



Healthier School Communities

What's at Stake
Now and What We
Can Do About It

Acknowledgments

Special thanks to the following experts who provided valuable information, guidance and critical review for this report.

David M. Bersoff, PhD, Global Head of Thought Leadership Research, Edelman Intelligence

Jayne Greenberg, EdD, National and International Physical Education Consultant

Kayla Jackson, Project Director, AASA, The School Superintendents Association

Karen Kafer, RDN, Senior Vice President, Health Partnerships, GENYOUth

Julie Mattson-Ostrow, MS, RDN, FAND, Vice President, Dairy Experience-Wellness, Midwest Dairy

Robert Murray, MD, FAAP, Professor of Pediatrics, The Ohio State University

Jean Ragalie-Carr, RDN, President, National Dairy Council

Patrick Smith, Principal, Maple Grove Middle School, Minnesota

Katie Wilson, PhD, SNS, Executive Director, Urban School Food Alliance and Former USDA Deputy Under Secretary, Food, Nutrition, and Consumer Services

This report was produced with generous funding support from Midwest Dairy.

www.midwestdairy.com



GENYOUth[®] CREATING HEALTHIER SCHOOL COMMUNITIES™

GENYOUth empowers students to create a healthier future for themselves and their peers by convening a network of private and public partners to raise funds for youth wellness initiatives that bolster healthy, high-achieving students, schools and communities. We believe that all students are change-agents who deserve the opportunity to identify and lead innovative solutions that positively impact nutrition, physical activity and success. www.genyouthnow.org



AASA, the School Superintendents Association, is the professional organization for more than 13,000 educational leaders in the United States and throughout the world. AASA members range from chief executive officers, superintendents and senior-level school administrators to cabinet members, professors and aspiring school system leaders. AASA members advance the goals of public education and champion children's causes in their districts and nationwide. As school system leaders, AASA members set the pace for academic achievement. They help shape policy, oversee its implementation and represent school districts to the public at large. www.aasa.org



National Dairy Council (NDC) is the nonprofit organization dedicated to bringing to life the dairy community's shared vision of a healthy, happy, sustainable world — with science as the foundation. NDC provides science-based nutrition information to, and in collaboration with, a variety of stakeholders committed to fostering a healthier nation, including health and wellness professionals, educators, school nutrition directors, academia, industry, consumers and media. NDC has taken a leadership role in promoting child health and wellness through programs such as Fuel Up to Play 60. Developed by NDC and the National Football League (NFL), Fuel Up to Play 60 encourages youth to consume nutrient-rich foods and achieve at least 60 minutes of physical activity every day. www.USDAiry.com



The Urban School Food Alliance consists of 12 of the nation's largest school districts, which represent 3,600,000 students, serving 635 million meals annually. School districts include: New York City Public Schools; Dallas Independent School District; Baltimore City Public Schools; Chicago Public Schools; Orange County Public Schools (Fla.); Boston Public Schools; Los Angeles Unified School District; Broward County Schools (Fla.); Palm Beach County (Fla.); Miami-Dade County Public Schools (Fla.); The School District of Philadelphia; and DeKalb County School District (Ga.). These districts work together to leverage their collective voice to transform school meals and make sure all students have access to high-quality, healthy meals. www.urbanschoolfoodalliance.org



A Message from GENYOUth CEO Alexis Glick Fall 2020

Dear Friends,

As I write this, we are facing unparalleled challenges in our nation. The data is astonishing as we continue to see record levels of food insecurity, unheard-of levels of joblessness, health-related disparities brought on by gross inequities and a fractured U.S. economy in the wake of COVID-19. For our nation's public schools, the daily challenges they experience have been almost insurmountable, and only increasing by the day. Many of these challenges GENYOUth is helping to address, as I will be sharing with you in this message. However, our work is never finished, and I hope this report will inspire others to act, especially during these unprecedented times.

I am confident that solutions are within reach, and achievable, especially if we never lose sight of the importance of a healthy school community, and the countless contributions that it provides our children on a daily basis. In order to ensure that we have healthy students achieving academic success, without any social or economic boundaries, we must recognize and embrace that schools, now more than ever, are the great equalizer in helping us address the needs of our youth. Schools are contributing daily to our solutions

in ways that often go unnoticed, but that truly make a difference. I am humbled and inspired when I reflect on the tireless work of those educators, counselors, school nutrition personnel, physical education staff and volunteers who make the school building a haven for students to learn, socially thrive, have access to nourishing meals (often more than one a day) and provide safe places for our kids to play and be physically active.

At the height of school closures this past spring, 124,000 U.S. K-12 schools, impacting over 55 million kids nationwide, were shut down overnight. For the 30 million kids who rely on school meals daily it was even more devastating. The level of need was overwhelming. Better yet, unprecedented. The pandemic upended our sense of what school is. School buildings, notoriously ground zero for hungry children, became ground zero for hungry families. The stark reality is that schools may never be the same.

Acts of heroism on behalf of school nutrition professionals, school superintendents, school bus drivers and volunteers were nothing short of miraculous. Our educators' job-descriptions changed overnight. Teachers were forced to scramble to adapt to new distance-learning

scenarios, learning new technologies with little to no preparation. Some of us may have not given it much thought, but when schools nationwide shut down, school feeding did not. School meal operations remained open for hungry kids and families.

Fast forward to where we are today, the fall of 2020, at the start of a new school year in which no school building looks alike. Some kids are back in school. Others fully in distance-learning scenarios. Some on staggered school schedules. School deficits are the largest in U.S. history as most states are fiscally insolvent paying for extended unemployment benefits and COVID health-related costs. The role of the school building is more critical than ever. And returning parents and caregivers to work is only possible if our nation's schools can safely re-open with the preventive measures and precautions the CDC has outlined.

At GENYOUth, I am proud to say our team has never worked harder. Our mission to create healthier school communities has never wavered. COVID-19 forced us, like so many others, to urgently solve the real-world challenges that we see every day at warp speed.

As CEO, Saturday, March 14th was a seminal day for me and preceded the harsh reality of the global health crisis that still requires so much of our attention today. The number of calls we shared with federal and state officials, superintendents, CEO's and partners was extraordinary,

but even more extraordinary, the commitment shown by each and every one of them to roll up their sleeves and support us in our efforts to help us feed our nation's kids. In weeks, we launched a COVID-19 Emergency School Meal Delivery Fund to provide grants to schools for the urgent equipment and protective resources needed to serve vital meals daily, created a nationwide campaign #ForSchoolsSake and built a crowd-sourced geotargeted meal locator for families in need to find the nearest school feeding site, called SAP4Kids.

COVID laid bare the severity of the need and the urgency of helping all students, especially those who face inequities based on where they live, how much money their family makes and even the color of their skin. The state of healthier school communities is far different than what we had imagined only six months ago.

The following report reflects on the role schools play in supporting a culture of wellness; the opportunities, trends, barriers and reasons why schools have been the great equalizer in America, where the minority is the majority in U.S. schools. We examine how far we've come since the passage of the Healthy, Hunger-Free Kids Act ten years ago and the important role nutrition and physical activity play in learning, health and well-being.

At GENYOUth we're proud of the role we have played in creating healthier school communities

over the past decade. Our COVID-19 Emergency School Meal Delivery Fund has supported over 8,500 schools and we have:

- Raised over \$100 million to support the development of healthier school communities, with 46% of funded schools located in underserved communities.
- Placed 500 Grab and Go Breakfast Systems in high-need schools across the U.S., resulting in double-digit increases in school-meal participation and providing access to over 50 million new school breakfast opportunities a year.
- Enabled 13 million students to participate in our NFL FLAG-In-Schools initiative, which supports P.E. in 24,000+ school communities.
- Funded 1,500 student-led projects through our youth leadership and social-impact program, AdVenture Capital, in which students are trained to think, act and solve real-world problems like entrepreneurs do. Over 3,000 students and 650 schools have participated, and 1,100 corporate volunteers have acted as mentors.

I would be remiss if I did not take a moment to recognize the importance of the student voice. As a mom of four, and as the CEO of GENYOUth, I am fortunate to see firsthand the positive influence that the youth of our nation are demonstrating on so many levels. At GENYOUth, we can't do what we do without the student voice. We are privileged to support 40 million kids daily in 75,000 schools across the

U.S. because our programs are created for and with KIDS. It's their voice that curates, defines and elevates the work we do every day. Our society will only grow stronger if we uplift, empower and amplify the voices of this next generation. Whether it be the unrest in our nation around race and inequality, the fear of living in a COVID-19 world or the consequences of food insecurity, job losses or other vital topics of importance to them, young voices need to be heard.

Our ten-year journey at GENYOUth has only just begun. Much like our colleagues in the school building we recognize the winds of change are only going to grow in the days, months and years ahead. Together, with our school partners, health professionals, private and public sector leaders, foundations, businesses, school wellness champions, volunteers and students, we will tackle the impacts and harsh realities that COVID-19 has created. We believe in a world where all students can thrive. Creating healthier school communities is essential to achieving this vision.



Alexis Glick



FOREWORD

In March of 2020, the COVID-19 pandemic upended our country, leading to a hunger and education crisis like we have never seen before.

Since the emergence of COVID-19, the prevalence of food-insecure children in America has increased by 20 percent, reaching Depression-era statistics. One in 4 U.S. children is now living with food insecurity, up from 1 in 7 prior to the pandemic (USDA Economic Research Service, September 2019). And, the numbers are even more alarming for minority students, with 1 in 3 living in food-insecure households. The rate of food insecurity for Black households with children is about 39 percent. For Hispanic households with kids, the rate today is nearly 37 percent. The rate for white households with children is significantly lower at 22 percent. Still, that is more than double what it was before the pandemic and much higher than it has been since the government began measuring food insecurity two decades ago. (Source: U.S. Census Bureau)

A 2020 [report](#) issued by the Rockefeller Foundation recognizes public schools as anchors of community feeding and emphasizes the important role schools play in ensuring children are nutrition secure. School meals provide up to 50 percent of a student's daily calories/nutrition, and for the majority of participants, school meals are a lifeline and fundamental to a healthy lifestyle. (Source: Pew

Charitable Trusts) In spring 2020, 124,000 schools closed to classroom learning, impacting 55 million students. The 2020-21 school year will continue to present schools with a number of challenges to meet the growing food needs of their students — from serving school meals in the classroom or delivering them via school pick-up — including great financial pressure as school meal expenses are rising while budgets have been cut by up to 20% and staff have been excised.

Our Schools Are in Crisis While the Need to Feed Students Remains Great

According to a spring 2020 survey conducted among school nutrition professionals by the School Nutrition Association, 95 percent of respondents were engaged in emergency meal assistance while U.S. schools were

closed to learning. In addition, 91 percent of school nutrition directors either anticipate a financial loss (68%) for their programs this school year or are uncertain about financial losses (23%).

While Federal funding continues to support school meals for the 30 million students who rely on them daily, additional funding is crucial to provide schools with the necessary resources and equipment as they adapt to new means of delivering healthy meals to the nation's children. Frontline workers, including school nutrition professionals, bus drivers and volunteers, are taking extraordinary measures to distribute and deliver school meals through a variety of methods that enable social distancing, including grab and go, bus stop drop-off and drive-through pick up.

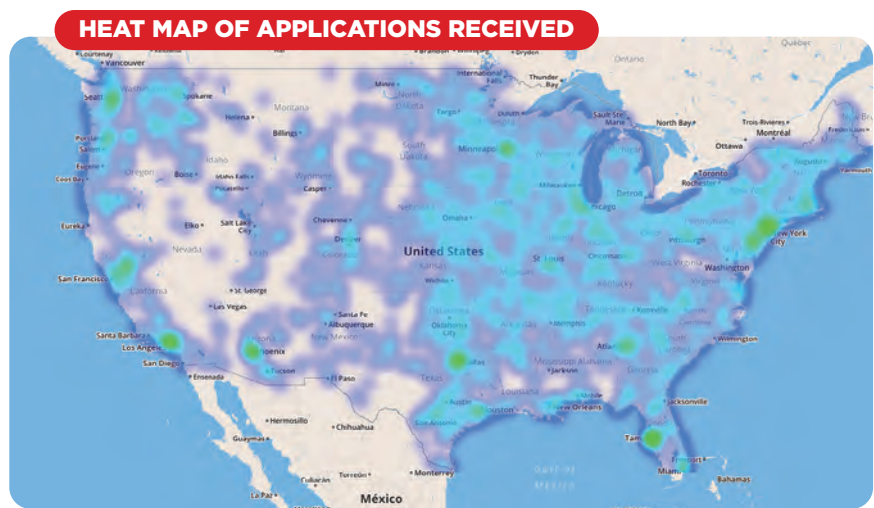
Recognizing this urgent need, GENYOUth created the COVID-19 Emergency School Meal Delivery Fund to help schools maintain continuity in the school meal program by inviting schools to apply for a \$3,000 grant to purchase equipment and supplies urgently needed to get meals distributed to youth.



"As the pandemic has continued, I have been on social media a lot more than my parents would approve, to support my friends and community. Food insecurity has always been the main issue in my community, and social media highlights this problem as the pandemic continues to adversely impact the situation. People are losing their jobs and sources of income."

Hannah, High School Student (Ohio)

Since March of 2020, GENYOUth has received requests for emergency equipment grants from over 13,000 schools. The heat map at right reflects the number of grant applications from schools across the U.S., with more concentrated numbers in areas of denser population, mirroring COVID-19 hot spots. The pie chart below reflects the type of equipment requested through the emergency grant applications. Of the requests, 29% stem from rural schools, while 28% and 24% stem from suburban and urban schools, respectively.



Concentrations of GENYOUth's COVID-19 Emergency School Meal Delivery Fund requests from over 13,000 schools across the U.S.

TO SERVE MEALS OUTSIDE THE CAFETERIA, SCHOOLS ARE REQUESTING FUNDING FOR:



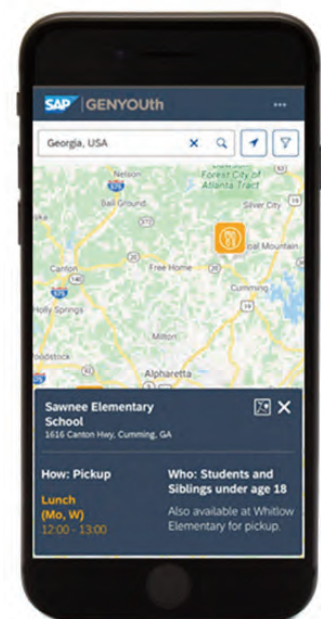
- 22%** SANITATION
- 28%** TRANSPORTING OR SERVING FOOD
- 23%** COLD STORAGE
- 11%** STIPENDS
- 9%** FOOD PREPARATION
- 5%** OTHER

Type of equipment requests made through GENYOUth's COVID-19 Emergency School Meal Delivery Fund

“We must recognize school food service as an essential nutrition program — not as a side business expected to generate revenue — by increasing investment in these programs so that they can reach more children, provide school nutrition professionals with a livable wage, and support school food directors’ innovative efforts to get healthier food onto the menu and into kids’ stomachs,” according to Dr. Rajiv Shah, President of The Rockefeller Foundation.

To provide additional support to school communities, GENYOUth and SAP, the market leader in enterprise application software, partnered to create **SAP4Kids**, which combines SAP’s technology and GENYOUth’s relationships with school communities to help connect kids with resources. Through an easy-to-use, mobile friendly web application, SAP4Kids enables families to identify local school feeding sites and other available resources on an intuitive resource locator map. “Families have experienced major disruptions to their lives, whether it be through school

closures, layoffs or furloughs due to COVID-19,” said DJ Paoni, President of SAP North America and member of GENYOUth board of directors. “As a result, the simple act of putting food on the table is something that many people are struggling to do for their families. It is important to connect people to the resources they need now and in the future.”



SAP4Kids' Resource Locator Web App provides an easy-to-use map-based interface to find resources nearby

The Pandemic's Impact on Movement and Physical Education

The COVID-19 pandemic has had, and will continue to have, considerable effects on the physical activity crisis among children and adolescents. Prior to the pandemic, 1 in 4 youth participated in the recommended 60 minutes of daily physical activity. School closures and disruptions due to COVID-19 have increased the risk of inactivity among youth, resulting in potential negative consequences on students' physical, mental, emotional and cognitive health that physical activity supports. Due to lack of physical activity during school closures, it is projected that the childhood obesity rate in the U.S. might further increase by 2.4%. In such a case, by March 2021, about 1.27 million new childhood obesity cases will develop under the COVID-19 pandemic than otherwise. (Source: [Projecting the Impact of COVID-19 Pandemic on Childhood Obesity in the](#)



“Overall, these unprecedented times have left us all devastated emotionally, mentally or financially, and a great sense of worry for the unpredictable future is still prevalent. Realizing that this was what the rest of my school year was going to look like was downright disappointing. If there is any way we have benefitted from this situation, I think it is by the gift of time we’ve all been given. During our busy lives, it’s hard to find time to take a step back sometimes; to absorb reality, seize the moment, and truly live life for what it is. An opportunity.” *Viren, High School Student (New Jersey)*

U.S.: A Microsimulation Model, May 2020 *Journal of Sport and Health Science*).

The pandemic is the most life-altering global event that today’s youth have ever experienced. While we have heard volumes from government officials, health professionals, parents and educators about COVID-19 and its impact on youth, teens have just recently had the opportunity to share their voice in ways that can guide adults to take action on their behalf.

Life Disrupted: The Impact of COVID-19 on Teens

To bring youth voice to the center of the COVID-19 dialogue, and to better understand how young people are impacted, what they are feeling, how they are coping and what they need from adults to build and maintain resiliency, GENYOUth conducted a youth survey titled “[Life Disrupted: The Impact of COVID-19 on Teens](#)” in May of 2020. The results provide sobering insights on the enormous

FIGURE 1
HOW MUCH OF AN IMPACT HAS THE PANDEMIC HAD ON THE FOLLOWING THINGS IN YOUR LIFE?

Youth who report a “huge impact”

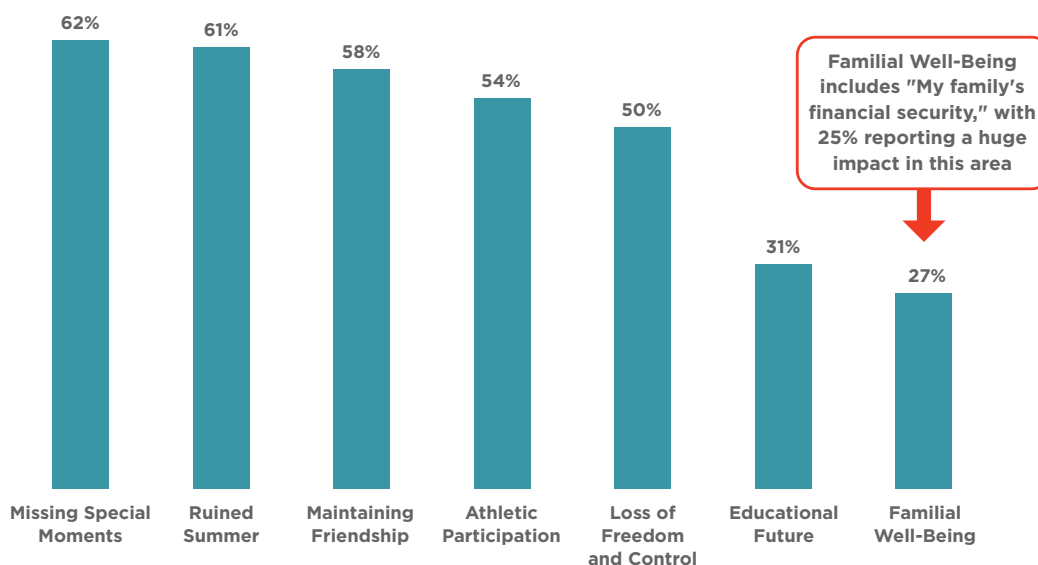
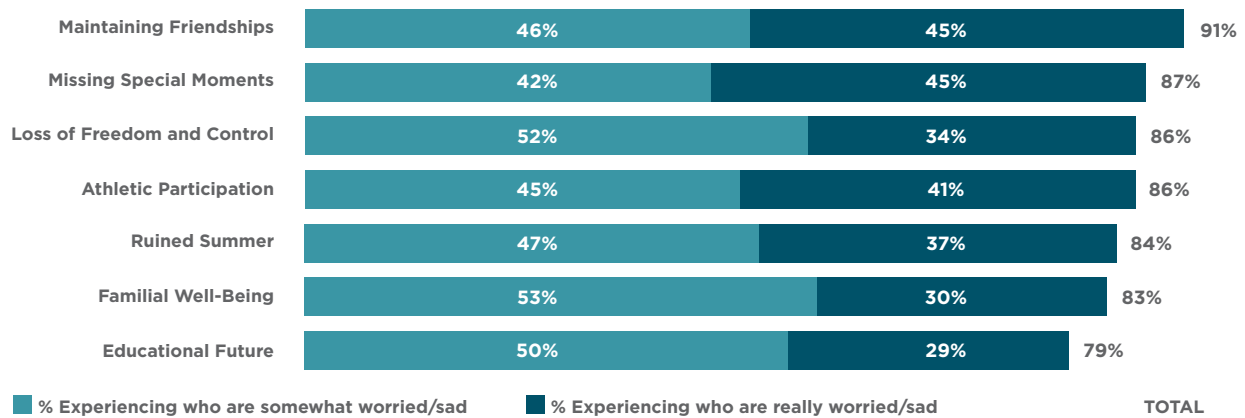


FIGURE 2

IN THE PREVIOUS QUESTION, YOU SAID THE PANDEMIC IS HAVING AN IMPACT ON THE FOLLOWING THINGS IN YOUR LIFE. HOW WORRIED OR SAD ARE YOU ABOUT THAT IMPACT?
Youth who report that they are “somewhat worried/sad” and “really worried/sad” about the impact



impact that the pandemic has had on young lives, in terms of lost special moments; meaningful activities canceled; friendships put on hold; and a sense of freedom and control lost overnight. The findings also paint a picture of youth wrestling with worries around their families' financial security and economic well-being, their own educational future, and the near-complete lack of access to athletics — a key part of some students' identity and, for many, a primary route to higher education. It also revealed students' inherent resilience and optimism, the crucial role of adults who listen and some surprising silver linings to the pandemic.

Among the dimensions of impact, survey results show notable disruptions and a huge impact on youth (see Figure 1).

Key Findings: Youth are engaged in the COVID-19 crisis, even if only reading about it, and following it on the news, and

they are feeling the impact across many areas of their lives, often deeply and sometimes irretrievably.

- 62% of youth say they are missing special moments, many of which are once-in-a-lifetime events.
- 58% say it is a lot harder to stay close to friends.
- Over half, 54% say they are experiencing a huge impact on their participation in athletics. This number is even higher for lower income students.
- 1 in 3 says their educational futures have been disrupted, and the number is much higher for upperclassmen and certain ethnic groups (Asian-Americans, Hispanics).
- Nearly 1 in 3 say they are worried about their family having basic needs met, with 1 in 4 expressing worry about financial security.

Youth are also feeling high levels of worry and distress, which may worsen as the pandemic continues (see Figure 2). In particular,



"Solutions are what center me. Watching what was going on, I felt like it would never end, which is what a lot of youth are feeling right now. What can I do? What impact can I possibly have on this country?"

Kayla, High School Student (Florida)

- 86% of youth are somewhat or really worried/sad about athletic participation.
- 83% of youth feeling an impact around their family's ability to buy what they need and pay the bills are worried or sad about it, and 30% are really worried or sad.



"In March 2020, sitting exactly where I am now, I felt my heart drop through the floor as I swiped through the notifications on my phone. School was effectively cancelled for the foreseeable future. The pandemic entirely took over the news and conversations, both at home and with friends. And just like that, my entire family was confined at home, all adapting to our new lives, to be lived almost entirely through a screen. Seeing how our society is so fragile and hyper-dependent on a number of non-predictable elements that could easily fall apart at any moment was just so surreal."

Jimena, High School Student (Texas)

Importantly, disruptions from the pandemic are hurting some youth more than others, including African American youth, youth living in urban areas, youth living in households whose income is below \$50,000 annually, and especially among girls. The pandemic has also highlighted the deep inequities that exist in access to resources, tools and supports that youth need to thrive.

While youth are finding many ways to cope, there are impor-

tant aspects that the adults in their lives need to start providing, or keep providing, to help teens navigate the ongoing disruptions. Or, if answers are not readily available, youth need reassurance and reliable information from adults. Those who are particularly distressed (in the top quartile for being worried or sad about impacts) need some of these supports even more. Youth told us they need:

- 1. A sense of what this school year will look like:** needed by 30% of youth who want to reduce the uncertainty in their lives.
- 2. Reliable information about when things will start returning to the way they were:** needed by 26% of youth. It is easier to hang on and hang in when you know how much longer you need to last.
- 3. Confidence the government knows what it is doing:** needed by 22% of youth who say they currently aren't feeling this. Youth who are particularly distressed, need this even more, with 28% saying they need this right now.

On the positive side, youth have their eye on a new and better future, and the COVID-19 crisis has reinforced the essential role that schools play in the lives of students and communities. The crisis has sparked a dialogue in many sectors, most importantly in education, and how to reimagine the future of learning. Including youth voice in this dialogue and empowering students to co-create the future

of education will be essential in helping them to navigate the disruptions and distress.

Food, Fitness and Future

As this report lays out, food and fitness are fundamental to student wellness and academic performance, as is giving young people reassurance and a real sense of what the future holds for them. In keeping with GENYOUth's mission, we believe that whether it be the programs and initiatives schools need to deliver in the context of current challenges and student needs, or how organizations and community leaders may partner with schools to help actualize a vision for the evolution of school communities necessitated by the current crisis, youth are, in many ways, the best and most important voice on the topic of healthy school communities and what it means to them now, and their future.

School communities are essential to kids, families and our society. COVID-19 is requiring all of us to think in new ways — to create new connections, new ways to engage, new ways to learn and new ways to support students and schools. The stakes have never been higher for the health, well-being and future-readiness of our nation's kids.



Meeting the Moment

Q&A with Dr. Rajiv J. Shah, President,
The Rockefeller Foundation

How is The Rockefeller Foundation “Meeting the Moment” to feed students during COVID-19?

The Rockefeller Foundation is committed to making sure every child and family in America can access the resources they need to weather the COVID-19 crisis. In March 2020, as schools across the country began to close indefinitely, we focused quickly on the 30 million children who rely on the National School Lunch Program for their nutritional needs. By funding our valued partners, including GENYOUth and the Urban School Food Alliance, today we’re helping schools provide more than 1.7 million meals per day in both urban and rural communities. As of earlier this summer, together we’ve provided nearly 110 million meals since the start of the pandemic.

What concerns you most about the state of food insecurity in America?

COVID-19 started as a public health and economic crisis, but it’s also created America’s worst hunger crisis in generations. Before the pandemic, the USDA had estimated that 37 million people in the United States struggled with hunger. Recent research indicates that since the pandemic began, food insecurity has doubled overall and tripled among households with children. Today 14 million children are regularly missing meals — three times more than during the Great Recession and five times more than before the pandemic.

The fact that our society is plagued by systemic racism and inequality makes these

problems even worse. Black and Hispanic households with children are nearly twice as likely to be struggling with food as similar white families, and it’s roughly three times as likely that their children aren’t eating enough. Research also shows that hunger is now common even among families that normally earn up to \$50,000 or even \$75,000 per year — showing how widespread, pandemic-induced job losses have only amplified what’s becoming a global hunger pandemic and the need for a stronger nutrition security system.

How critical are schools to feeding food-insecure youth?

Schools are essential to making sure children can eat the food they need to learn, grow and thrive. It’s become clear during this crisis that schools’ role in nourishing our children is just as important as their role in educating our children. School nutrition professionals, like other essential workers, stepped up to the plate this year — sometimes at great personal risk — to keep providing healthy meals to the millions of children who rely on them. And school food programs have taken significant financial risks in continuing to distribute food to children and families in need, not knowing whether they will be reimbursed for the costs they’re incurring.

The Rockefeller Foundation is grateful for the partnership of GENYOUth, the Urban School Food Alliance and many more who are providing direct support to school food programs so they can fill these gaps and keep them operational. But keeping schools

(Continued on next page)

Dr. Rajiv J. Shah: Meeting the Moment

running — and financially afloat — as the anchors of community food safety nets that they are will require even more public and private resources in the coming months and years.

What types of structural reforms do we need to support healthier school communities?

One key reform is to activate the power of food purchasing to set even higher standards for the food children get. Schools are doing a phenomenal job of cooking, preparing, packaging and serving nourishing meals with the limited resources they have. But these programs are overextended and underfunded. As a result, too many public dollars are being spent to purchase cheap food that's ultimately bad for public health, for the environment and for racial and social equity. That's why, through our network of grantees and partners, The Rockefeller Foundation is helping school districts to use their food dollars in innovative ways: getting more nutritious, delicious food onto students' plates while prioritizing food that's grown sustainably and equitably and advances the public good.

Kids can't learn when they don't eat. That's why more broadly, we should ensure all children gets the nourishment they need to be healthy and reach their full academic poten-

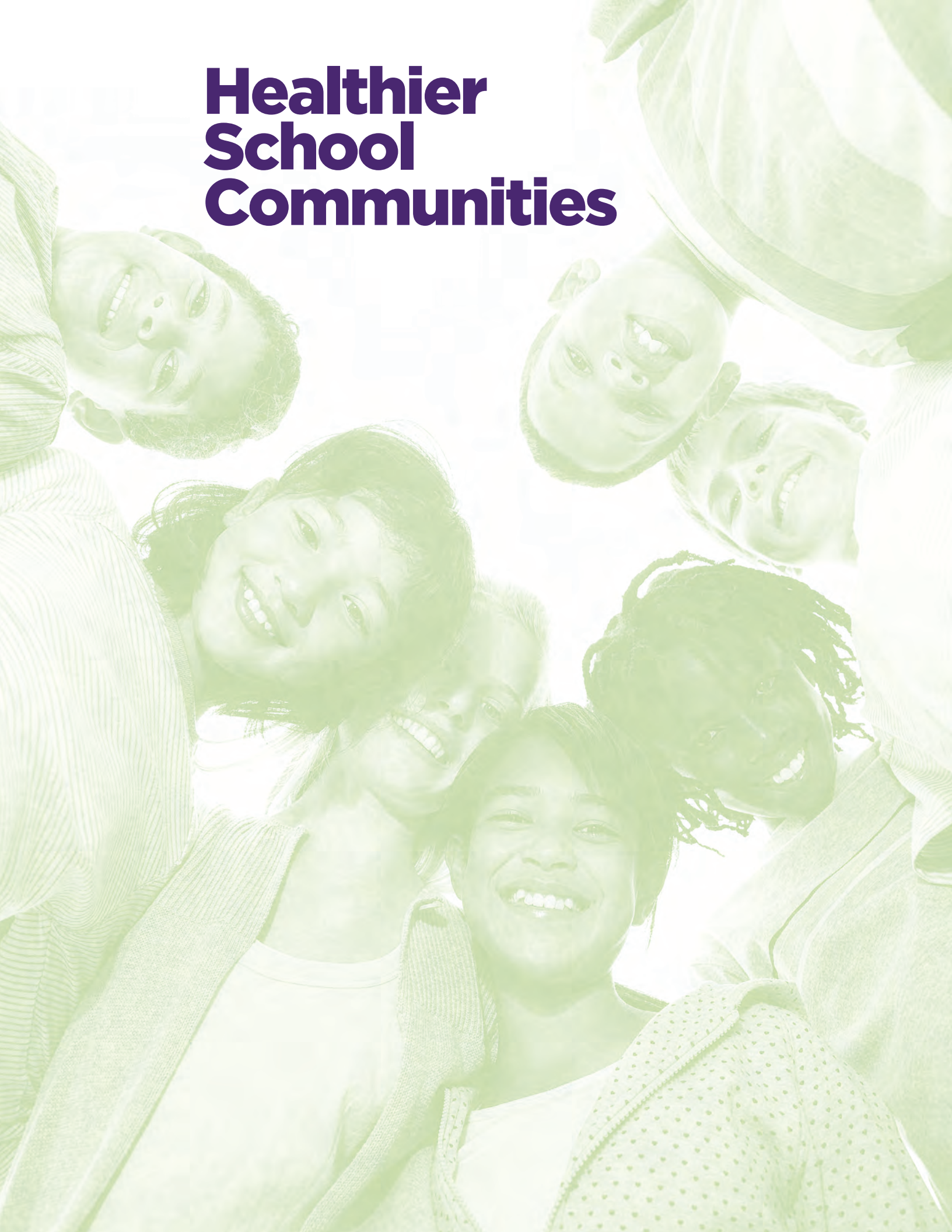
tial by first enabling schools to provide free meals to all children, and also by putting in place programs to make sure children don't miss meals when schools are closed. Schools should be able to pay all their workers living wages, be incentivized to source products sustainably and equitably, and be equitably funded to create inviting cafeterias and purchase kitchen equipment to do more cooking from scratch if they choose to.

How critical are public-private partnerships?

Public-private partnerships are essential to make nutritious food affordable and accessible to everyone. Historically, public-private collaboration has been key to efforts to fight hunger and malnutrition in the United States, and that basic concept is still relevant today. While we have proven approaches — including federal nutrition assistance like Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants and Children (WIC), local food banks and national school meal programs — they don't coordinate with each other. The result is a patchwork of programs that allows too many families to slip through the cracks. These essential services — public, private and philanthropic food safety nets alike — must be more tightly woven together, so that no child goes hungry or malnourished.

Rajiv J. Shah, MD serves as President of The Rockefeller Foundation, a global institution promoting the well-being of humanity around the world. The Foundation improves health for women and children, creates nutritious and sustainable food systems, ends energy poverty for more than a billion people and enables meaningful economic mobility around the world. Shah served as Chief Scientist and Undersecretary for Research, Education and Economics at USDA, before being appointed USAID Administrator by President Obama. Shah reshaped the \$20 billion agency's operations in more than 70 countries by elevating the role of innovation, creating high impact public-private partnerships, and focusing U.S. investments to deliver stronger results. Shah secured bipartisan support that included the passage of the Global Food Security Act and the Electrify Africa Act. He led the U.S. response to the Haiti earthquake and the West African Ebola pandemic and served on the National Security Council. Shah founded Latitude Capital, a private equity firm focused on power and infrastructure projects in Africa and Asia and served as a Distinguished Fellow in Residence at Georgetown University. He served at the Bill & Melinda Gates Foundation, where he created the International Financing Facility for Immunization helping reshape the global vaccine industry. He has received the Secretary of State's Distinguished Service Award, and the U.S. Global Leadership Award.

Healthier School Communities



INTRODUCTION

This report addresses why healthy schools matter today: what’s at stake, what progress has been made, what challenges we face and what key opportunities exist.

In 2013, GENYOUth published *The Wellness Impact: Enhancing Academic Success Through Healthy School Environments*, an issue-framing report that illuminated the vital importance of improved nutrition and increased physical activity in creating an environment that enriches students’ readiness to learn. It also issued calls to action for schools, students, teachers, families, education and health decision-makers, businesses and others who play a critical role in creating healthy schools.

This new report, *Healthier School Communities: What’s at Stake Now and What We Can Do About It*, from GENYOUth and partners AASA (The School Superintendents Association), National Dairy Council and the Urban School Food Alliance, picks up the story with updated information and data about the changing education and school wellness landscape as well as key wellness-enhancing opportunities that exist for schools today. The Whole School, Whole Community, Whole Child (WSCC) model, released

by ASCD and the Centers for Disease Control and Prevention in 2014, is a central feature of the new school wellness landscape. WSCC is based on the premise that every child in every school deserves to be healthy, safe, engaged, supported and challenged. This reimagined view of school wellness puts youth at the center with a strong health and well-being focus.

The COVID-19 pandemic has reinforced the urgent fact that health-promoting schools matter more than ever in making it possible for *all* students to lead full, productive lives today and in the future. As a society we’ve learned a great deal about what’s needed to create and sustain healthy schools and exactly what’s at stake for students and for society if we don’t. Our hope is that this report — and four single-topic briefs that accompany this report — provides information and inspiration that spur continued commitment and momentum to create the healthy school environments that whole child success demands.



CONTENTS

1	Schools: Nurturing the Whole Child	2
2	Neuroscience as Proof and Support for Healthy Schools. . . .	7
3	A Healthier Next Generation: Trends and Opportunities . . .	12
4	A Healthy Payoff for Health-Promoting Schools.	23
5	What We Can Do: Action Steps.	28
	Endnotes	30

1

Schools

Nurturing the Whole Child

A growing body of research demonstrates the positive correlation between health and learning and shows that they are mutually reinforcing.¹⁻³ Simply put, healthy students are better students. Over the past two decades, our school districts, communities, states and nation have been on a school wellness journey to help ensure the healthy environments that learning requires.

In 2001, then-U.S. Surgeon General David Satcher **sounded the alarm** about the nation’s epidemic of childhood obesity, and as a result, the federal **School Wellness Policy Mandate** became law in 2006, followed by the Healthy, **Hunger-Free Kids Act** of 2010. Along with these policies came much good and important work, and much commitment shown, by school administrators, educators, school nutrition professionals, students, health and public health officials, government, community partners, philanthropy, researchers and others in the quest for health-promoting schools across the United States.

This dedicated and wide-ranging work has contributed to undeniable progress in:

- adoption of school wellness policies;
- creation of healthier school environments with improved access to healthy food and physical activity opportunities;
- widespread awareness of the important “learning connection” between nutrition, physical activity and academic performance;
- engagement of students as advocates for their own health and well-being; and
- deeper understanding of the importance of a “whole child” approach in schools that support students’ physical, mental, emotional, social and cognitive health.

But there are still significant gaps that impact students’ health and ability to learn and thrive.

NUTRITION GAPS

- Poor nutrition, over-nutrition and under-nutrition among youth remain issues.⁵
- Access to breakfast is still a hurdle for many, and participation in school meal programs could be greater.⁶
- School meal periods can be short, and students often miss out on the chance to eat a nutritious meal offered by the National School Lunch Program and School Breakfast Program.⁷
- For 1 in 7 children, food insecurity is a reality⁸ (with even higher rates due to COVID) even as statistics tell us that 30 percent or more of food is wasted.⁹

PHYSICAL ACTIVITY GAPS

- Few schools have regular recess and daily physical education.¹⁰

“SCHOOL WELLNESS”

is both a policy and practice whereby schools have an active role in ensuring the healthy environment that learning requires and in which they are committed to an atmosphere that promotes students’ health and well-being through support of healthy eating and physical activity.⁴

- Only about 1 in 4 youth ages 6 to 17 get the recommended 60 minutes of daily physical activity.¹¹
- Few students walk or bike to school,¹² and student participation in high-calorie-burning sports is declining.¹³
- By age 14, girls are dropping out of sports at approximately twice the rate of boys.¹⁴

OTHER STUDENT WELL-BEING GAPS

- High rates of chronic disease persist, including obesity/overweight among children and youth (and unacceptable disparities in prevalence).¹⁵
- Insufficient sleep affects the vast majority of high school (73%) and middle school (58%) students,¹⁶ and it significantly affects their health and safety, as well as their academic success.¹⁷
- Evidence is growing regarding the implications of pervasive stress and mental health issues among students.¹⁸
- Two-thirds of high school students are disengaged in school.¹⁹

ECONOMIC AND EQUITY GAPS

- Educational disparities — with implications for individual students’ lives and for society as a whole — persist.²⁰
- Economic hurdles are significant, with funding and resources to support healthy schools often lacking.²¹

WELLNESS POLICY GAPS

- While most public school districts in the U.S. have a **wellness policy** that addresses a variety of components, the policies are **weak** overall.²²
- And despite progress, implementation of wellness policies in schools and districts is not universal.²³



“Think of a school as an anchor around wellness. It’s the notion that schools don’t just play a part in youth wellness but are at the center of it — a place where the ideal community should exist, where we eliminate bullying, take care of each other and model good world citizenship.”

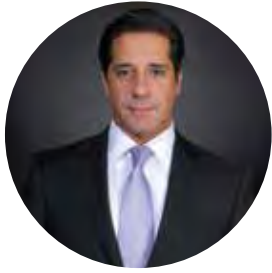
— Robert Murray, MD, FAAP, Professor of Pediatrics,
The Ohio State University

“From my perspective, a healthy school not only provides healthy and balanced school meals and opportunities to engage in physical activities but also creates an environment in which students have everything they need to be happy and healthy.”

— Jimena, High School Student (Texas)

Amid the many challenges identified above, healthy eating and physical activity — the bedrock of school wellness efforts — remain paramount as proven ways to foster “the learning connection” and help create healthy, high-achieving schools and students. Healthy eating and physical activity are also essential to an increasingly important goal of school administrators and educators in recent years: the concept of educating the “whole child.” This approach puts youth at the center with a strong health and well-being focus — encouraging schools to integrate health services and programs more deeply into the day-to-day life of schools and students as a way to raise academic achievement and improve learning.

Our progress and challenges over the past decade underscore a central point: *Schools are the epicenter of student wellness.* **Perhaps more than ever before, the COVID-19 pandemic has reinforced the crucial role schools play in ensuring student nutrition, well-being and learning — and what’s at stake without schools (and dedicated school administrators, teachers and school staff) being able to play their essential role in society.** With our collective support, schools hold the power to put well-intentioned wellness policies and whole child models into daily practice. ■



Schools Making a Difference

Q&A with Alberto Carvalho, Superintendent,
Miami-Dade County Public Schools

How would you define a healthier school community?

A healthier school community focuses on food, housing, social and emotional support. To give some perspective, out of our 350,000 kids in Miami-Dade, there are 9,000 active homeless kids, with approximately 800 of them living in shelters. The logistical support — the engineering, the science behind the distribution, the most effective way of actually meeting the need where the need is, rather than believing that every single person in crisis has the ability or opportunity to come to where the need is satisfied — is not enabled by the public sector or by the private sector alone. It relies on a seamless partnership between both.

What are the most common challenges to creating a healthier school community?

We all know what is happening with kids in their middle school years. Their cognitive and physical development is all coming together, the hormonal shift is happening faster than the speed of light. If you add food insecurity to that, matched by sleep patterns that are irregular for that age group, a problem is further enhanced. In addition, not enough middle school kids were eating breakfast in the morning. We saw a huge disparity between the number of breakfast meals served to middle school kids versus lunch. By lunch, most of the kids were there, but the latecomers usually skip breakfast. So we decided to change the way we make food accessible to kids. Rather than having every single kid go

to the cafeteria, regardless of the time they arrive at the building, why not have a Grab and Go cart with healthy food accessible to them regardless of when they arrive at school.

What role do schools play in feeding hungry kids?

The kids we are impacting are the kids who, before the crisis, were already in crisis, and the COVID pandemic just deepened the hole they're in. So, if we do not create a ladder of opportunity, when we resume normalcy — whenever that is, it's not going to be the old normal — the new normal, we will still have a challenge. The challenge is in part regulatory in nature — the concept that a child needs to pick up a meal at the school they attend, which works well, perhaps, when conditions are normal. But when there's a crisis, all that falls apart as kids may be bused to different schools. We need greater partnerships between funding entities, and the public sector alone cannot do it. The private sector is indispensable to meet the need where the need is. As a point of reference, we have 350,000 kids, 73.4 percent of whom depend on free meals.

On top of the difficulties of distanced learning, there are really essential functions for every human being, and there's nothing more essential than food. And in a community as poor as Miami-Dade, considering the level of food insecurity, that's a huge concern. When we decided to shut down schools, because of our experience with hurricane closures, we had plans in place to deal with this problem. We have fed the community after

(Continued on next page)

Alberto Carvalho: Schools Making a Difference

hurricane closures, we are the sheltering entity for the entire community, so we had some degree of experience. But, we've never faced anything for this prolonged period of time, and the level of demand that we've been getting has increased with each passing day. We continue to feed kids. Hunger does not go away because of summer vacation.

As Superintendent, how has your job changed because of COVID?

This health crisis, which has created an economic crisis, has now, unfortunately, morphed into a food insecurity crisis wrapped around social injustice crisis levels across the country. Talk about a perfect storm. And I think the most humane thing that anyone who has the resources, the know-how, the skill and the will can do, is meet children and families where they are.

What types of barriers have kids faced as a result of COVID?

Since we closed schools last spring, we have distributed in excess of four million meals out of 50 school distribution sites. These numbers represent a fraction of what it would have been in school. We learned that for us to fill in the gap, we had to diversify the delivery system. So, we launched community family meals on the go, where we actually overlaid the grid of our community with the poorest zip codes, with the highest concentrations of children in need. Partnering with local restaurants, we have raised lots of money and supported local restaurants, acquired the food and brought it to communities in need. We're now doing dinners on special days of the week in addition to daily lunch feedings and food distribution.

Alberto M. Carvalho has served as Superintendent of Miami-Dade County Public Schools (M-DCPS), fourth largest school system in the United States, since September 2008. He is an expert on education transformation, finance and leadership development. During his tenure, M-DCPS has become one of the highest-performing urban school systems in the U.S. The District has also been named as the 2014 College Board Advanced Placement Equity and Excellence District of the Year, as well as the 2012 winner of the Broad Prize for Urban Education. He has expanded school choice options in Miami-Dade to over 1,000 offerings that include bilingual programs, fine and performing arts, biotechnology, engineering, robotics, aviation, forensic sciences and many others. Carvalho is also the proud founder and principal of the award-winning iPreparatory Academy that has become a model of 21st-century learning in the age of innovation and technology. He is recognized by his peers as a national voice for equity in education. He serves on the National Assessment Governing Board, to which he was appointed by the U.S. Secretary of Education. He also serves as a committee member for the National Academies of Science, Engineering, and Medicine and as an Advisory Committee Member to the Harvard Program on Education Policy and Governance. Carvalho has been awarded many honorary degrees and also recognized by the President of Portugal with the "Ordem de Mérito Civil" and by Mexico with the "Othli Award."

2

Neuroscience

As Proof and Support of Healthy Schools

The growth of a child's brain is influenced by many factors through the fetal, infant, toddler, childhood and adolescent stages. Schools — along with parents and family, childcare and community programs — have an impact on enhancing brain capacity.

Neuroscience — more specifically, study of the brain’s ability to change throughout life — remains the quantitative basis for the learning connection. Research is ongoing into the physiological effects of better nutrition and of more/improved physical activity on the brain and the resulting impact on cognition and cognitive development.

From a physiological perspective, and relative to learning, the key fact about the human brain is that it is malleable²⁴ and that it changes throughout one’s lifespan as a function of both biological and environmental factors. Brain functions can be enhanced in order to improve children’s ability to learn.

DIET AND THE BRAIN

Numerous studies continue to link diet and cognition, with strong evidence building the connection between nutritional intake — including micronutrients and whole diet — and neuro-cognitive development in childhood.²⁵ New research is revealing the notable effects of nutrition on hippocampal function especially, providing a more specific physiological link between dietary intake and cognitive health, particularly important since the hippocampus is connected to relational memory,²⁶ which is critical for learning. In contrast, a 2014 study indicates that lower cognitive function may be yet another complication of childhood obesity²⁷ and that proper dietary intake is crucial to “cognitive control.”

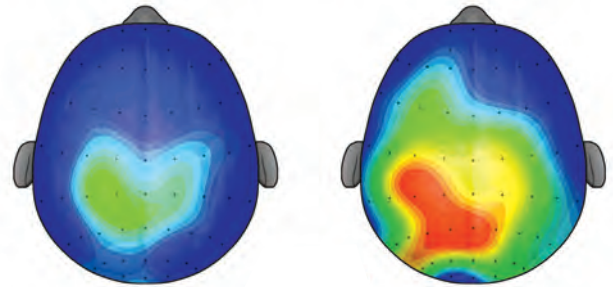
Breakfast, especially, continues to be shown as beneficial for cognitive and academic performance in school children, with one 2016 systematic review demonstrating particularly the short-term, i.e., same morning, effects on cognitive performance in both young children and adolescents.²⁸ This review noted that “tasks requiring attention, executive function and memory were facilitated more reliably by breakfast consumption ... with effects more apparent in undernourished children.”

COGNITION AND PHYSICAL ACTIVITY

Research into physical activity’s effects on cognition, like that of good nutrition, continues to reinforce the learning connection. Aerobic fitness, according to one study, is consistently found to play a positive role in brain health, specifically in

Cognitive Effects of Exercise in Preadolescent Children

Average composite of the brains of 20 students after they took the same test after sitting quietly (left) or after they took a 20-minute walk (right)



Reprinted with permission of Dr. C. H. Hillman.

the brain’s “white matter” structure so crucial to the communication between other regions of the brain.²⁹ This particular study compared the cortical brain structure of higher-fit and lower-fit 9- and 10-year-olds and indicated that higher-fit youth showed decreased gray matter thickness (associated with brain development and maturation) in the superior frontal cortex, superior temporal areas and lateral occipital cortex — coupled with better mathematics achievement.

A review of recent research reveals that “higher fit and more active preadolescent children show greater hippocampal and basal ganglia volume, greater white matter integrity, elevated and more efficient patterns of brain activity, and superior cognitive performance and scholastic achievement.”³⁰

Controlled studies involving brain imaging have cast light on the effects of exercise and obesity on cognition. They are providing visual evidence of the neurophysiological impact of physical activity — or lack thereof — on children. Hillman et al.’s research is teasing out the relationship between physical activity and processes involved in attention, memory and academic performance in children. Their ongoing research findings “demonstrate a causal effect of a PA [physical activity] program on executive control, and provide support for PA for improving childhood cognition



and brain health,” providing particular evidence around the role of aerobic fitness for “attentional inhibition and cognitive flexibility.”³¹

A systematic review finds that “research supports the view that physical fitness, single bouts of PA [physical activity], and PA interventions [throughout the day] benefit children’s cognitive functioning,”³² while the latest Physical Activity Guidelines from the U.S. Department of Health and Human Services decisively agrees: “Physical activity ... has brain health benefits for school-aged children, including improved cognition and reduced symptoms of depression. Evidence indicates that both acute bouts and regular moderate-to-vigorous physical activity improve the cognitive functions of memory, executive function, processing speed, attention, and academic performance for ... children.”³³

BRAIN DEVELOPMENT AND SOCIAL-EMOTIONAL WELL-BEING

In their report “The Brain Basis for Integrated Social, Emotional, and Academic Development,” Immordino-Yang et al. examine how — especially among children and youth — brain development

“Students who are unhealthy for whatever reason — physically unhealthy, emotionally unhealthy, psychologically unhealthy — do not have the same readiness for learning as those who are healthy. These indicators of childhood fragility and the whole issue of equity are within our hands as adults to address. As a school system, we are addressing them through physical and mental health supports, through social-emotional learning, screenings of all sorts — and from a food perspective, it’s about providing every single student with access to healthy, nutritious food. That goes a long way in terms of eliminating the precursors to academic gaps.”

— **Alberto Carvalho**, Superintendent,
Miami-Dade County Public Schools (Florida)

differs based on “opportunities to engage actively and safely with rich and meaningful environments, social relationships, and ideas.” They draw on evidence to suggest several principles for education practitioners and decision-makers. Among them are the following:

- “An emotionally safe, cognitively stimulating environment contributes to brain development.”
- “The brain development that supports learning depends on social experience.”
- “The major networks of the brain provide a view into the essential dimensions of cognitive, emotional, and social processing and their developmental interdependence.”
- “For individuals to take full advantage of learning opportunities, certain physiological preconditions must be met.” These include sleep and rest; nutrition; physical activity; green space; emotional well-being, social relationships and safety/belonging.³⁴ ■



Developing Healthy Habits

Q&A with Dr. Sanjay Gupta,
Chief Medical Correspondent, CNN

How critical is it to develop healthy habits early?

We all know that habits are tough to break — that's why the earlier on we build healthy habits, the easier and more likely it is that we maintain them and be as healthy as possible. It's important for parents to model healthy habits. And I know that can be challenging — I've got three girls myself — and we try to incorporate healthy practices in to our family's everyday as much as possible like, picking and preparing nutritious foods; making exercise time also family time — so we go on lots of walks and hikes together. It's important to make these positive experiences, because forcing a kid to eat broccoli or making them go on a run can really backfire and create negative connotations with these practices in the long run.

What can parents do to support cognitive development?

Cognitive development frequently happens to all of us without even knowing it. Whenever we are exposed to new experiences, we build new neural pathways. What's really amazing is that much of that brain development happens by the time we are five or six. At that early age — kids' brains are just exploding, building more than a million neural connections every second. Those connections are primed by their exposure to new things — this can include anything from a new book to a new food or new place. And that development continues as they grow, even though it may not be happening as quickly. Remember, it's not just about experiencing

something new — but it's also about thinking in a new way. Since the pandemic began, it's easy to get down — particularly for kids, they haven't been able to go to school or see their friends. I ask my girls each what are three things they are thankful for. It helps not only to remind us about the positive, but it also gets them to think about things from a different perspective. It makes them more likely to grow resilient in the face of these experiences instead of being crushed by them.

How critical is preventive health care for kids?

Just as it is for adults, it is important for kids to get preventive care. In fact, for kids, their annual well visits are key in preventing disease but also catching conditions early on so they can get treatment as soon as possible. Early interventions — particularly when it comes to developmental issues — can make a significant difference. If you're noticing any signs of developmental delay, especially in the early ages, before the age of 3 — it's worth talking to your doctor. Getting interventions like speech or physical therapy is more effective earlier on when their brains are still able to adapt and create new connections. Right now, there is understandably so much concern about potential exposures to COVID, but there are still ways to see your doctors. Lots of doctors are doing telemedicine visits so families don't have to go into the office.

It's also more important than ever this year that we all get flu shots. It can help prevent

(Continued on next page)

Dr. Sanjay Gupta: Developing Healthy Habits

or reduce symptoms of the flu. We know that kids can pass on the flu to other members of their household quite easily. Everyone getting a flu shot this year can help reduce the larger burden the flu has on our hospital system as we anticipate the flu season coinciding with COVID-19.

What worries you most about COVID's impact on kids?

This has been such a difficult time on all of us – but particularly on kids. I see the impact of not being able to socialize and be with their friends or see their grandparents on my own girls. It's really hard. We know that schools have been such a huge resource for kids including for some of the most basic necessities such as food and shelter, as well as observing for any signs of abuse in the home. It's hard to see our nation's youngest have to deal with this all. But we can help buffer them from some of these harms and stresses

by protecting and supporting them emotionally. Decades of research have shown that one of the key factors in building resilience is by caring for and supporting them. Check in on your kids, give them hugs and spend quality time with them, read a book or share a meal; ask them how they are feeling. This kind of support promotes their well-being now as well as after this pandemic is over.

What's at stake now and what can we do about it?

All of this can feel so crushing. Not only are we going through a pandemic, but many of us are experiencing economic hardships and loneliness. This is a very trying time for the world – but we can help shoulder this, particularly for our youngest, by being there for them and supporting them. It's so critical that they know that we are here for them to help them get through this now and whatever future adversities they may face.

Sanjay Gupta, MD is the multiple Emmy® award winning chief medical correspondent for CNN. Gupta, a practicing neurosurgeon, plays an integral role in CNN's reporting on health and medical news for all of CNN's shows domestically and internationally, and contributes to CNN.com. His medical training and public health policy experience distinguishes his reporting from war zones and natural disasters, as well as on a range of medical and scientific topics, including the opioid crisis, Pandemic outbreaks, brain injury, disaster recovery, health care reform, fitness, military medicine and medicinal marijuana. Gupta joined CNN in the summer of 2001. Since then he has covered the most important health stories in the United States and around the world. He reported from New York following the attacks on the U.S. on Sept. 11, 2001. In 2003, he embedded with the U.S. Navy's "Devil Docs" medical unit, reporting from Iraq and Kuwait as the unit traveled to Baghdad. He provided live coverage of the first battle field operation performed during the war, and performed life-saving brain surgery five times himself in a desert operating room. In 2009, he embedded with the U.S. Army's 82nd Airborne, accompanying them on life-saving rescue missions in Afghanistan.

3

A Healthier Next Generation

Trends and Opportunities

The context in which schools are operating and students are learning is different from 2001, when then-U.S. Surgeon General David Satcher sounded the alarm about the nation's epidemic of childhood obesity, launching the past two decades of attention on school wellness. Following are seven trends that are creating greater urgency and greater opportunities for healthy schools today.

“As demographics shift, so do our paradigms. The metaphor of the melting pot does not adequately describe the rich diversity of America. Eclectic or mosaic may be more appropriate terms as children maintain the values, customs and beliefs of their own cultures, while assuming some traits of the prevailing or dominant culture, like dress, language and food. Values, customs, beliefs and language are key cultural constructs that we must recognize, accept, affirm and use as tools to relieve hunger and increase healthy outcomes among racial and ethnic minority groups.”

— Excerpted from *Health and Hunger Through the Lens of Race, Ethnicity and Culture*, produced by AASA, The School Superintendents Association³⁸



1 TODAY'S STUDENTS: INCREASING DIVERSITY, PERSISTENT DISPARITIES

Today's students are increasingly diverse. More than half of **public K-12 students** are children and youth of color. Demographic trends show particular growth among Hispanic students across the U.S., including in suburbs and many locales with historically small non-white populations. The

COVID-19 and the Central Importance of Healthy Schools

The coronavirus pandemic has disrupted U.S. schools, educators, students and their families in profound ways. In addition to finding ways to continue to provide learning opportunities for students, schools also have to find ways to ensure access to essential services such as meals and medical and social services as well as access to social-emotional supports that many families rely on and that are vital to learning. The COVID-19 crisis underscores the essential role of schools — and the fundamental importance of healthy, safe and supportive school environments — for whole child success.

general trend is toward “majority-minority” schools with fewer white, fewer African American and more Hispanic students.³⁵ In 2015, approximately 30 percent of U.S. public school students attended schools in which minority students comprised at least 75 percent of total enrollment.³⁵

The majority of K-12 students qualify for **free and reduced-price school meals**, and 1 in 7 children is **food-insecure**.⁸ Education and health disparities based on socioeconomic status, race and ethnicity are pervasive.³⁶ Differences in academic achievement, graduation rates, disciplinary practices, school funding, access to technology and other challenging conditions disproportionately affect students of color and low-income students.³⁷

Ensuring that every U.S. student has the opportunity to achieve his or her educational potential and to live a healthy life is an urgent equity issue in the United States.

2 A NEW PARADIGM: EDUCATING THE WHOLE CHILD

In the past, schools were directed to develop and implement policies to promote wellness. Now, more and more schools are seeing wellness as part of their mission — to further their academic goal of producing successful graduates and to play their unique role in supporting the “whole child,” not just the academic child.

The **Whole School, Whole Community, Whole Child** (WSCC) model, released in 2014 by ASCD

(an education leadership professional association) and the Centers for Disease Control and Prevention, has taken root in American schools. WSCC is based on the premise that every child in every school deserves to be healthy, safe, engaged, supported and challenged. This approach puts youth at the center with a strong health and well-being focus.³⁹ It acknowledges that health and education affect individuals, society and the economy. As such, health and education must work together whenever possible. The model suggests that health services and programs should be deeply integrated into the day-to-day life of schools and that students themselves represent an untapped tool for raising academic achievement and improving learning.¹⁸

Today, most educators say that the whole child approach to education is important and relevant to their work.⁴⁰ And though educators may have different interpretations of what “whole child education” means, the WSCC model is seen by most experts as shaping the school role in the years to come. We’ve come a long way from the No Child Left Behind era, characterized by a singular focus on test scores, to a more holistic approach focused on the welfare and nurturing of students’ cognitive, physical and emotional development and well-being.

“All of our youth depend on a stable, supportive learning environment when they are in our schools. Schools provide essential needs for our youth including two meals a day along with social-emotional support through curriculum and daily engagement with peers and adults. Providing our children with a healthy school environment is the first step in shaping their future.”

— Patrick Smith, Principal, ISD 279 – Osseo Area Schools (Minnesota)

3 INDISPUTABLY ESSENTIAL: HEALTHY EATING AND PHYSICAL ACTIVITY

School wellness [guidelines](#) have consistently emphasized the importance of improving school meals and other foods/beverages available on campus as well as increasing physical activity levels among students. Good nutrition and adequate physical activity remain core to preventing chronic diseases.⁴¹ Promoting healthy eating and physical activity, and limiting sedentary behaviors, through school and community interventions can be beneficial to students’ mental health.⁴² And the positive impact of nutrition and physical activity on academic performance, the so-called “learning connection,” is firmly established.^{43,44}

Vital to learning and cognition, too, are the nutrients necessary to support normal growth and development — although the reality is that the typical eating patterns currently consumed by many in the United States do not align with the [Dietary Guidelines](#).⁴¹ Given breakfast’s positive effect on overall nutrition and cognition,⁴⁵ it’s especially discouraging that a survey found that 62 percent of students did not eat breakfast on all seven days before the survey and that 13 percent of students never ate breakfast during that time. Equally frustrating, even now, nearly three-fourth of high school youth are not physically active for 60 minutes seven days a week.⁴⁶

School meals are essential. A school meal may be the only nutritious meal many American children eat on some days. In the United States, the national School Breakfast Program (SBP) and the National School Lunch Program (NSLP) meals are provided for free or at a reduced price to eligible children and are a critical nutrition safety net for low-income children. Research on the association between school meal consumption and overall dietary intake is encouraging. Au et al.⁴⁷ demonstrated that eating school breakfast and school lunch every day by U.S. schoolchildren was associated with healthier dietary intakes overall, connecting the nutritional benefits of regularly consuming school meals. A 2017 study found that, for the major food groups, the contribution of school meals ranged from between 40.6 percent for vegetables to 77.1 percent for milk.⁴⁸ The [2019 School Nutrition and Meal Cost Study](#)

TRYING SOMETHING NEW: INNOVATIONS IN SCHOOL NUTRITION

Innovations in school nutrition programs across the U.S. are making a difference in students' health and well-being. Today many school districts are:



- * Offering fun, meal participation-building options like yogurt-/milk-based fruit smoothies and parfaits

- * Introducing new methods of local procurement for fresher, more varied menu items

- * Overhauling and redesigning cafeteria environments



- * Developing better-tasting, kid-inspired, “chef-crafted” menu options

- * Bringing breakfast out of the cafeteria through Grab and Go, Breakfast in the Classroom and Breakfast After the Bell options



- * Encouraging a farm-to-table philosophy around school meals

- * Offering foods that reflect the diversity of student cultures and diet preferences



- * Allowing students to order meal choices via apps and/or participate directly in recipe development

“I applaud schools that are providing kids with enough time to taste and enjoy their meal. Not only does this reduce waste, but it also impacts social-emotional learning and overall wellness. Anything that mimics the outside ‘retail’ food experience in school is good. Some schools are branding cups with school colors. One school opened a coffee-bar-type service that does smoothies. A high school in Texas has a traditional cafeteria with a special area off the courtyard where students can get breakfast burritos with homemade salsa — and in the lobby, a Grab and Go cart offers parfaits and smoothies with dairy. These are all great things that kids love.”

— Kayla Jackson, Project Director, AASA,
The School Superintendents Association

from the U.S. Department of Agriculture reported that school meal participants are better nourished than nonparticipants and that school lunches consumed by participants have higher concentrations of vegetables, whole grains and dairy.⁴⁹

The Community Eligibility Provision (CEP) is the newest of the federal provisions available for high-poverty school districts to offer breakfast and lunch at no cost to all students, regardless of income, resulting in higher participation rates. Schools also play a key role in ensuring children and youth have access to nutritious meals during the summer. Schools across the U.S. are implementing Summer Meals Programs through innovative meal service options, marketing the program to children and families and working collaboratively with community partners to bring food to children and families in places where they spend their time during the summer.

The need for school nutrition continues to expand, as hunger and food insecurity persist, and today this need is being addressed by everything from the expanding popularity of food trucks to comprehensive summer and after-school feeding — as well as monumental efforts by school nutrition programs to reach students and families with healthy food during a crisis like COVID-19.

School breakfast is powerful. Of all the steps schools can take toward creating healthier, higher-achieving students and a culture of wellness, implementing school breakfast is perhaps the simplest and most cost-effective, with very possibly the most direct impact. Breakfast is linked with numerous health and educational



The annual **School Breakfast Scorecard** from the Food Research & Action Center (FRAC) recognizes innovative school breakfast models that move breakfast out of the cafeteria as successful strategies for increasing school breakfast participation. Grab and Go breakfasts — in which students pick up a nutritious morning meal from mobile carts strategically placed in high-traffic areas in school buildings or on campus — are especially easy and effective, allowing students to eat on the way to class, during class or in designated areas.



Grab and Go breakfast overcomes hurdles like timing, inconvenience and stigma of participation associated with traditional breakfast in the cafeteria. In fact, research has demonstrated that when breakfast is brought to students (adolescents in particular) in an unrestricted hallway, more students receiving free and reduced-priced meals choose to participate. As with all school breakfast programs, serving Grab and Go breakfast meets the government school meal requirements developed by the U.S. Department of Agriculture. More [here](#).

benefits — including improved academic performance, student behavior, school attendance and nutrition intake, while also addressing hunger.⁴⁵ Indeed, strong support for school breakfast in the scientific literature continues to build. A 2016 systematic review stated that “[t]he dietary outcomes most commonly reported to have positive associations with academic achievement were: breakfast consumption ... and global diet quality/meal patterns ..., whereas negative associations reported with junk/fast food.”⁵⁰

Additionally, because schools receive federal reimbursement for each meal served, school breakfast supports the financial bottom line. The national School Breakfast Program (SBP) is an important solution that provides a healthy morning meal to millions of students across the country. But many millions more students are missing out. In fact, only 57.5 low-income students participate in school breakfast for every 100 who participate in school lunch.⁵¹

Physical activity benefits youth. Research reveals that developing the problem-solving part of the brain requires not more study time but a more nurturing environment, including physical activity and more playtime. Physical activity is linked with numerous health and educational benefits — yet only 22 percent of school-aged children and youth meet national physical activity guidelines of 60 minutes of moderate to vigorous physical activity at least five days a week. Nearly half of students don’t attend P.E. class in an average week when they’re in school. And the median school P.E. budget in the U.S. is less than \$1.50 per student per year.¹⁰

Reductions in school recess and physical education programs, lack of equipment and lack of funding in school communities all play a role in the physical inactivity crisis. The result: many American students have few or no options when it comes to the before-, during-, and after-school activity so crucial to their wellness and learning potential.

Yet evidence continues to mount about the benefits of physical activity — through physical education class, recess and brief classroom physical activity breaks — to learning and well-being.

Students who are physically active tend to have better grades, school attendance, cognitive performance and classroom behaviors.⁴⁵ Regular physical activity can help children and adolescents improve cardiorespiratory fitness, build strong bones and muscles, control weight, reduce symptoms of anxiety and depression and reduce the risk of developing health conditions such as heart disease, cancer, Type 2 diabetes, osteoporosis and obesity.³³ In providing for *equity, diversity and inclusion*, physical education, physical activity and sport become places of acceptance and support for everybody by everyone.



The continuing tendency of school districts to eliminate recess and/or physical education and the de-prioritization of physical activity in general remain challenges. Overcoming structural issues like costs and time constraints in schools remains a key need along with the need for new ways to engage today's children and youth, especially adolescent and teen girls, where the inactivity gap is greatest. Examples: A rising interest in free and unstructured play, as both a counterpoint and an accompaniment to more structured team sports; getting students outside to connect with the natural world as a way to offset too much screen time; and providing schools with fun-for-all-kids turnkey solutions like GENYOUth's NFL FLAG-in-Schools model. More [here](#).

4 BEYOND NUTRIENTS: FOOD THAT'S GOOD FOR PEOPLE, COMMUNITIES AND THE PLANET

Sustainable food systems and diets have become critical areas of focus in nutrition, health, agriculture, food production and environmental sectors — and among consumers, including youth, who increasingly want to understand the story behind where the food they eat comes from.⁵¹ Given that less than 2 percent of the U.S. population today farms, the average American is disconnected from agriculture, conservation and the land.

“Eating better” means more than nutrients and personal health. It also means where food comes from, how it was produced and packaged, where it's available and to whom, how it impacts communities, animals and the planet. It's about the inherent trade-offs and tensions among nutrition and health as well as the economic, social and environmental dimensions of food, nutrition and eating. And it is the realization that we all must take part in helping to sustain a fragile planet.

“Now more than ever, consumers — including students and schools — are interested in responsibly produced, nutrient-rich foods like dairy. Ensuring today's youth have access to sustainably produced, nutritious foods and beverages, along with science-based information to help them make good eating choices, is just as important as computers when it comes to learning and flourishing.”

— Jean Ragalie-Carr, RDN, LDN, FAND, President,
National Dairy Council

In schools, sustainable nutrition has expanded the traditional focus on the nutritional and health value of foods to also encompass food procurement and preparation considerations, school gardens, a focus on food waste, nutrition and agriculture education as well as cultivating a better understanding of the food ecosystem in which we all participate.

“Conversations on sustainable nutrition must be enhanced beyond what students get to eat every day.”

— Alicia Harris, Principal, Winding Ridge School of Inquiry and Performing Arts (Indiana)



There’s a growing focus on sustainable nutrition issues in schools. It’s showing up in school nutrition procurement practices, menus and food preparation. It’s also evident in classrooms, the cafeteria and other areas of the school to help students decide what they eat, understand food systems and production, address food waste, enhance science/STEM education, explore food justice issues and familiarize children and youth with the origin of their food. And according to a 2020 [GENYOUth Insights survey](#), students themselves care about this topic and want to learn more. More [here](#).

5 ADEQUATE SLEEP: AS BASIC AS PROPER NUTRITION AND PHYSICAL ACTIVITY

Like nutrition and physical activity, adequate sleep is now seen as vital to student health and well-being and essential to learning.⁵³ According to the Centers for Disease Control and Prevention, “Children and adolescents who do not get enough sleep are at increased risk for diabetes, obesity, and poor mental health, as well as injuries, attention and behavioral problems, and poor academic performance.”¹⁶ And the National Sleep Foundation notes that sleep “can even help [students] to eat better and manage the stress of being a teen.”⁵⁴

Sleep deficits among youth are well documented. The CDC reports that nearly 73 percent of U.S. high school students and almost 58 percent of middle-school students receive less than the recommended amount of nighttime sleep.¹⁶ An American Academy of Pediatrics policy statement “recognizes insufficient sleep in adolescents as an important public health issue that significantly affects the health and safety, as well as the academic success, of our nation’s middle and high school students.”¹⁷

A 2018 [GENYOUth Insights survey](#) shows that 71 percent of middle and high school-aged students are getting less sleep on weekday nights than they need to perform at their best throughout the school day. Sleep-deprived students are losing about 8.5 hours of sleep per school week on average. That’s equal to missing out on one full night’s sleep a week.⁵⁵

6 AS IMPORTANT AS ACADEMICS: SOCIAL AND EMOTIONAL LEARNING

In keeping with WSCC and a whole child approach, growing data and insights about social and emotional learning (SEL) point to the need to address students’ resilience and emotional well-being, not just their physical and cognitive selves, to help them succeed.⁵⁶ According to the Collaborative for Academic, Social, and Emotional Learning (CASEL), SEL “is the process through which

Continued on page 20 >



What Schools Should Be

**Q&A with Dr. Katie Wilson, Executive Director,
Urban School Food Alliance**

What should schools be today, in your view?

The best schools have a growing role as the epicenter of community life, a source of reliable information and a place of trusted family relationships, where ideals around health start, develop and are supported. They're neighborhood hubs. Though this may sound idealized, there's a real value in viewing schools as places that improve lives around nutrition, physical activity and overall wellness.

What's changing in school wellness?

There has been a good evolution — from a kind of negative focus on “combating obesity” and “breaking bad habits” to a more positive “encouraging students to live well” approach that's more supportive and less chastising. There are challenges remaining but good things happening: in budget-strapped districts, recess continues to be cut and lunch periods shortened, yet the move toward recess before lunch gets kids ready to eat and is being found to reduce food waste, so that's a step forward.

What's new in school food delivery?

The emergence of new breakfast options has been great, with some districts starting as early as 6 a.m. This particularly helps home-

less students, which is an issue in many districts. Other districts are letting kids order food ahead, using apps. Food trucks, kiosks and Grab and Go breakfast carts are extremely effective new options.

What about students' awareness of their own wellness?

Youth awareness of wellness is burgeoning. Kids are asking in some cases for organic food; they're very conscious of food waste — as early as the second grade — and how food workers are being treated. There's a growing consciousness of animal care and agriculture. They're not waiting for adults to take steps; they're very action-oriented. I see youth-led action really bringing communities together.

So you're seeing empowered youth?

Absolutely, from young elementary students through high school — they want control, and they want influence. They see themselves as purchasers, consumers, when it comes to food. They want understandable labeling, they want reusable plates and cutlery, and they're having their say. Students were single-handedly responsible for getting plastic straws out of school cafeterias in Miami-Dade. They want to be a big part of the solution, and it's up to us to help them channel those positive passions!

Katie Wilson, PhD, SNS, became the Urban School Food Alliance's first executive director in 2019. She previously served as the USDA's Deputy Under Secretary of Food, Nutrition and Consumer Services. Before she worked with the USDA, Wilson served as executive director of the Institute of Childhood Nutrition, the only federally funded national center dedicated to applied research, education and training and technical assistance for child nutrition programs. She also knows firsthand the challenges of school food service, having served as a food service director at various school districts in her home state of Wisconsin.

> Continued from page 18

children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”⁵⁷ Students with strong social and emotional skills are better able to cope with everyday challenges and benefit academically, socially and professionally. An important aspect of SEL is that it is efficient at addressing growing issues around student stress, anxiety and trauma.⁵⁸

Although the term has been around for 20 years, there has been a surge in interest in SEL among parents, educators and policymakers. More schools are implementing specific SEL benchmarks by significant percentages, and principals and teachers are assessing SEL skills at higher rates than just two years ago.⁵⁹ Fully 74 percent of teachers report that they are devoting more time to teaching SEL skills today compared to five years ago.⁶⁰ Increasingly, state boards of education have adopted or are considering policies to support social and emotional learning, and eight states (as of 2018) had officially established SEL standards for their K-12 schools.⁶¹

“Supporting the whole child means that we educate toward making the child successful in every way, even if it is sometimes not in our curriculum area.”

— Mellonee Cappiello, Family and Consumer Sciences Teacher, Tri-Valley Central School (New York)

7 SCHOOL AND STUDENT CONNECTEDNESS: THE IMPORTANCE OF BELONGING

“Connectedness” is the feeling among youth that they are cared for and supported and that they belong, and it has important protective factors for students’ health and well-being. And **school connectedness** — the belief by students that adults and peers in school care about them as individuals — has positive effects on academic achievement, increases attendance and leads to students staying in school longer. We now know that being connected to caring adults and to



A decade ago, youth as change-agents for healthy schools was a novel concept — the idea that students can and should play a lead role in demanding, creating and participating in solutions that affect their health and well-being in their school communities. But today, empowered youth are a driving force in many education and public health initiatives. When it comes to creating healthier schools, the need exists for more and better opportunities for empowering youth. Indeed, students may be their own best innovators and advocates. More [here](#).

“Once we are informed, youth want to make a difference. It can be hard if someone in power keeps shutting us down.”

— Taylor, Student, Grade 8 (Florida)

FOSTERING CONNECTEDNESS AT THE START OF THE SCHOOL DAY

Recent research has pointed out the relationship of school breakfast to connectedness. Results of one study show that students who eat breakfast regularly have higher levels of school connectedness, not just better academic performance, than those who eat breakfast less frequently. Encouraging youth to eat breakfast regularly may, it appears, help improve school connectedness.⁶² Alternative school breakfast models like Breakfast in the Classroom offer additional opportunities for strengthening connections.

school contributes to students’ well-being.⁶² Student-led clubs at school, mentoring programs, volunteer opportunities and connections of youth with community-based programs and supportive adults are all important strategies for fostering connectedness — which includes and implies integration, interdependence and interaction. ■



Population Health

Q&A with Dr. Selwyn Vickers, Senior Vice President of Medicine and Dean of the University of Alabama School of Medicine, University of Alabama at Birmingham

How do you describe disparity among today's youth?

There are clear disparities between minority urban, inner-city youth and their majority suburban counterparts. These disparities are often driven by resources, teacher availability, class size as well as their personal social environment that brings difficulty and challenges to learning. Those differences and those disparities have been exacerbated to a significant degree during COVID. Within limitations of in-person classroom education and the requirement for remote learning, those who were already struggling to learn at a competitive level and to compete at that level, which particularly focuses on under-represented minorities in this country, are critically limited in their ability to do so due to the lack of computers, the lack of broadband and the lack of access.

In addition to having these critical infrastructure of needs available for youth with high variability across the country, many single parent homes are now asked to take on the job of homeschooling while additionally trying to work two to three jobs as essential workers, while not having the ability to work remotely. These disparities are significantly increased.

What concerns you most?

I am most concerned that America's response to this problem will be one of both ignoring it or hoping it will pass by; this is unfortunate. Not to politicize this, one of my colleagues, who is British, informed me, "Selwyn, I realize America's value and com-

mitment to certain issues. It was solidified to me after the Sandy Hook incident where nearly 20 Caucasian suburban kids were killed and America chose to create no new significant gun control laws to help prevent this (at least against assault rifles). This clarified that there was nothing that would ever make America change those laws." I worry that this could be a water-shed moment as we look at health disparities and disparities among youth; there will probably be no event that will more greatly highlight this issue — both the lethality as it relates to minorities and COVID, and disparities related to their education. My concern is that we will ignore it and continue on our merry way.

Why does racial inequality matter today more than ever to the health and well-being of our kids?

I think many understand that one of the most vital periods of formation for a young person is the first thousand days, and the next set of years as they formulate the development of their brain for their trajectory to have a successful life and career in America. Many disparities are related to them having the ability to have nurtured, focused care and the ability to learn — basic initiatives that will allow them to succeed. There is such a level of differentiation around the ability to read at a third-grade level when you are in the third grade; this predicts so much, it predicts your earning income, your ability to graduate from high school and it is also closely linked to your frequency of incarceration. Can you imagine what America could

(Continued on next page)

Dr. Selwyn Vickers: Population Health

be if all parts of our country were given the opportunity to be their best? Imagine the power and impact. What would be the power, the privilege and the influence of America for the world and itself if the least of us were given the opportunity to be like the best of us? As long as we have differential values of individuals' lives, we will always suffer haves and have-nots.

How has COVID impacted population health?

It has, dramatically. It has affected our view of the value of population health and public health. It has affected the understanding of disease transmission and the impact of lives in our infrastructure; that is, when public health and population health are not managed well, it can overwhelm the acute care infrastructure and put our providers at risk. It also has highlighted that the need is something we pull off the shelf in a crisis, but it is not something we plan and build in to protect us for when this occurs again.

What's at stake now and what can we do in the future?

I think COVID-19 has laid bare the disparities in education and opportunities for our youth and their parents. We can no longer ignore them as smoldering embers, but now can really see them. We are creating an unbelievably low ceiling for the future of our youth who don't have the resources and who are often not in the best environments, typically minority children in urban areas. It has been said by many that the great equalizer in our society is education, and in many ways, this has put that equalizer in a position where it is only available to the haves and the well-offs. This time has challenged us to look at this and not ignore it, to not tolerate the disparities in education and opportunity, and to not tolerate the disparities in healthcare.

Selwyn M. Vickers, MD is Senior Vice President of Medicine and Dean of the University of Alabama School of Medicine, one of the ten largest public academic medical centers and the third largest public hospital in the U.S. He is a world-renowned surgeon, pancreatic cancer researcher and pioneer in health disparities research. His major research interests include: gene therapy as an application in the treatment of pancreatobiliary tumors, the role of growth factors and receptors in the oncogenesis of pancreatic cancer, the implications of FAS expressions and Tamoxifen in the growth and treatment of cholangiocarcinoma, assessment of clinical outcomes in the surgical treatment of pancreatobiliary tumors and the role of death receptors in the treatment of pancreatic cancer. Vickers is a member of over 21 professional societies with leadership roles in many, including the National Academy of Medicine and the American Surgical Association. He has served as president of the Society of Black Academic Surgeons, the Southern Surgical Association and the Society for Surgery of the Alimentary Tract.

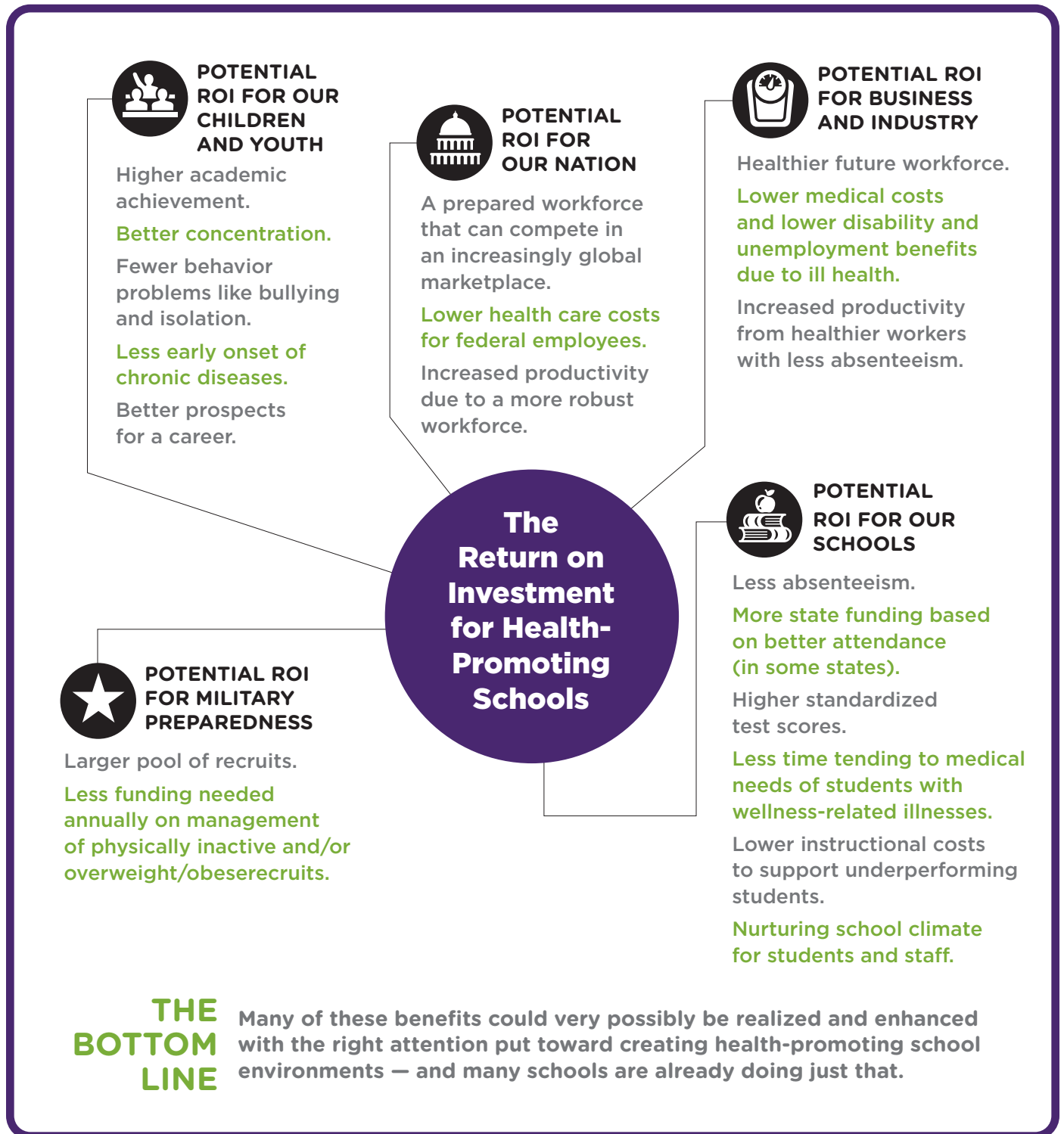
4

A Healthy Payoff

For Health-Promoting Schools

Youth health and well-being represent the promise of a lifelong return on investment for society, not to mention for individual children, their families and communities. Good nutrition, active play, social-emotional skills, adequate sleep, an engaging and nurturing school environment ... all pay back in terms of cognitive, physical and mental health, better employment status and career prospects, life satisfaction and happiness.

With their enormous influence over children’s behavior, **schools are a focal point for ensuring whole child success**. While the costs of ignoring school wellness are virtually incalculable, the benefits that can come from health-promoting schools that have the capacity and resources to nurture a healthy next generation can be significant. The return on investment (ROI) comes in the form of improved health, academic achievement and workforce readiness among children and youth, now and in the future; cost and productivity savings to government, schools and businesses; improved military preparedness; and more.



“The return on investment for healthy schools and districts is immediate, profound, long-lasting and so powerful as to be incalculable in simple dollars and cents. The real dividends that are derived are reflected in instilling healthy habits in young people. These include connected lives that leverage community resources, engage in regular physical activity, are knowledgeable about high-quality nutrition and possess an understanding that what we eat and our levels of physical activity affect our overall health and well-being in every facet of our lives.”

— John Skretta, Superintendent, Norris School District 160 (North Dakota)

THE SOCIAL RETURN ON INVESTMENT FOR SOCIAL AND EMOTIONAL LEARNING

“Social ROI” refers to a methodology for calculating the value of socioeconomic outcomes based on a variety of interventions that traditionally have not been measured in quantitative ways.⁶³ Belfield et al. report “a growing body of research emphasizing the advantages of teaching students social and emotional skills in school.”⁶⁵ Detailing a study that used the Social ROI approach, researchers Durlak and Mahoney found that “[a]dding an SEL program is likely to be a wise choice, academically and otherwise, compared to students receiving current school services,” with “improved academic performance,” “gains in skills levels,” “improved social behaviors and lower levels of distress,” “improved attitudes” and “fewer conduct problems.”⁶⁶

Belfield et al. also measured practical benefits in terms of cost-effectiveness. Their method leads to an overall conclusion that the return on investment for SEL programs is 11 to 1 — meaning, that on average, for every dollar invested in SEL programs, there is a return of 11 dollars.⁶⁵

Business Partnerships and the New Corporate Purpose

We are in a business era characterized by the encouraging rise of purpose-driven companies that value philanthropy and that prioritize helping to solve some of society’s biggest challenges as part of their mission.⁶⁷ Thanks to the demands of the Millennial generation and their younger cohort, Gen Z, social impact on the part of companies is no longer merely a nice option.

Some of the nation’s most influential CEOs have formally announced that corporations need to get beyond seeing quarterly earnings reports as the sole measure of success. Upcoming generations, it turns out, care about things other than just profit, and this is good news for social causes that urgently need and will welcome corporate support.⁶⁸ This includes creating cultures of wellness in the school environment.

For this reason, to build capacity for school wellness, public health groups must collaborate not only with government organizations, community coalitions, academia and mass media but also with interested, socially responsible corporations. The best strategy for promoting wellness “is a multifaceted one involving the efforts of many stakeholders, including individuals, families, employers, health plans, schools and government.”⁶⁹ Collaboration is becoming a core principle of public health practice. ■



Public-Private Partnerships

DJ Paoni, President, SAP North America

Why is it important for companies like SAP to partner with nonprofits like GENYOUth?

SAP has been a proud partner of GENYOUth since 2013. As a company, SAP is committed to preparing students for the workforce of the future — and that means empowering them with the resources, skills, and mentorship that can translate into future jobs and economic opportunity to set our future generations up for success. Through programs like AdVenture Capital, SAP and GENYOUth have helped students reach their potential while giving them the confidence and leadership skills to drive impactful change in their communities.

How critical is the student voice in helping solve real-world challenges?

I'm personally passionate about the development of our future generation leaders, and SAP's partnership with GENYOUth has allowed us to see what's possible when you tap into the entrepreneurial spirit students naturally seem to have for recognizing problems and wanting to solve them. Every day, we see students taking responsibility for shaping their schools and communities — whether it's participating in student government, raising money to support a cause or powering entire movements to bring attention to issues like climate change and world hunger. I am always inspired by the passion and commitment they have to making a difference. Students show us they want to play an active role in improving the world

around them, and I believe organizations and their leaders have a responsibility to empower that desire with the tools and resources to help our next generation become changemakers for a better future.

Why did you build SAP4Kids?

When Alexis Glick called me in March 2020, she articulated an emerging problem she saw due to the COVID-19 pandemic and iterated the need for quick action. As the pandemic reached the United States, virtually overnight we saw an unprecedented number of school closures. This was compounded by families experiencing major disruptions to their lives through significant layoffs and furloughs, leading to increased food insecurity across our nation. At the same time, 9 out of 10 public schools were maintaining their school meal operations, which many families rely on to feed their kids. We saw a gap in the ability for schools to quickly and safely connect the meals they had available with the families and those in the community who need them most.

In my role as the President of SAP North America, the largest business software company in the world, I saw the opportunity to leverage SAP's technology, employees and vast customer network to make an impact. This was the foundation for SAP4Kids, which is all about connecting people to local resources and providing an intuitive path for organizations to offer additional support. With SAP4Kids, it's our goal to ensure families will not miss meals they desperately need each day.

(Continued on next page)

DJ Paoni: Public-Private Partnerships

Why are employee and partnership engagement so important to SAP and how did you enlist their support to build SAP4Kids?

On the day Alexis called, within an hour, we brought employees together across marketing, development, sales, government relations and corporate social responsibility and got to work. Our teams worked nights, weekends, whatever it took to build this platform and have it launched within a short period of time. We had over 50 volunteers who scrubbed data submitted to the app for accuracy so that resources could be posted as quickly as possible. This collective effort is nothing new for us — SAP employees are bonded by a common mission to help the world run better and improve people's lives. We came together, put our technology to work and made sure the app was easy to use and gave real-time data. The best part? We had it up and running in a matter of days, not months.

Our people and technology are what built the app, but our customer and partner networks are what really brought the SAP4Kids mission to life. What began as a program focused on school outreach to connect food resources turned into a vast effort to scale the resources and support the app could provide to communities. We are now using our technology to track donations from

organizations that can offer resources from food donations, to free telemedicine for families in need of care, to housing assistance. Our hope is that we continue to scale resources available on the app as we bring in more organizations and identify more specific needs for local communities.

What advice would you give to other companies looking to partner with nonprofits?

Until public health concerns are resolved, the state of our business and economy cannot completely return to normal. Partnerships between organizations in the private and public sector are instrumental to finding solutions that will help reinforce our communities in times of uncertainty. Private sector companies should think about how they can leverage their unique platform to solve challenges in a way that no other organization can.

With SAP4Kids, we evaluated how SAP could uniquely help solve a very real and urgent need in communities. For us, it was the power of our purpose-driven employees, broad reach of our customers and partners, and our industry leading technology that led to the success of SAP4Kids. And none of this would have been possible without the partnership of GENYOUth and their unmatched access and credibility in school communities.

DJ Paoni serves as President of SAP North America where he is responsible for the strategy, day-to-day operations, and overall customer success in the United States and Canada. Dedicated to helping customers become best-run businesses, he has established himself as a trusted advisor who places a high priority on their success. Since joining SAP in 1996 as an account executive, Paoni has held several leadership roles throughout the organization. Prior to his current role, he was the managing director of the Midwest and oversaw the region's profitability, strategic direction, and all client-related activities. As head of the Strategic Customer Program in North America, he was responsible for establishing the strategic direction and vision for all efforts related to SAP's top North American-headquartered customers. Paoni's previous distinguished roles have included leading regional sales organizations in the Midwestern and Eastern United States. He currently serves on the board of GENYOUth.

5

What We Can Do

Action Steps

Our future well-being as individuals, as communities and as a nation lies with students in elementary and secondary schools today. We owe all of our children and youth — and our educators and other school staff — the healthy school environments and supports they need to teach, learn and thrive.

Below are action steps that schools and school stakeholders can take to inspire and instill the changes that lead to healthy, high-achieving schools and whole child success.

SCHOOL LEADERSHIP AND CLIMATE

Take a leadership role in setting a tone and vision for healthy schools.

Develop and implement a strong school wellness policy with input from diverse school and student stakeholders.

Incorporate the Whole School, Whole Community, Whole Child (WSCC) model components as appropriate (see CDC's [Virtual Healthy School](#) for ideas).

Gather data about health and wellness policies and practices in your school or district, and evaluate the impact of these policies and practices.

Create a safe, supportive environment for social and emotional learning (SEL) and a positive school climate.

HEALTHY EATING AND PHYSICAL ACTIVITY

Expand school breakfast, including alternative breakfast opportunities at school.

Make sure that all foods served and sold at school, including school meals and snacks, are appealing, nutritious and aligned with the Dietary Guidelines for Americans.

Expand a traditional focus on the nutritional and health focus of foods to also help students learn where food comes from.

Ensure that high-quality, standards-based physical education is offered to students in all grades.

Provide additional opportunities for students to be physically active before, during and after school, including recess and in-class physical activity breaks for all students.

YOUTH, FAMILY AND COMMUNITY ENGAGEMENT

Empower students as partners and change-agents for creating healthy schools. Involve them in planning, implementation and participation.

Engage families in meaningful ways to improve student health and learning. Encourage families to support and reinforce healthy behaviors in multiple settings — at home, in school, in out-of-school programs and in the community.

Collaborate with community agencies and groups that can provide valuable resources for student health and learning.

Engage students and families in contributing to the community through service learning opportunities and by sharing school facilities with community members.

BUSINESS AND PHILANTHROPY

Provide funding and in-kind resources to support school wellness and whole child success, working collaboratively with school leaders, educators, staff and students to identify needs and design solutions.

EVERYONE CAN ...

Be a healthy role model — and encourage other adults to be models for healthy eating, regular physical activity, adequate sleep and social-emotional well-being.

“In 20 years, I believe student activists will be leading the charge to ensure that their school is healthy. Students will develop a passion for their own health and the health of the environment and our planet, leading them to go out into the community and work for change using their school as an example. Every student will realize that what is going on around the world affects them and also is caused by them.”

— **Kayla**, High School Student (Florida)

RESOURCES

- ▶ Topic-specific briefs on school breakfast, student physical activity, sustainable nutrition and youth empowerment, available at www.genyouthnow.org
- ▶ Whole School, Whole Community, Whole Child (WSCC) Model from the Centers for Disease Control and Prevention and ASCD, www.cdc.gov/healthyschools/wsc/index.htm
- ▶ Collaborative for Academic, Social, and Emotional Learning (CASEL), casel.org
- ▶ Fuel Up to Play 60, the youth wellness program supporting healthy school environments and youth empowerment from GENYOUth, National Dairy Council and the National Football League (NFL), www.fueluptoplay60.com
- ▶ Urban School Food Alliance best practices for driving school food quality up and costs down while incorporating sound environmental practices, www.urbanschoolfoodalliance.org
- ▶ AASA reports on *Health and Hunger Through the Lens of Race, Ethnicity and Culture* and *Leaders Matter: Superintendent Leadership for School Breakfast* ■

ENDNOTES

1. Centers for Disease Control and Prevention. CDC Healthy Schools, Health and Academics. Retrieved from https://www.cdc.gov/healthyschools/health_and_academics/index.htm
2. Rasberry CN, Tiu GF, Kann L, et al. Health-related behaviors and academic achievement among high school students — United States, 2015. *MMWR Morbidity and Mortality Weekly Report*. 2017;66(35):921-927.
3. Michael SL, Merlo CL, Basch CE, et al. Critical connections: health and academics. *Journal of School Health*. 2015;85(11):740-758.
4. US Department of Agriculture. Local school wellness policy. July 29, 2016. Retrieved from <https://www.fns.usda.gov/school-meals/local-school-wellness-policy>
5. Larson N, Story M. Barriers to equity in nutritional health for U.S. children and adolescents: a review of the literature. *Current Nutrition Reports*. 2015;4(1):102-110.
6. Askelson NM, Golembiewski EH, Bobst A, et al. Understanding perceptions of school administrators related to school breakfast in a low school breakfast participation state. *Journal of School Health*. 2017;87(6):427-434.
7. Centers for Disease Control and Prevention. Making time for school lunch. July 29, 2019. Retrieved from https://www.cdc.gov/healthyschools/nutrition/school_lunch.htm
8. Feeding America. Map the Meal Gap 2020. Retrieved from: <https://map.feedingamerica.org/>
9. US Department of Agriculture. Food waste FAQs. Date unknown. Retrieved from <https://www.usda.gov/foodwaste/faqs#targetText=In%20the%20United%20States%2C%20food,worth%20of%20food%20in%202010>
10. SHAPE America. 2016 shape of the nation: status of physical education in the USA. 2016. Retrieved from https://www.shapeamerica.org/uploads/pdfs/son/Shape-of-the-Nation-2016_web.pdf
11. National Physical Activity Plan Alliance. The 2018 United States report card on physical activity for children and youth. 2018. Retrieved from http://physicalactivityplan.org/projects/PA/2018/2018_USReportCard_UPDATE_12062018.pdf?pdf=page-link
12. Safe Routes to School. The decline of walking and bicycling. July 2015. Retrieved from http://guide.saferoutesinfo.org/introduction/the_decline_of_walking_and_bicycling.cfm

13. The Aspen Institute/Project Play. State of play 2018: trends and developments. 2018. Retrieved from https://assets.aspeninstitute.org/content/uploads/2018/10/StateofPlay2018_v4WEB_2-FINAL.pdf?_ga=2.90553690.1116431382.1587927338-1989037080.1587927338
14. Zarrett N, Veliz PT, Sabo D. Keeping girls in the game: factors that influence sport participation. Women's Sports Foundation. 2020. Retrieved from <https://www.womenssportsfoundation.org/wp-content/uploads/2020/02/Keeping-Girls-in-the-Game-FINAL-web.pdf>
15. Smith JD, Fu E, Kobayashi M. Prevention and management of childhood obesity and its psychological and health comorbidities. *Annual Review of Clinical Psychology*. 2020;16:351-378.
16. Wheaton AG, Jones SE, Cooper AC, et al. Short sleep duration among middle school and high school students — United States, 2015. *MMWR Morbidity and Mortality Weekly Report*. 2018;67:85-90.
17. Adolescent Sleep Working Group, Committee on Adolescence, Council on School Health. School start times for adolescents. *Pediatrics*. 2014;134(3):642-649.
18. Solomon B, Katz E, Steed H, et al. Creating policies to support healthy schools: policymaker, educator, and student perspectives. *Child Trends*. October 2018. Retrieved from https://www.childtrends.org/wp-content/uploads/2018/10/healthyschoolstakeholderreport_ChildTrends_October2018.pdf
19. Hodges T. School engagement is more than just talk. Gallup. October 25, 2018. Retrieved from <https://www.gallup.com/education/244022/school-engagement-talk.aspx>
20. Asada Y, Hughes A, Chriqui J. Insights on the intersection of health equity and school nutrition policy implementation: an exploratory qualitative secondary analysis. *Health Education and Behavior*. 2017;44(5):685-695.
21. Carlson JA, Mignano AM, Norman GJ, et al. Socioeconomic disparities in elementary school practices and children's physical activity during school. *American Journal of Health Promotion*. 2014;28(3 Suppl):S47-S53.
22. Cox MJ, Ennett ST, Ringwalt CL, et al. Strength and comprehensiveness of school wellness policies in Southeastern US school districts. *Journal of School Health*. 2016;86(9):631-637.
23. Schuler BR, Saksvig BI, Nduka J, et al. Barriers and enablers to the implementation of school wellness policies: an economic perspective. *Health Promotion Practice*. 2018;19(6):873-883.
24. Diamond A. The interplay of biology and the environment broadly defined. *Developmental Psychology*. 2009;45(1):1-8.
25. Mountain JA, Nyaradi A, Oddy WH, et al. Data linkage in an established longitudinal cohort: the Western Australian Pregnancy Cohort (Raine) Study. *Public Health Research & Practice*. 2016;26(3):2631636.
26. Baym CL, Khan NA, Monti JM, et al. Dietary lipids are differentially associated with hippocampal-dependent relational memory in prepubescent children. *American Journal of Clinical Nutrition*. 2014;99(5):1026-1032.
27. Khan NA, Raine LB, Donovan SM, et al. IV. the cognitive implications of obesity and nutrition in childhood. *Monographs of the Society for Research in Child Development*. 2014;79(4):51-71.
28. Adolphus K, Lawton CL, Champ CL, et al. The effects of breakfast and breakfast composition on cognition in children and adolescents: a systematic review. *Advances in Nutrition (Bethesda, Md.)*. 2016;7(3):590S-612S.
29. Chaddock-Heyman L, Erickson KI, Kienzler C, et al. The role of aerobic fitness in cortical thickness and mathematics achievement in preadolescent children. *PLoS One*. 2015;10(8):e0134115.
30. Erickson KI, Hillman CH, Kramer AF. Physical activity, brain, and cognition. *Current Opinion in Behavioral Sciences*. 2015;4:27-32.
31. Hillman CH, Pontifex MB, Castelli DM, et al. Effects of the FITKids randomized controlled trial on executive control and brain function. *Pediatrics*. 2014;134(4):e1063-e1071.
32. Donnelly JE, Hillman CH, Castelli DM, et al. Physical activity, fitness, cognitive function, and academic achievement in children: a systematic review. *Medicine & Science in Sports & Exercise*. 2016;48(6):1197-1222.
33. US Department of Health and Human Services. *Physical Activity Guidelines for Americans*. 2nd ed. 2019. Retrieved from https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf
34. Immordino-Yang MH, Darling-Hammond L, Krone C. The brain basis for integrated social, emotional, and academic development: how emotions and social relationships drive learning. The Aspen Institute/National Commission on Social, Emotional, and Academic Development. 2018. Retrieved from https://assets.aspeninstitute.org/content/uploads/2018/09/Aspen_research_FINAL_web.pdf?_ga=2.192761194.1126296002.1578358135-182804827.1574880478
35. de Brey C, Musu L, McFarland J, et al. Status and trends in the education of racial and ethnic groups 2018. US Department of Education. February 2019. Retrieved from <https://nces.ed.gov/pubs2019/2019038.pdf>

36. American Psychological Association. Ethnic and racial minorities and socioeconomic status. July 2017. Retrieved from <https://www.apa.org/pi/ses/resources/publications/minorities>
37. US Department of Education. Equity of opportunity. Date unknown. Retrieved from <https://www.ed.gov/equity>
38. AASA/The School Superintendents Association. Health and hunger through the lens of race, ethnicity and culture. 2019. Retrieved from [https://aasa.org/uploadedFiles/Childrens_Programs/School_Breakfast/AASA_Health_Hunger_2019\(1\).pdf](https://aasa.org/uploadedFiles/Childrens_Programs/School_Breakfast/AASA_Health_Hunger_2019(1).pdf)
39. Lewallen TC, Hunt H, Potts-Datema W, et al. The Whole School, Whole Community, Whole Child model: a new approach for improving educational attainment and healthy development for students. *Journal of School Health*. 2015;85(11):729-739.
40. Burstein R. Educators don't agree on what whole child education means: here's why it matters. *EdSurge*, July 16, 2019. Retrieved from <https://www.edsurge.com/news/2019-07-16-educators-don-t-agree-on-what-whole-child-education-means-here-s-why-it-matters>
41. US Department of Agriculture and US Department of Health and Human Services. *Dietary Guidelines for Americans, 2015-2020*. 8th ed. December 2015. Retrieved from https://health.gov/sites/default/files/2019-09/2015-2020_Dietary_Guidelines.pdf
42. Michael SL, Lowry R, Merlo C, et al. Physical activity, sedentary, and dietary behaviors associated with indicators of mental health and suicide risk. *Preventive Medicine Reports*. 2020;19:101153.
43. Faught EL, Gleddie D, Storey KE, et al. Healthy lifestyle behaviours are positively and independently associated with academic achievement: an analysis of self-reported data from a nationally representative sample of Canadian early adolescents. *PLoS One*. 2017;12(7):e0181938.
44. Asigbee FM, Whitney SD, Peterson CE. The link between nutrition and physical activity in increasing academic achievement. *Journal of School Health*. 2018;88(6):407-415.
45. Centers for Disease Control and Prevention. Health and academic achievement. May 2014. Retrieved from https://www.cdc.gov/healthyyouth/health_and_academics/pdf/health-academic-achievement.pdf
46. Eaton DK, Kann L, Kinchen S, et al., and Centers for Disease Control and Prevention. Youth risk behavior surveillance — United States, 2011. *MMWR Morbidity and Mortality Weekly Report*. 2012;61(SS04):1-162.
47. Au LE, Gurzo K, Gosliner W, et al. Eating school meals daily is associated with healthier dietary intakes: The Healthy Communities Study. *Journal of the Academy of Nutrition and Dietetics*. 2018;118(8):P1474-P1481.E1.
48. Cullen KW, Chen T-A. The contribution of the USDA school breakfast and lunch program meals to student daily dietary intake. *Preventive Medicine Reports*. 2017;5:82-85.
49. US Department of Agriculture. School nutrition and meal cost study. April 23, 2019. Retrieved from <https://www.fns.usda.gov/school-nutrition-and-meal-cost-study>
50. Burrows T, Goldman S, Pursey K, et al. Is there an association between dietary intake and academic achievement: a systematic review. *Journal of Human Nutrition and Dietetics*. 2017;30(2):117-140.
51. Food Research & Action Center. School Breakfast Scorecard, school year 2018-2019. February 2020. Retrieved from https://frac.org/wp-content/uploads/Breakfast-Scorecard-2018-2019_FNL.pdf
52. GENYOUth. Youth and the future of food survey summary. May 5, 2020. Retrieved from <https://www.genyouthnow.org/reports/genyouth-insights-spring-2020-youth-and-future-of-food>
53. Weaver MD, Barger LK, Malone SK, et al. Dose-dependent associations between sleep duration and unsafe behaviors among US high school students. *JAMA Pediatrics*. 2018;172(12):1187-1189.
54. National Sleep Foundation. Teens and sleep. 2020. Retrieved from <https://www.sleepfoundation.org/articles/teens-and-sleep>
55. GENYOUth. Teens and sleep survey summary. October 4, 2018. Retrieved from <https://www.genyouthnow.org/reports/teens-and-sleep-survey-summary>
56. Holzapfel B. Emotion and cognition in the age of AI: new research from Microsoft Education and The Economist Intelligence Unit. Microsoft Education Blog. February 20, 2019. Retrieved from <https://educationblog.microsoft.com/en-us/2019/02/emotion-and-cognition-in-the-age-of-ai-new-research-from-microsoft-education-and-the-economist-intelligence-unit/>
57. Collaborative for Academic, Social, and Emotional Learning (CASEL). What is SEL? 2020. Retrieved from <https://casel.org/what-is-sel/>
58. Blanco M, Norville V. Gauging support for social and emotional skill building in school. National Association of State Boards of Education (NASBE). *Policy Update*. 2019;26(2):1-4.
59. Jones SM, Doolittle EJ. Social and emotional learning: introducing the issue. *The Future of Children*. 2017;27(1):3-11.

60. McGraw-Hill Education. 2018 social and emotional learning report. Fall 2018. Retrieved from <https://www.mheducation.com/prek-12/explore/sel-survey.html>
61. Collaborative for Academic, Social, and Emotional Learning (CASEL). 2018 state scorecard scan. February 2018. Retrieved from <https://casel.org/wp-content/uploads/2018/02/2018-State-Scan-FINAL.pdf>
62. Allen K-A, Kern ML, Vella-Brodrick D, et al. What schools need to know about fostering school belonging: a meta-analysis. *Educational Psychology Review*. 2018;30(1):1-34.
63. Sampasa-Kanyinga H, Hamilton HA. Eating breakfast regularly is related to higher school connectedness and academic performance in Canadian middle- and high-school students. *Public Health*. 2017;145:120-123.
64. Banke-Thomas AO, Madaj B, Charles A, et al. Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review. *BMC Public Health*. 2015;15:582.
65. Belfield C, Bowden AB, Klapp A, et al. The economic value of social and emotional learning. Center for Benefit-Cost Studies in Education, Teachers College, Columbia University. February 2015. Retrieved from <http://blogs.edweek.org/edweek/rulesforengagement/SEL-Revised.pdf>
66. Durlak JA, Mahoney JL. The practical benefits of an SEL program. Collaborative for Academic, Social, and Emotional Learning (CASEL). December 2019. Retrieved from <https://casel.org/wp-content/uploads/2019/12/Practical-Benefits-of-SEL-Program.pdf>
67. Fink L. A fundamental reshaping of finance. 2020. Retrieved from <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
68. Business Roundtable. Business Roundtable redefines the purpose of a corporation to promote “an economy that serves all Americans.” August 19, 2019. Retrieved from <https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans>
69. National Institute for Health Care Management Foundation. Health plans emerging as pragmatic partners in fight against obesity. April 2005. Retrieved from <https://nihcm.org/pdf/Obesity-Report.pdf>

GENYOUTH[®]
CREATING HEALTHIER SCHOOL COMMUNITIES™

genyouthnow.org