifer L. Magnabosco. "Childhood Overweight and Academic Performance: National Study of Kindergartners and First-Graders." *Obesity Research* 12, no. 1 (2004): 58-68. doi:10.1038/oby.2004.9.

fruits and vegetables, is also associated with lower grades, along with deficits of specific nutrients, such as vitamins A and C or calcium.⁹ Obesity can also be a predictor of a low-grade point average (GPA), fewer years of education, placement in special education or remedial class, and an increased likelihood of grade retention.¹⁰

Taking a broader perspective beyond obesity, students with poor health also have a higher probability of failing school, being held back grades, and dropping out compared to their healthier peers.¹¹ One study showed that middle-school aged boys and girls who were in the Healthy Fitness Zone (standards set by the Cooper Institute) for aerobic fitness and muscular endurance were two to four times more likely to meet or exceed their reading and math standards.¹² Other studies show that after 20 minutes of physical activity, students tested better in reading, spelling, and math, and teachers spent 21 percent less time managing problem behaviors in their classrooms.¹³ Over the longer term, results also showed that standardized test scores can increase up to 6 percent for students engaged in physically active programs at school.¹³ Ultimately, students who are physically active tend to have better grades, school attendance records, classroom behavior, and cognitive performances than students who are less physically active.¹⁴ These statistics support the link between healthy eating, physical activity, and academic achievement and, more broadly, the bi-directional link between health and education. These achievement gaps are further amplified when looking at achievements across racial groups, with approximately a 16 percent difference in school performance for Hispanic, Black, and American Indian students versus their Asian and White peers across all subjects and years.¹⁵

Certainly, in large part because of these positive impacts that education has on individuals and society, much effort has been put toward identifying ways to improve education at all levels and to identify and eradicate disparities in educational quality, particularly for students most vulnerable to factors that also impact their health and wellbeing, such as poverty, hunger, homelessness, exposure to violence and trauma, and language and cultural barriers. Colorado is no different from other states in its ongoing pursuit of ways to enhance the quality of education for all students at all levels.

The State of K-12 Education in Colorado

This year's Colorado Kids Count report (2016 data), produced annually by the Colorado Children's Campaign with support from the Annie E. Casey Foundation, shows some positive developments for many children. More Colorado children are covered by health insurance than at any point in recent history. Fewer children are living with the daily stresses of poverty. More children have access to full-day kindergarten and preschool programs. But for too many of our state's children, the odds remain weighted against them. Despite the decline in the child poverty rate, more than 190,000 Colorado children still lived in poverty in 2014, with 82,000 living in extreme poverty. Colorado school districts identified nearly 25,000 students who were experiencing homelessness. More than 240,000 children lived in

⁹ "Health and Academic Achievement," *National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention*, Atlanta: 2014.

¹⁰ Ibid.

¹¹ Steven R. Shaw et al., "The relationship between student health and academic performance: Implications for school psychologists", *School Psychology International*, Vol 36, Issue 2, pp. 115 – 134, First published date: March-30-2015, doi: 10.1177/0143034314565425

¹² R.W. Bass et al., "Physical fitness and academic performance in middle school students," *Acta Paediatr*, 102: 832–837. doi:10.1111/apa.12278

¹³ "Healthy Kids Learn Better." Alliance for a Healthier Generation. Accessed May 15, 2017.

https://www.healthiergeneration.org/about_childhood_obesity/wellness_stories/healthy_kids_learn_better/.

¹⁴ Ibid

¹⁵ Ibid

households that were uncertain about whether they would have enough food for their families.¹⁶

Within Colorado, the state of K-12 education varies between successes and disappointing results. This variation can impact students across the state and can influence their health behaviors. In terms of academic achievement, Colorado has low levels of students meeting grade-level expectations across all subjects; in 2015, only 17 and 20 percent of fourth and seventh grade students, respectively, met standards in social studies and only 33 and 32 percent of fifth and eighth grade students, respectively, met standards in social science.¹⁷

Issues facing Colorado schools include a growing student population and very low per-pupil funding across the state. The gap between the U.S. national average and Colorado in per-pupil funding has grown to more than \$2,700, which places limits on staff, supplies, and infrastructure, and leads to increased class sizes and the implementation of four-day school weeks. Colorado's 2017 Legislative session ended with a final budget bill that includes an average increase of roughly \$242 per student, which will bring Colorado's per pupil spending to approximately \$6,546 and increases the state's overall education spending to more than \$6.5 billion. There is work to be done, however, and a bipartisan group of lawmakers were able to agree on creation of a study commission to more thoroughly review how the state funds schools, particularly given Colorado's unique, and conflicting, constraints on spending and school funding related to three constitutional amendments: the Colorado Taxpayer's Bill of Rights (TABOR), which limits both state taxes and revenues; the Gallagher Amendment, which regulates personal and business property taxes; and Amendment 23, which regulates statewide school funding formulas.^{18,19}

In terms of the mental and behavioral health of Colorado's students, nearly a quarter of teens (youth between the ages of 12 and 17) reported feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities²⁰, while 11.7 percent of all teens reported at least one major depressive episode in the past year.²¹ Colorado has one of the nation's highest teen suicide rates, with 13 out of every 100,000 teens between the ages of 15 and 19 committing suicide annually; the national average is nine per 100,000 teens. There are also issues of substance abuse, with 7 percent of teens binge drinking in the past month, 6 percent using cigarettes, 3 percent using illicit drugs, and 13 percent using marijuana. Additionally, 20 percent of children under age 18 experienced one or more adverse childhood experiences (ACEs), a number that increases to 31 percent for children in low-income families.²²

Mental health is an equally important factor in affecting a student's academic achievement and abilities. Having a mental illness is associated with being pushed out of school due to suspension, expulsions, or credit deficiencies.²³ Students dealing with mental health issues often have frequent absences, have

¹⁶ "Kids Count in Colorado! 2016," *Colorado Children's Campaign*, 2016, <http://www.coloradokids.org/wp-content/uploads/2016/03/2016-Kids-Count-final-low-res.pdf>.

¹⁷ Ibid

¹⁸ Nicholas Garcia, "Colorado schools were a hot topic at the state Capitol this year. Here's what lawmakers did", *Chalkbeat Colorado*, May 12, 2017, <http://www.chalkbeat.org/posts/co/2017/05/12/colorado-schools-were-a-hot-topic-at-the-state-capitol-this-year-heres-what-lawmakers-did/>

¹⁹ Nicholas Garcia, "How the heck does Colorado fund its schools? (And six other money questions you might be embarrassed to ask)," *Chalkbeat Colorado*, May 15, 2017. <http://www.chalkbeat.org/posts/co/2017/03/20/how-the-heck-does-colorado-fund-its-schools-and-six-other-money-questions-you-might-be-embarrassed-to-ask/>

²⁰ "Kids Count in Colorado!"

²¹ "Behavioral Health Barometer: Colorado, 2015", HHS Publication No. SMA-16-Baro-2015-CO. *Substance Abuse and Mental Health Services Administration*. Rockville, MD: 2015.

²² Ibid

²³ "Mental Health and Academic Achievement" Now is the Time, Technical Assistance Center, *SAMSHA*, 2016, HMA4May 22, 2017

trouble making and maintaining friendships, and following school routines, which can often lead to behavioral referrals.²⁴ Students with mental illnesses also often have reduced high school graduation rates, slower problem-solving skills, and lower end-of-course grades. Further, only about a third of adolescents with mental illnesses will go on to postsecondary education, and those who do go on to higher education often face issues in completing coursework and managing an independent lifestyle.²⁵ Ultimately, earlier detection of mental health issues leads to improved academic achievement and reduced disruptions at school.

Strategies to Improve K-12 Education

There are a wide variety of strategies that can and are being implemented in schools, school districts, and statewide that can help to increase the quality of K-12 education. Many of these strategies also can positively impact physical and behavioral health issues for students, both while they are in school and later in their lives. Across the strategies there are common features being used at all age-levels to help create supportive and safe school environments to help students stay in school. Many of these strategies are focused on building students' social and emotional capacity and their resilience to cope with behavioral health issues that impact their ability to learn, but equally important, impact their fellow students and teachers.

Several programs have components that focus on teaching students social and emotional skills to promote prosocial behavior and prevent or decrease the number of students disrupting classes and/or being disengaged from learning through either time spent in detention or the principal's office or from being expelled. These lessons can range from teaching problem-solving skills to stress management skills, and they can involve such activities as peer tutoring and meditation. The idea is to give students a solid foundation of social and emotional skills that can better equip them to handle stresses at school and in their personal lives, allowing them to thrive in school.

Similarly, school administrators recognize they need to create systems that can support students with specific behavioral health needs. Often this takes the form of schools and school districts partnering with local community centers, community mental health centers, or police departments. These partnerships can provide support both for students, but also for teachers, offering training and help with understanding how to manage students with behavioral health issues in ways that are least disruptive and allow teachers to spend time with all their students.

Elementary and Middle School

Many of the programs listed below can be implemented at all levels of a school system and could also be implemented with older students, but they have been placed here because they are success stories from this age bracket, both in Colorado and other states.

Live Well Colorado Healthy Schools

Colorado has the second-fastest growing childhood obesity rate in the country, and nearly a quarter of Colorado's youth are obese, and so many schools are paying more attention to healthy eating and wellness.²⁶ One prominent example is Live Well Colorado's Healthy Schools initiative, which focuses on serving freshly prepared meals that are healthy and taste good. One example of success of the Healthy

<https://www.samhsa.gov/nitt-ta>

²⁴ "The Wellbeing Effect of Education", Economic and Social Research Council, July 2014, <http://www.esrc.ac.uk/news-events-and-publications/evidence-briefings/the-wellbeing-effect-of-education/>

²⁵ "Kids Count in Colorado!"

²⁶ "Healthy Schools," LiveWell Colorado. Accessed May 10, 2017. <https://livewellcolorado.org/healthy-schools/>.

Schools Initiative comes from the Denver public charter school, Academy 360, where they have implemented a healthy eating model. The focus was on education and building students' minds, bodies, and characters to prepare them for the rest of their academic careers and beyond by modeling healthy eating habits, providing daily opportunities for physical activity, and offering social and emotional skill-building practices. There are also educational components that teach students about food deserts, cooking with fresh fruits and vegetables, and yoga with the objective of providing children with life-skills that will serve them beyond their academic careers. The program's success is best summed up by first-grader Aza-Riyah, who "bombards her teacher with a 4.5-ounce juice box and proceeds to tell her that it was unacceptable that: a.) her fruit was in a box, and b.) this tiny box of juice had 12 grams of sugar in it. Aza-Riyah says that juice is not the same thing as real fruit; too much sugar will hurt her teeth and tummy."²⁷

Multi-Tiered Systems of Support (MTSS)

Multi-Tiered System of Supports is a framework that connects families, schools, and community partners to leverage their resources and problem-solving skills to improve the outcomes of students. The framework involves the use of evidence-based practices, data-based problem solving, team-driven leadership, and layers of support. This framework can be enacted at all levels, from school to district to region to state. An evaluation of an MTSS program implemented in Kansas found observational results indicating that MTSS had a positive impact on students scoring at the benchmark or proficient level and on reducing discipline referrals.²⁸ "Survey responses show that schools are observing more students scoring at benchmark on the universal screeners, behavior is improving, there are fewer special education referrals, and student engagement and motivation has improved."²⁰ Other reported benefits included improvements in school culture and attitudes, increased student motivation and pride in accomplishments, and more students receiving support and intervention earlier.²⁹ These outcomes show some of the benefits for students, schools, and districts of creating a supportive environment where students can excel and where schools are better linked to families and communities.

Positive Behavior Interventions and Supports (PBIS)

Positive Behavior Interventions and Support is a school-wide framework that focuses on helping students achieve social and learning goals that can increase their academic achievement and behavioral competence. The program is developed primarily around creating in-school programs that focus on the key aspects of being one's best, safety, respectfulness, responsibility, and honesty. Schools can personalize the program to match their needs, such as associating the program with their mascot and coming up with the school's own acronym for students to follow. For example, Greenwood Elementary School in the Cherry Creek School District uses the slogan BEARS (Be responsible, Engage in learning, Act safely, Respect yourself and others, Show a positive attitude) that aligns with their bear school mascot.³⁰

The benefits of this program can be broad, but it largely focuses on reducing behavioral issues by increasing academic achievement. Over a four-year period, one school in Illinois saw "office referrals and suspensions decrease, test scores climb, and the achievement gap in math shrink to almost nothing."²³ Improvements at the same school were particularly remarkable in helping to close the achievement gap in

²⁷ "Colorado Framework for School Behavioral Health Services," *The Colorado Education Initiative*, Denver, 2014.

²⁸ "Implementation and Outcomes of Kansas Multi-Tier System of Supports Final Evaluation Report—2014," *Learning Innovations Program*, WestEd. Woburn, MA, 2015.

²⁹ Ibid.

³⁰ "PBIS." Greenwood Elementary, accessed 09 May 2017, <http://greenwood.cherrycreekschools.org/pages/pbis.aspx> HMA6May 22, 2017

math for African American students in grades three through eight over the same four-year period.³¹ These outcomes were also supported by a study showing that school-wide PBIS programs can result in significant reductions in the number of students receiving referrals and suspensions, which increased the amount of instructional time available to students.³² Importantly, other benefits can include lower substance abuse rates: one study found that schools that fully met or exceed the criterion for the PBIS implementation program had a statistically significant lower reported use of illegal drugs and alcohol.³³

Using PBIS and MTSS frameworks, Colorado's Pueblo City school district created a "System of Care" that included families, community organizations, mental health centers, the police department, and justice systems that aimed at bolstering the district's behavioral health services. "By blending the System of Care principles with the co-located services in the schools, over 600 students per year received services (approximately 3,000 encounters)."²⁶ The program helped to build trust between students and the police and ultimately helped the district reduce office discipline referrals, which resulted in students spending more time in classrooms and less staff time being used on discipline cases.³⁴ This system is just one way that schools and school districts have seen more students engaged in schools, fewer behavioral referrals, and greater connections between schools and communities.

Caring School Communities

The Caring School Communities program implements a social and emotional curriculum aimed at creating a school-based model that promotes prosocial values, increases academic motivation and achievement, and prevents drug use, violence and delinquency.³⁵ This is achieved by making classrooms a caring, safe space that can meet all students' needs for emotional and physical safety. The program is aimed at elementary schools (grades K-six) and revolves around four main principles: 1) class meeting lessons; 2) cross-age buddies; 3) home side activities; and 4) schoolwide community-building activities.

In Aurora, Colorado, several public elementary schools implemented a Caring School Communities program that included a behavioral assessment tool for teachers to identify students with behavioral health issues. After identifying students who would benefit from the program, they used problem solving and social skills improvement systems, along with skill streaming from the Caring School Communities curriculum, to work with the participating students. Over one academic year, 50 percent of students in the initial program showed significant behavioral improvement based on pre- and post-assessments. The success at the elementary schools has inspired the district to try to implement the program in more Aurora schools in the future.³⁶

Lion's Quest Skills for Adolescence

Lion's Quest Skills is a program designed for students in middle school, grades six through eight, that focuses on building social and emotional skills that include self-regulation, prosocial and cooperative

³¹ Ellen R. Delisio, "PBIS Rules, Rewards Boost School-Wide Behavior and Academics." *Education World: PBIS Boosts School-Wide Behavior and Academics*. Accessed May 10, 2017. http://www.educationworld.com/a_admin/admin/admin535.shtml.

³² Russ Curtis et al., "Outcomes of a School-Wide Positive Behavioral Support Program." *Professional School Counseling* 13 (2010): 159-64. doi:10.5330/psc.n.2010-13.159.

³³ Eoin Bastable et al., "Do High Schools Implementing SWPBIS Have Lower Rates of Illegal Drug and Alcohol Use?" *Positive Behavioral Interventions & Supports, Office of Special Education Programs*. 2015.

³⁴ "Colorado Framework for School Behavioral Health Services"

³⁵ "Caring School Community." Center for the Collaborative Classroom, accessed May 11, 2017. <https://www.collaborativeclassroom.org/caring-school-community>

³⁶ Ibid

behaviors, self-determination, and resisting negative peer pressure. The goal is to promote positive relationships with peers, prosocial behavior, academic effort and persistence, and a greater sense of school safety.³⁷ The program provides an in-depth curriculum for teachers that can be implemented in classrooms, along with other learning materials, geared towards building the skills listed above. The program also provides assessments to help educators measure the impact of the program in their classrooms. One study found that middle schools that fully implemented the program were significantly less likely to have students engaged in disruptive, disrespectful, potentially harmful, and dangerous behaviors compared to students who did not participate in the program. The study also found that social awareness and relationship skills significantly increased after a year in the program for middle school students, helping to create a more positive school environment for both students and educators.³⁸

Mindfulness-based Interventions

Mindfulness interventions are focused on teaching students to be more aware of their thoughts, emotions, bodies, and surrounding environment through a variety of “mindfulness” activities. There are a wide variety of mindfulness curricula geared towards students of all ages, with the more well-known programs being Mindful Schools and Learn to BREATHE. Each of these programs provides lesson plans and guidelines for educators to use in their classrooms. Most programs involve short sessions, usually around 15 minutes, where students are taken through a mindfulness practice that can include such activities as breathing techniques or meditation.

Mindfulness activities have been implemented in Denver Public Schools, where students participate twice a month in 15-minute mindfulness sessions. To date, the schools practicing the Mindfulness activities have seen a pay-off in terms of fewer student conflicts and an easing around test anxieties.³⁹ One of the Mindfulness instructors for the Denver School District noted, “Before, the kids would have had a hard time sitting still for any duration of time. Whereas now they are able to sit with mindful bodies — quiet, still and eyes closed — for upward to two minutes at time.”⁴⁰ Studies show that Mindfulness also shows promise in improving cognitive performance and resilience to stress. For example, one study demonstrates that Mindfulness can help improve students’ attention, help them better regulate their emotions, reduce their feelings of stress, and reduce anxiety and distress in stressful social situations.⁴¹ Teachers also report benefits, such as greater efficacy, having more emotionally supportive classrooms, better classroom organization, and helping to reduce stress and burnout.⁴² A final benefit is that Mindfulness programs can be implemented with low-to-no resources and take minimum class time.

Low-to-No-Cost Prevention Strategies

There exist a variety of low cost, but powerful, prevention strategies that can be implemented easily in classrooms that can have been shown to have multiple positive outcomes, including improved academic achievement and decreased behavioral problems. For example, giving each student in a classroom a

³⁷ "Middle School Social and Emotional Learning." Lions Quest, accessed May 11, 2017. <https://www.lions-quest.org/middle-school-social-and-emotional-learning/>.

³⁸ Yael Kidron, Mark Garibaldi, and David Osher, “The Effects of Three Lions Quest Programs on Students’ Behaviors and Prosocial Attitude,” *American Institutes for Research*, Washington, D.C., 2014.

³⁹ Monte Whaley, "Denver Public Schools “Mindfulness” class teaches gratitude, appreciation of surroundings." *The Denver Post*, November 28, 2016, <http://www.denverpost.com/2016/11/28/denver-public-schools-mindfulness-class-teaches-gratitude-appreciation-surroundings/>.

⁴⁰ Ibid.

⁴¹ Charlotte Zenner, Solveig Herrnleben-Kurz, and Harald Walach. "Mindfulness-based interventions in schools: a systematic review and meta-analysis." *Frontiers in Psychology* 5 (2014). doi:10.3389/fpsyg.2014.00603

⁴² Leora Wolf-Prusan, Meagan O'Malley, and Nancy Hurley, “Restorative Practices: Approaches at the Intersection of School Discipline and School Mental Health,” *Now is the Time Technical Assistance Center, SAMSHA*, 2014.

meaningful role, with specific responsibilities, has been shown to increase prosocial behaviors, increase available instructional time, and increase academic achievement.⁴³ Teachers also can use written praises where they, or other adults, send complimentary notes to students in the classroom or at home. This technique has been shown to improve social competence, increase school engagement, increase academic achievement, improve work performance, and reduce problem behaviors.⁴⁴

Peer-to-peer tutoring is another way to improve behavior and academic achievement and reduce disruptive conduct or problems associated with Attention Deficit Hyperactivity Disorder (ADHD), by allowing dyads or triads to work with one another to give praise, ask questions, and give feedback to one another.³⁵ Finally, another low-cost strategy is team competitions, which can improve academic engagement and achievement, can help reduce disruptive behavior, and can turn students' brain chemistry towards attention and endurance.³⁵

High School

Restorative Practices

Restorative practices is a program that looks at school discipline and its impact on mental health, with the aim being to improve students' social and emotional wellbeing.⁴⁵ The foundation of restorative justice programs is to provide the opportunity for individuals in conflict to work together to find a resolution, without bringing in school or legal punishments. These programs can also help improve students' perceptions of their school climate, which improves their engagement with school and learning.⁴⁶ Restorative justice programs have been used in Colorado, such as in the Longmont School district. The district created a pilot program called Longmont Community Justice Partnership that works with the local police department to try to divert behavioral punishments from the local police to the school. Program results showed that from August 2010 to May 2015, Longmont schools diverted 190 court referrals, saved 375 days of suspension, and increased the number of hours of in-class learning by 2,600.⁴⁷ This program is still in place today and shows some of the benefits of a restorative practice program in reducing student absenteeism and creating a better school environment. As another example, Leadville Lake Country High School, put into place a restorative justice program through which students in conflict and a support team of peers come together to create an action plan to resolve the conflict. Students were required to follow through on the action plan or face stricter punishments. This program helped the high school achieve a 61 percent drop in referrals after only a year.⁴⁸

Project AWARE

Similar to the MTSS and PBIS frameworks described above, Project AWARE is geared towards advancing wellness and resilience in schools and school districts. The major aims of Project AWARE are to build state and local infrastructure and capacity around children and youth's mental and behavioral health, implement research-based programs and services, increase awareness of mental health issues, and develop sustainable models in schools⁴⁹ through a framework that promotes the healthy development of

⁴³ "Selecting Evidence-Based Substance Use Prevention Programs: A Guide for Maine Schools Grades K-12," *Maine Center for Disease Control and Prevention*, Augusta, ME, 2016.

⁴⁴ "LCJP - Restorative Practices in Schools." Accessed May 11, 2017. <http://www.lcjp.org/what-we-do/restorative-practices-in-schools.html>.

⁴⁵ Wolf-Prusan, O'Malley, and Hurley, "Restorative Practices"

⁴⁶ "Selecting Evidence-Based Substance Use Prevention Programs"

⁴⁷ "LCJP - Restorative Practices in Schools."

⁴⁸ "Behavioral Health Barometer: Colorado, 2015"

⁴⁹ "Project AWARE," *Project AWARE: Advancing Wellness and Resilience in Education*. Colorado Department of Education, Denver, CO, 2016.

children and youth while decreasing school violence.⁵⁰ The framework helps schools connect with local authorities, namely police departments, and local mental health resources — often community-based mental health centers — to try to keep students in school rather than suspending, expelling, or putting them into juvenile detention.⁵¹ This model includes an educational framework aimed at increasing literacy and awareness of behavioral health issues, building social and emotional learning skills, and promoting positive mental health.⁵² Components of the model are also geared toward helping educators build their leadership capacity to promote mental health prevention, as well as training school personnel to better detect mental health issues among students. Programs like this have shown that building more robust behavioral health service systems that can support students improves the quality of education by keeping students in school, making classrooms more manageable, allowing teachers to focus more on teaching, and giving both students and staff better tools, and training, for resolving issues without resorting to suspensions, expulsions, or engaging the criminal justice system.

Positive Action

Positive Action is a systematic educational program that promotes an intrinsic interest in learning and encourages cooperation among students. The effects of the program can range from increased academic achievement to dramatic reductions in problem behaviors. This program is closely aligned with MTSS/PBSI initiatives, and in Colorado it is largely promoted for use in anti-bullying campaigns, but it can have a broader use with students in grades K-12.⁵³ The program revolves around six core units: 1) self-concept; 2) positive actions for body and mind; 3) managing yourself responsibly; 4) treating others the way you like to be treated; 5) telling yourself the truth; and 6) improving yourself continually. The program also has expanded to create lessons around school climate, connecting schools with families, and working with school counselors to help create a more positive school environment. The program has been used by federal agencies, national groups, and states and, has an extensive research portfolio that supports its curriculum and program outcomes. The program has been shown to increase academic achievement in math and reading and significantly reduce violent behaviors, suspensions, and levels of depression and anxiety among students in grades three through eight.⁵⁴

School-Based Health Centers

School-Based Health Centers (SBHCs) are health care clinics located directly within schools.⁵⁵ Benefits of SBHCs include improving access to care, reducing absenteeism from school, reducing ER visits, and improving student immunization rates.⁵⁶ SBHCs bring schools and parents together, as parents must give permission for their children to be treated at the SBHC, and parents and schools often work collaboratively to determine the scope of services SBHCs offer. As noted above, there is ample research showing that healthy children perform better in school and experience less absenteeism and higher graduation rates. One study found that there was an increase in school attendance for students who used the SBHC for health care versus students who received health care in other venues; and students who

⁵⁰ "About Project AWARE," Colorado Department of Education, accessed May 11, 2017. <https://www.cde.state.co.us/healthandwellness/projectaware>.

⁵¹ "Advancing Wellness and Resilience in Education (AWARE)," *Thompson School District Learning Services*, Loveland, CO, 2015.

⁵² "Project AWARE"

⁵³ "Positive Action," Colorado Department of Education, accessed May 10, 2017. <https://www.cde.state.co.us/mtss/bullying/positiveaction>.

⁵⁴ "Research Outcomes," Positive Action, accessed May 09, 2017. <https://www.positiveaction.net/research-outcomes>.

⁵⁵ "What is a school-based health center (SBHC)?" Department of Public Health and Environment, accessed May 11, 2017. <https://www.colorado.gov/cdphe/what-is-a-sbhc>.

⁵⁶ "Measuring the Impact of School-Based Health Centers on Student Health and Academic Achievement," *Colorado Association for School-Based Health Care*, Denver, CO, 2011.

used a SBHC for mental health services saw an increase in grade point over time versus students who received mental health services in non-school settings. It further demonstrated that schools with SBHCs have seen improvements in their learning environments, decreased drop-out rates, and reduced teen pregnancy rates. Finally, it showed that SBHCs can also help students better monitor their body weight – an important academic indicator because obesity can have an important effect on a student’s academic outcomes.⁵⁷

Sources of Strength

Sources of Strength is a program targeted towards students in middle and high schools that focuses on reducing suicide at the school population level.⁵⁸ The program institutes a unique training curriculum that first focuses on creating peer leaders, supported by adult advisors, that are trained to try to change school-wide norms and impressions regarding suicide beliefs and related behaviors through strength-based messaging.⁵⁹ The goal is to create a better-connected school environment where students are able to turn both to peers and adults to discuss and address their suicidal thoughts and behaviors. In Colorado, the Colorado Department of Public Health and Environment in 2015 launched a Sources of Strength pilot program in seven schools across six counties in Colorado.⁶⁰ Results are promising; one study done across eighteen high schools in 2010 found that the program significantly improved youth-adult connectedness and school engagement for peer leaders, increased positive perceptions regarding adult support for suicidal youth behaviors, and increased positive perceptions regarding the acceptability of seeking health. Moreover, peer leaders were four times more likely than other students to refer a suicidal friend to an adult.⁶¹

Conclusion

Across Colorado and across the nation, there are a variety of programs and frameworks meant to increase the quality of K-12 education. Many of these programs focus on improving schools’ ability and capacity to reduce behavioral problems that cause students to be suspended, expelled, or sent into the juvenile justice system, all of which create significant disruptions in classrooms, keep students out of school and decrease their learning time, and do little to resolve the underlying issues students and educators are experiencing. These programs are backed by solid evidence demonstrating their ability to effect change in schools and across school districts, improving the quality of education for all students, and particularly for students with behavioral health needs. Education, in turn, is a critical determinant of individual health, with a positive correlation between education and reduced smoking rates, healthier stress coping behaviors, and more positive life outcomes for adults.

⁵⁷ Ibid.

⁵⁸ “Sources of Strength”, Sources of Strength, accessed June 6, 2017, <https://sourcesofstrength.org/>

⁵⁹ Ibid.

⁶⁰ Jan Stapleman, “Sources of Strength pilot program works ‘upstream’ in seven schools to prevent the need for youth suicide intervention”, *Colorado Department of Public Health and Environment*, 2015, <https://www.colorado.gov/pacific/cdphe/news/SoS>

⁶¹ Peter A. Wyman et al., “An Outcome Evaluation of the Sources of Strength Suicide Prevention Program Delivered by Adolescent Peer Leaders in High Schools”, *American Journal of Public Health* 100 (2010): 1653-1661