

# Afterschool Advantage

*Powerful **New** Learning Opportunities*

Edited by Terry K. Peterson and Sybil Fix

Foreword by Richard W. Riley

Published by Foundations, Inc.



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*W*E WOULD LIKE TO THANK THE C. S. MOTT FOUNDATION, THE UNIVERSITY OF SOUTH CAROLINA FOUNDATION, THE COLLEGE OF CHARLESTON, AND FOUNDATIONS, INC. FOR CONTRIBUTING SUPPORT AND FUNDING TO THE PUBLICATION OF THIS AFTERSCHOOL BOOKLET. WE APPRECIATE THE COLLABORATION OF FOUNDATIONS, INC. AND ITS WILLINGNESS TO PUBLISH AND DISTRIBUTE IT. WE ALSO THANK ALL THE CHAPTER AUTHORS FOR CONTRIBUTING THEIR TIME AND THEIR EXPERTISE TO IMPROVING THE QUALITY OF AFTERSCHOOL OPPORTUNITIES FOR ALL CHILDREN.

*The opinions expressed in this publication are solely those of the authors.*

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## FOREWORD

Afterschool's Potential for Our Children's Future . . . . . 4  
*by Richard W. Riley*

## INTRODUCTION

Afterschool: An Opportunity to Develop 21st-Century Skills . . . . . 5  
*by John I. Wilson and Ken Kay*

CHAPTER 1: Science in Afterschool: Undisputed Advantage . . . . . 14  
*by Lucy N. Friedman and Sylvia M. James*

CHAPTER 2: Technology in the Afterschool Landscape:  
An Essential Tool for Today's Economy and Curriculum . . . . . 20  
*by Milton Chen*

CHAPTER 3: The Power of the Arts in Afterschool . . . . . 27  
*by Jonatban Katz and Scott Shanklin-Peterson*

CHAPTER 4: Entrepreneurial Advantage: "Out-of-the-Box" Afterschool . . . . . 37  
*by Paul F. DeLargy*

CHAPTER 5: Afterschool for the Global Age . . . . . 43  
*by Michael H. Levine, Alexis Menten, and Claudia Weisburd*

CHAPTER 6: Afterschool: Creating Pathways to College . . . . . 53  
*by Richard Tagle, Terry K. Peterson, and Tracy Brown*

## CONCLUSION

Afterschool Must No Longer Be an Afterthought . . . . . 62  
*by Rhonda H. Lauer and Terry K. Peterson*

CONTRIBUTING AUTHORS & EDITORS . . . . . 67



# Foreword:

*Afterschool's Potential  
for Our Children's Future*

*“We need more time. Our kids could  
do so much more after school to expand  
their horizons.”*

This is the comment I heard time and again as I visited schools around the country during my eight years as the U.S. Secretary of Education. Now, in this 21st century, enriching afterschool programs are needed more than ever. As a grandparent of thirteen and a founding co-chair of the Afterschool Alliance, I say that with a strong sense of urgency. Our children simply must have more time to learn and develop a host of skills that are necessary for a productive life in this new millennium.

Many excellent afterschool programs have been created in the past decade or so, and some communities have succeeded in establishing afterschool programs as an important element of their children's education and

development. However, we are still well short of meeting the enormous demand for more engaging learning time. As a result, more than fourteen million young people are being left behind.

Our children need more time to learn and explore if we want to get them on the path to college and career success. To accomplish that, we must break through the rigid thinking that learning happens only between 8:00 a.m. and 3:00 p.m. The recent report *A New Day for Learning*, developed by the Time, Learning, and Afterschool Task Force, with support from the C. S. Mott Foundation, is right on target and an excellent resource.

In recent years, we have learned a great deal about creating quality afterschool programs. That's a plus. In the early years of this movement, many people were content just to keep children occupied and off the streets between 3:00 p.m. and 6:00 p.m. The message was simple – keep the kids safe and out of trouble until mom and dad get home. What the kids did during that time didn't matter so much as long we kept them from getting into mischief.

It is indeed most important to keep our children and youth safe during afterschool hours. But, if used thoughtfully, those afterschool hours also offer a wonderful opportunity to provide learning enrichment that will capture the imagination of children – involvement in the arts, speaking another language, visiting museums and colleges, learning to work in teams, and other activities that also will help them learn core subjects better.

Current data clearly demonstrate that afterschool programs help children master the basics, improve regular school day attendance, and complete homework. They also present huge opportunities to help children – particularly in low-income communities – forge into exciting new territory, unexplored in the regular school day, and get a step ahead.

To many middle- and upper-income families, using afterschool hours to open children's eyes to the world around them and to gain additional skills is nothing new. For many of those youth, afterschool time is full of engaging

activities – chess clubs, music lessons, theater classes, sports and fitness programs – that not only are fun but keep them learning. These young people are being groomed for success; they get the message early on that extra time and support outside the classroom are beneficial to getting on the path to college and success in the workforce.

*We need these additional enrichment opportunities for all children.*

Our children are smart, and one of our challenges is to expose them to different forms of learning in order to capture their attention and motivate them to excel. Afterschool programs offer us that opportunity and freedom. The young boy bored with math may be a great chess player or musician; the young girl who has no expectations of going to college might think differently if she spends a couple of afternoons on a college campus with a caring mentor. A class that learns CPR from a nurse gets a hands-on science experience that may be far more exciting than reading about it in a book.

But to give all of our children and young people more time to learn, we need to keep our schools open later, build more school-community partnerships, and find more adults who can share their skills. Fortunately, there is a growing movement to design and build schools as community learning centers – facilities that are open later and longer for people of all ages. Making our schools the center of our communities can give us the extra time and space we need to create exciting afterschool opportunities for children and youth.

We also have done a better job at creating school-community partnerships that give young people better access to new learning sources. But much more needs to be done – and a grand opportunity is upon us. Millions of baby boomers are nearing retirement from full-time employment and seeking meaningful uses for their new available time. We should plan now to



garner their volunteer involvement in community afterschool initiatives as a rewarding way for them to contribute to society and help renew our great country.

This small book of cutting-edge strategies is an excellent guide for building the next generation of quality afterschool programs. It covers a wide range of activities – the arts, technology, entrepreneurship, and so forth – that offer great ideas for starting or expanding afterschool programs that will help our children develop six critical skill sets to prepare them for the future.

Thank you for your commitment to America’s most valuable asset – our children.

*Richard W. Riley*

Former U.S. Secretary of Education

Former Governor of South Carolina

# INTRODUCTION



## fterschool: *An Opportunity to Develop 21st-Century Skills*

BY JOHN I. WILSON AND KEN KAY

There is growing consensus among policymakers, elected officials, business people, educators, philanthropists, parents, students, and the general public that more needs to be done to ensure that all students are prepared for success in the 21st century. By the time they leave high school, U.S. students should be well equipped for citizenship, work, and post-secondary education in an increasingly interdependent and competitive global economy.

Preparing students for the global marketplace is critical, and educators tell us that they want to do so, but existing standards, curricular assessments, physical infrastructure, and professional development do not typically align with this emerging goal. While some groups of American students have improved on international comparisons, educators must continue to focus on improving critical thinking and problem-solving skills. We can no longer claim that the U.S. educational results are unparalleled. Many students around the world outperform American students on assessments

that measure 21st-century skills. Innovation and creativity no longer set American education apart; indeed, increasingly innovators around the world rival Americans in breakthroughs that fuel economic competitiveness.

Today, every student, whether he or she plans to enter the workforce, a two- or four-year college, or a trade school, requires 21st-century skills to succeed. Integrated with core academic subjects, 21st-century skills should be the “design specs” for creating K-12 schools that are truly effective for students and the nation. Only by setting clear goals that incorporate 21st-century skills can our nation’s schools prepare students to succeed.

For the past five years, the Partnership for 21st Century Skills has worked to build a national consensus of educators and business leaders on the skills that today’s young people need to become successful citizens and workers in the 21st century. What are they?

- **Twenty-first century content areas such as global awareness, financial literacy, civic literacy, and health awareness:** These content areas are critical to success in communities and workplaces, yet they typically are not emphasized in schools today.
- **Learning and thinking skills such as critical thinking, problem solving, communication, and innovation:** As much as students need to learn academic content, they also need to know how to keep learning – and make effective and innovative use of what they know – throughout their lives.
- **Information and communications technology (ICT) literacy:** Students must be able to use technology to help them learn content and skills, so that they know how to learn, think critically, solve problems, use information, communicate, innovate, and collaborate.
- **Life skills such as leadership, ethics, self-direction, and social responsibility:** Good teachers have always incorporated life skills into

their pedagogy. The challenge today is to incorporate these essential skills into schools deliberately, strategically, and broadly.

- **Twenty-first century assessments that measure 21st-century content, learning and thinking skills, ICT literacy and life skills:** Standardized tests alone can measure only a few of the important skills and knowledge students should have. A balance of assessments, including high-quality standardized testing along with effective classroom assessments, must be instituted to offer students the most effective feedback for mastering the content and skills central to success.
- **Mastery of core subjects such as math, science, and English:** These core subjects will, as in the past, continue to play a pivotal role in a student's ability to succeed in life and work. However, these content areas must be taught via 21st-century skills and context in order to adequately prepare and motivate students.

Our Framework for 21st Century Learning has been embraced by policymakers, community leaders, school boards, administrators, and school staff around the country as a positive structure for creating new teaching and learning outcomes. Afterschool leaders have also shared that our framework is very useful to their work. They note that many of the skills and content areas embraced by the Partnership's framework are not solely within the purview of K-12 education, but also within the legitimate scope of the work of afterschool and youth development groups. We agree.

The 21st-century outcomes promoted by our framework may provide a collaborative tool for both groups to work together in promoting the workforce and life skills that today's young people need to be successful global citizens and workers. While the task of creating a new framework for 21st-century learning may appear daunting, educators of the regular school day need not face this challenge alone. When contemplating an education

that encompasses critical thinking, problem solving, communications skills, global awareness, business and financial literacy, and leadership skills, there are many institutions in the community working to instill these attributes in our young people. Afterschool programs must be among them. Indeed, our approach to education must increasingly reflect the way today's students learn and interact – 24/7.

Afterschool programs have a unique opportunity to cooperate on key content and skill areas, which traditional K–12 educators cannot adequately cover during the regular school day. Afterschool opportunities can complement the traditional school day by focusing on a variety of 21st-century skill and content areas. In particular, if well-coordinated, afterschool programs can provide students with opportunities to apply skills and content from school programs to real-world situations. So, afterschool and school strongly reinforce one another in building broad student competencies. Specifically, as the chapters in this publication demonstrate, special opportunities exist in expanding student exposure to:

- **Business and financial literacy**
- **Problem solving in science**
- **Global awareness issues**
- **Information and communications technology (ICT) literacy.**

Additionally, afterschool programs and K–12 education can coordinate their efforts to design educational programs that focus on critical skills outcomes such as:

- **Communications skills**
- **Collaborations skills**
- **Creativity and innovation skills**

- **Information and communications technology literacy**
- **Leadership, personal ethics, and people skills.**

Clearly, many opportunities exist to create afterschool strategies for grades K–12 in order to produce a unique array of 21st-century skills outcomes. Connecting students in afterschool programs to students carrying out similar projects in other countries or linking them to returning foreign exchange students can give them a taste of global awareness and new uses of communications technology. Engaging students in entrepreneurial projects in afterschool programs clearly can help them develop beginning business skills and financial literacy. Partnering the afterschool program with local cultural groups and artists-in-residence can help young people develop creativity and collaboration skills. Hands-on science projects can connect them to the community and motivate them to study science. Because of the time flexibility, their untraditional structure, and frequent community partnerships, afterschool programs are a perfect structure in which to help develop and assess the development of 21st-century skills as well.

As afterschool becomes more focused on assessment, it can also build the assessment of 21st-century skills into its assessment strategy. For example, new tools such as a 21st-century skills portfolio could be developed to help students collect evidence of their competency in 21st-century skills. Analogous to the current art portfolio or IT portfolio, this would allow students to compile evidence of their mastery of critical thinking, problem solving (e.g., hands-on science), communications, global awareness, arts and creativity development, financial and business literacy, etc., to complement their application for college or work. This would be a vehicle to allow students to combine their experiences from both the K–12 classroom and their afterschool experiences.

Afterschool programs offer a unique opportunity to respond to our students' needs for skills and understanding to succeed in today's globally

interconnected society and workforce. But bringing 21st-century skills to every child requires a commitment from the community. It also requires a new era of cooperation between traditional K-12 institutions and afterschool and youth development institutions. Designed and implemented imaginatively and creatively, afterschool programs can play a unique role in providing our students with what they need to succeed in today's globally interconnected society and workforce. And every student across the nation will benefit from this community-based approach to learning for the 21st century.

For additional information, visit the Partnership for 21st Century Skills Web site at [www.21stcenturyskills.org](http://www.21stcenturyskills.org).

*John I. Wilson is executive director of the National Education Association and board member of the Partnership for 21st Century Skills. Ken Kay is president of the Partnership for 21st Century Skills.*



# Science in Afterschool: *Undisputed Advantage*

BY LUCY N. FRIEDMAN AND SYLVIA M. JAMES

## *I*ntroduction

Across the country, students in afterschool programs are engaged in exciting, high-quality, hands-on science experiences offered by a wide variety of youth, community, and education organizations. Informal science education organizations such as museums, science centers, zoos, and aquariums have long been heralded for introducing children and adults to science in ways that are engaging and non-threatening. In recent years, however, educators and policymakers have come to realize that increasing student science achievement and literacy will require a partnership of sorts between schools and other educational organizations. Afterschool programs provide valuable ways to increase access to science content, especially in schools that cannot extend instruction time.

A look at the science pipeline – the flow of learning that students follow from early childhood to careers – offers some helpful insights into the status of science in schools. Unfortunately, most U.S. students are



not demonstrating proficiency in science, with students in underserved communities consistently performing at even lower levels. According to the 2000 *National Survey of Science and Mathematics Education*, on average, K–3 teachers spend only twenty-three minutes per day on science instruction. At the middle school level, students may have few options for science courses, and more rigorous advanced courses are not always available for high school students.

Limited science instruction in the classroom is just one issue. While the numbers of students who earn science and engineering degrees at the undergraduate and graduate level have increased in recent years, it is likely that even more will be needed to replace those who are retiring from science careers. Additionally, blacks and Hispanics earn fewer college degrees overall, fewer degrees in science and engineering, and are underrepresented in the science and engineering workforce. More must be done to attract and retain young people from all backgrounds in science.

## Why Science Is a Fit with Afterschool

There is no better place than afterschool programs, with their smaller group sizes and less formal settings, for kids to begin to dig into hands-on science and technology adventures. Kids “learn by stealth” while they have a wonderful time planting gardens, building toothpick bridges (that’s physics), or mixing corn starch and water into “oobleck,” a slimy cross between a liquid and a solid.

If you ask Nobel Prize winners and other prominent scientists where they developed their fascination for science and technology, few will say it happened in class. Most found their career inspiration outside of school. The visionary behind Apple computers, Steve Jobs, caught the technology bug as a teenager attending afterschool programs. In afterschool, students can learn informally without the pressures of grades and tests.

Scientific inquiry – forming an idea, testing it, drawing a conclusion – takes time. Kids don't have to work in fifty-minute blocks but can spend hours on child-centered explorations. They have time to go out to museums or to visit a pond where they check the water quality each day. They have time to discover the wildlife that lives in their neighborhoods or to predict the weather by reading cloud formations.

Kids from every ethnic group and income level go to afterschool programs. This makes afterschool an important venue for highlighting science. Kids carry in their heads the stereotype of a scientist as someone who is old, white, male, and probably balding, with a funny fringe of hair like Albert Einstein. People from low-income and ethnic minority groups are under-represented in well-paid science and engineering jobs, as are women and disabled people.

A Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology concluded that high quality, out-of-school time (OST) science programs can provide “academic enrichment in mathematics and science to pre-college students, as well as informal science programs that help students see mathematics and science as interesting and fun.” In afterschool, kids learn through experience that anyone can do science.

## *W*hat Kind of Science Can You Do After School?

Science offerings in the afterschool environment have several advantages over the classroom setting. As the Coalition for Science After School has noted, afterschool settings “are particularly conducive to project-based activities where a wide variety of children can participate in design, construction, investigation, sense-making, and communication of science projects.”

Program providers must consider the subject matter, delivery approaches, and resources that they will need to offer science in afterschool. Content

for afterschool science should align with local and national standards. Both nationally recognized sets of standards (National Research Council and American Association for the Advancement of Science) provide guidelines for developmentally appropriate content and instruction. Providers must be realistic about the amount of content that can be covered in an afterschool setting and align their programs with the development goals of afterschool as well, which include helping kids develop socially and emotionally as well as academically. Processes, such as science inquiry or innovation through design, can be a bridge between the science standards and youth development.

Programs may take an explicit or embedded approach to science content. For example, programs that have staff with science expertise may elect to focus exclusively on robotics, biotechnology, or environmental science. Partnerships with universities, businesses, and community organizations can help to provide laboratory resources and additional staff expertise. In other instances, if funding or expert staff is unavailable, it may be better to embed science and math content in interdisciplinary activities. Afterschool programs are ideal for authentic science learning that makes connections to real-world experiences. Authentic learning is experiential in nature, validates prior knowledge, and engages students with topics that are relevant to their daily lives (Rahm, 2002). Cooking, gardening, and environmental science are great ways to integrate measurement, observation, and classification.

In afterschool it is important to have activities that are stand-alone and can be adaptable to varying schedules. Afterschool activities should be developed specifically for an informal learning environment, and modified to support an interactive, student-focused approach to learning.

## Afterschool Science Helps Kids Succeed

Schools alone cannot teach all kids all the science that they will need to become informed and productive adults. Afterschool programs can reinforce

school-day learning by helping kids learn specific content and by blending in math and reading.

Most kids start out enjoying science inquiry, but many lose interest as they advance into middle and high school. The best predictor of whether someone will grow up to be an engineer, an astronaut, or a computer scientist is whether that child is still interested in science by the end of eighth grade, not whether or not the child is earning high marks in science. Afterschool can nurture kids' interest in science by drawing connections between facts on a page – water evaporates through heat – and what kids observe and experience in science activities, such as cooking classes. As they work through science exploration in groups or team up to build robots, kids learn the skills crucial to the new century: teamwork, thinking critically, and solving problems.

Many afterschool programs employ high school and college students to mentor younger kids and to model science methods. In New York, high school students have successfully led younger children through explorations of urban bird life and ecology.

Infusing science into afterschool programs also improves kids' attendance after school, and by extension, at school itself. In many districts, kids cannot attend afterschool unless they show up for school. Afterschool science is a draw, often among the most popular of all afterschool programs.

## Best Practices

All high-quality programs share certain characteristics, including a mix of short-term and long-term experiences. In general the same characteristics that one would look for in any high-quality youth program should be present in programs that concentrate on science content.

Most afterschool programs are voluntary in nature, so participants will stop attending if they do not like the activities. One way to ensure buy-in is to

allow kids to have input in the program design and decision-making. Not only does this help to develop social, leadership, and problem-solving skills, but it also creates an environment of equity and trust. For example, the YouthALIVE! Program for middle and high school students in museums and science centers around the country included youth advisory councils (<http://www.astc.org/profdev/youth.htm>).

Science-based programs can achieve these goals by taking advantage of community partnerships that introduce students to real-world applications of science content through field trips to science labs, guest speakers from university research centers and environmental organizations, and even mini-internships. Students can learn about the scientific method by participating in citizen science projects such as the one offered by the Cornell Laboratory of Ornithology's Urban Bird Studies Program. This project invites the general public to observe birds in their backyard, or virtually via "bird cams" on the Cornell Web site ([http://www.birds.cornell.edu/birdhouse/nestboxcam/cam\\_links/](http://www.birds.cornell.edu/birdhouse/nestboxcam/cam_links/)).

## Making Scientists of Staff

Many adults are afraid of science and math. They think that they don't know enough to pass on knowledge to kids. The people who staff afterschool programs are no different. A diverse group of people including high school and college students, artists, musicians, paraprofessionals, and older adults can be afterschool teachers, even though many do not regularly teach science or math.

Afterschool staff members do not need deep scientific knowledge, but they need training to become comfortable with science activities and to sideline their science phobias. Through specially developed training programs, such as After School Science Plus, a program of the Educational Equity Center, staff members discover they know more science than they realize, and they grow more confident in their science abilities and interests.

Many schools have institutions in their communities, such as science or children's museums, with whom they can become partners. Afterschool and science institutions can flourish together when they partner to train afterschool staff to use well-designed science-enrichment curricula and simple materials that are low-cost or free. Because many afterschool staff members work part-time, and staff turnover is frequent, ongoing partnerships and frequent trainings are of particular value.

## Program Examples

As indicated in the introduction, afterschool science programs are offered by a wide variety of organizations, including schools, science centers, museums, and community organizations. Below are several notable examples:

- **Community Science Workshops (CSW):** Located in schools and community centers, CSWs are small-scale science centers that promote inquiry-based science learning. Each CSW partners with museums, community organizations, and science centers to create a unique neighborhood setting that invites science exploration. <http://www.scienceworkshops.org/site/csw/>
- **Partnerships for Achieving Careers in Technology and Science (PACTS):** PACTS is based at The Franklin Institute and provides middle and high school students from the Philadelphia metro area with opportunities to participate in hands-on science activities in environmental science and robotics, in addition to field trips and training for positions in the museum as gallery explainers and peer tutors. <http://www.fi.edu/tfi/programs/pacts/join.html>
- **Kinetic City: Mission to Vearth:** Kinetic City, developed by the American Association for the Advancement of Science, enables children in grades 3-5 to learn standards-based science concepts using

a colorful, interactive video game format that is supplemented by collaborative hands-on activities. Students help the Super Crew battle the Deep Delete computer virus, while exploring topics such as the human body, animal diversity, and human learning. <http://www.kcmtv.com/>

- **Studio 3D:** At Studio 3D, the Walker Art Center, in partnership with the Science Museum of Minnesota, has created a drop-in afterschool art center that combines art, technology, and science. <http://www.smm.org/studio3d/>

Leaders in afterschool programming and science institutions are collaborating on ways to help staff introduce more science into afterschool. The National Partnership for Quality Afterschool Learning has developed a toolkit for staff development in science and a resource guide for afterschool staff members (<http://www.sedl.org/afterschool/toolkits/science/>). Afterschool programs can find materials and curricula they can use to support afterschool science no matter the size of their budgets, the science backgrounds of their staff members, or the grade levels of participants.

*Sylvia M. James is a program officer with the National Science Foundation's Informal Science Education (ISE) Program. Lucy N. Friedman is founding president of The After-School Corporation.*

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## CHAPTER 2



# Technology in the Afterschool Landscape:

*An Essential Tool for Today's  
Economy and Curriculum*

BY MILTON CHEN

Every year, the Internet and digital technologies offer new ways for us to relate to information, our work and family lives, and the larger world. In just two years, YouTube has reshaped the TV landscape from an industry controlled by TV channels to a Web-based global channel where student producers can upload their videos and find an audience alongside programs from the major networks – and even ask presidential candidates questions.

This rate of change challenges every field to keep pace, including our public schools, whose bureaucracies, policies, and politics conspire to prevent them from taking full advantage of technologies for learning, communication, and management. However, as one saying of this Internet age goes, “information wants to be free,” and educational experiences are slowly breaking out of the confines of the traditional school system bounded by time and space and moving to a 24/7, 365-day calendar where information is always on, wherever broadband access to the Internet is available.

In a scene filmed four years ago by The George Lucas Educational Foundation, a group of San Fernando High School students in Los Angeles

one evening sat in a parked car outside the home of their teacher, Marco Torres. The scene might have startled many a teacher, but the students were not lighting up illegal substances. Rather, they were illuminating their minds by using the wireless hub inside the teacher's home to access the Internet since their school building and Internet access were closed. Now, afterschool programs are extending the technology resources of schools by keeping the doors to learning open beyond the final bell so students, parents, and other community members can take advantage of computers and the Internet to further their learning.

Many educators and policymakers agree that the implementation of No Child Left Behind policies has led to a regrettable narrowing of the curriculum. Since only math and reading are tested, many schools have responded to the policy by focusing only on these subjects and teaching them in a didactic fashion, without recognizing that math and literacy can be taught from a rich, creative, project-based curriculum with applications across many subject areas. Math should be taught as the language of science, but science has often been moved out of the school day into afterschool programs. (Now that the testing of science is being added as an NCLB mandate, it may also be further marginalized as a subject.)

While this curricular constriction has spelled bad news for schools, it has proven to be good news for afterschool programs. Many of these applied, integrated, project-based learning experiences have been moved into the afterschool hours during afternoons, evenings, weekends, and summers. These types of curricula develop what are now known as 21st-century skills, as defined by the Partnership for 21st Century Skills. They include critical thinking and problem-solving, communication, creativity, collaboration, and media literacy, as well as content such as global awareness, health awareness, and civic literacy.

Importantly, these skills emphasize not just memorization of words and facts, but higher-order thinking and problem-solving. And they place

students in work groups for cooperative learning, where the group can produce a final presentation and project larger and more ambitious than could one student working alone. Group work emulates how work is organized in the modern workplace and develops skills that employers value highly.

As afterschool programs strengthen their delivery of these types of curricula, the distinctions between school and afterschool begin to evaporate. Indeed, many exemplary afterschool programs are leading more traditional schools to rethink how they organize and provide instruction. The larger goal should be to increase good teaching and learning for students at all times of day or night, during the traditional nine-month academic year and extending into the summer. A recent report from the Time, Learning, and Afterschool Taskforce, supported by the C. S. Mott Foundation, in which I participated, calls for moving beyond the current school/afterschool “silos” to the design of a new learning system.

Critical elements of this new system include a redefinition of student success expanding beyond tests, for example, giving authentic assessments of student work, exhibitions, and performances; using research knowledge such as the National Research Council’s landmark book *How People Learn: Brain, Mind, Experience, and School* to develop new learning environments; building collaborative structures across communities, such as closer partnerships between schools, nonprofits, city agencies, and universities; and creating opportunities and models for leadership, teacher development, and compensation.

Helping educators and the larger public envision this new system is The George Lucas Educational Foundation’s mission in publishing success stories of school and afterschool programs on our Edutopia Web site ([www.edutopia.org](http://www.edutopia.org)) and in our documentaries and *Edutopia* magazine. For more than ten years, we have been documenting powerful learning that happens during the school day, but also after 3:30 p.m. and during summers.

In 1997, for instance, we filmed a community school in West Des Moines, Iowa, that kept its school doors open so that parents could sharpen their skills in the computer lab, sometimes under the tutelage of their children! More recently, we have collected our coverage of afterschool programs, many featuring technology applications.

A recent survey of 150 afterschool leaders showed strong support for the use of technology during out-of-school periods, but less consistency and confidence in implementing technology for high-quality learning experiences (Peterson and Smith, 2007). Below are examples of afterschool programs that are keeping pace with technological change and enabling students to use the latest media and software in creative and powerful ways:

The PUEO (Partnerships for Unlimited Educational Opportunities, and Hawaiian for “owl”) program is the result of an unusual partnership, begun in 2005, between the independent Punahou School and the Honolulu Public Schools. Middle school students, called Pueo Scholars, commit to spending three summers on the beautiful Punahou campus studying science, engineering, multimedia, and other subjects. In one class, Douglas Kiang, a Boston-area teacher, shared with his students his passion for flight simulators. Students were using Microsoft Flight Simulator, a software program for adult aviation enthusiasts, to fly between airports in the Hawaiian Islands. The computers make use of a yoke, the plane’s steering wheel, to allow students to practice takeoffs and landings, as well as chart a flight path based on factors such as wind speed and air traffic. In another class, students were engaged in Logo Robotics, designing robots that behaved according to software instructions programmed by students and downloaded onto a chip.

As one example of innovative financing, Punahou used money to buy out the leases on Apple laptop computers, enabling each Pueo Scholar to receive his or her first personal computer. Several of the students told me that while

they had a computer at home, they were excited to have a machine that would be their very own.

The Chicago Public Schools are involved in a wide range of afterschool programs and partners, many of them involving innovative uses of technology. John Spry Community School uses the MIRACLES program, founded in 2004 by Todd Wagner, a technology entrepreneur from Texas. MIRACLES now operates twenty technology labs in seven cities. As with Pueo, students and families make a multi-year commitment starting in middle school. When I visited the Spry program, students were using Excel spreadsheets and graphs to predict the distribution of colored M&Ms in a bowl, an interesting (and delicious) exercise in statistical thinking. Other students were recording their musical compositions for a video.

At the North Kenwood/Oakland Charter School, middle school students participate in an afterschool project to make “movie reports” on historical issues, such as the history of the African American neighborhood of Bronzeville in the 1930s; the role of the Black Panthers in the civil rights movement; and the redevelopment of the Ida B. Wells housing complex. Mentored by professionals such as National Public Radio producer David Isay, the students use historic photos and footage and digital cameras, editing software, and laptops to produce documentaries on the city’s history, its neighborhoods, and racial issues connected to contemporary issues. Some of their work has been honored in student media competitions and has been documented as part of a MacArthur Foundation-funded project at MIT on the new digital thinking and skills of today’s “digital natives.”

As these examples illustrate, a growing number of afterschool programs are giving young people the tools to tell their own stories through digital art, photography, music, and filmmaking. This trend extends to the design of the rapidly changing field of computer games. At the Playing 4 Keeps program in Brooklyn, part of the Global Kids program, teens use their enthusiasm for games to design educational video games on topics such as racial profiling

in airports, the HIV/AIDS epidemic, or the life of a rural family in Haiti. Through afterschool workshops at South Shore High School, students learn about game design and programming, as well as global issues such as human rights, racism, health, education, and children's rights.

A final example demonstrates how innovative learning experiences during the school day can be adapted for the afterschool setting: READ 180 is an exemplary instructional system for literacy developed to reverse declines in reading for students in grades 4–12. Developed by Dr. Ted Hasselbring of Vanderbilt University and published by Scholastic, Inc., the program showed improved reading comprehension in English-language learners, African American and Native American students, and special education students. For a research study conducted by MPR Associates, the ninety-minute periods required for the regular school day were shortened to sixty minutes for afterschool programs; the time was then divided into three segments: small-group direct instruction, independent and modeled reading, and use of the READ 180 software. The software uses advances in technology for diagnostic teaching, analyzing student reading patterns, and adjusting instruction based on immediate feedback. Researchers concluded that “participation in the intervention led to greater fluency by improving students’ ability to read words more quickly and accurately.” READ 180 students also had more regular attendance and appeared more motivated to participate in the afterschool program.

Perhaps someday a school district and its community partners will envision and fund a new “learning year” in which students and teachers are able to engage in learning activities throughout the day and across the weeks and months, with vacation time but without the long three-month break. Can we conceive of a system that encourages learning beyond the standard thirty-one weeks of the school year and in which students are constantly stimulated and want to come to school early and stay late?

Contrary to their poorer peers, students from affluent families regularly benefit from such a learning year, able to go on trips to museums, take art and science enrichment classes, and travel in the United States and around the world to broaden their horizons. That divide extends into the digital world, with wealthy students having technology at their fingertips, and students from lower-income families having no daily, personal access to computers and broadband Internet. Our challenge now is to make such learning experiences available to all students as part of their public school experience. Innovative afterschool programs are already demonstrating that this new learning year can, indeed, become a reality.

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## CHAPTER 3



# The Power of the Arts in Afterschool

BY JONATHAN KATZ AND SCOTT SHANKLIN-PETERSON

As Thomas Friedman states in his book *The World Is Flat*, “We Americans will have to work harder, run faster, and become smarter to make sure we get our share....On such a flat earth, the most important attribute you can have is creative imagination – the ability to be the first on your block to figure out how all these enabling tools can be put together in new and exciting ways to create products, communities, opportunities, and profits. That has always been America’s strength, because America was, and for now still is, the world’s greatest dream machine.”

Community, education, and parent leaders who influence the content of afterschool programming at the local or state level would be well advised to consider including the arts as a means of developing creativity, innovative thinking, and problem-solving skills of young people, as well as enhancing their artistic skills.

According to the Afterschool Alliance, “In this increasingly competitive information age and creative economy, knowledge and skills in the arts and music are important in their own right. However, when done well, the



integration of the arts into afterschool programs helps build and reinforce important student learning. Not only does it help strengthen teamwork, responsibility, persistence, self-discipline, and presentation skills, but arts education also can promote learning in core subjects such as reading, writing and math.”

Many young people today, including some who are struggling, are looking for opportunities to explore new arts areas, expand their abilities, and discover hidden talents in afterschool programs (Miller, 2003; Stigelbauer in process). Concentrated afterschool time, flexible scheduling, teaching artists in the classroom, community arts partners, and apprenticeships all provide unique active learning opportunities for students to dig deeper, learn in new ways, and work across disciplines. So, it should not be surprising that parents often rank the arts as one of their top priorities for afterschool learning for their children (Peterson, 2007). In addition, research demonstrates that afterschool arts programs are successful methods of improving school attendance, academic achievement, and educational commitment (Peterson, 2005).

In a landmark study, researcher Shirley Brice Heath tracked a representative sample of students from schools across the United States over a six-year period. She compared youth who participated in arts-centered activities several hours a week after school with other youth in areas of accomplishment that demonstrate self-efficacy, persistence, and peer approval. Among her findings were that youth participating regularly in arts programs were:

- twice as likely to win an award for academic achievement
- three times more likely to win an award for school attendance
- four times as likely to participate in a science or math fair
- 23% more likely to feel that they can make plans and work from them
- 34% more likely to say that they plan to continue education after high school.

Heath suggests that this “outperformance” by youth enrolled in arts programs might derive from the processes that are intrinsic to arts learning, such as “theory-building and checking out the possible,” “translating and transforming,” and “projecting and reflecting.”

There is now strong evidence that learning in the arts provides distinct academic benefits in reading, language, and math skills; basic learning benefits in thinking, social skills, and motivation to learn; and comprehensive benefits in making the school environment a more productive and appreciated place. One 2005 College Board study of college-bound seniors found that students who took four years of arts courses outscored those at their same grade level who had one-half year or less of arts coursework by 58 points on the verbal portion and 38 points on the math portion of the SAT. Other studies have found that dance students scored higher than non-dancers on measures of creative thinking; learning to play guitar and perform boosted confidence of students in residential homes and detention centers; and encouragement to use visual images in conjunction with typical reading assignments resulted in boys with learning disabilities becoming less reluctant and more sophisticated readers (Minton et al). Integration of the arts to facilitate learning throughout the curriculum resulted in superior standardized test scores for students in Chicago schools and led to high measures of teacher collaboration, parental involvement, and community partnerships in North Carolina schools (Catterall et al).

Coming Up Taller is a national awards program sponsored by four federal agencies (President’s Committee on the Arts and the Humanities in partnership with the National Endowment for the Arts, National Endowment for the Humanities, and the Institute for Museum and Library Services) that honors the achievements of afterschool programs in the arts and humanities. Several of the arts programs identified as among the most effective have been school-community partnerships that involve learning activities that take place in schools after school hours.

Coming Up Taller award-winning programs such as The School Project in Los Angeles (2005) demonstrate how the opportunity to work with teaching artists on a complex project can provide students opportunities to enhance their creativity and develop team-building skills and persistence by creating a concept and working together to carry it through to completion.

The School Project is a free, theater-based collaboration between Inside Out Community Arts, Inc., and three diverse Los Angeles middle schools. The four-month program employs forty professional artists, offering on-site arts workshops, field trips, and performances. Students participate in afterschool workshops, which introduce them to the various elements of play production including scriptwriting, set and costume design, and acting. Next, students use their newly developed skills to write original plays on themes relevant to their life and community. The young artists are responsible for every aspect of the production, from developing characters to designing and painting sets. In addition, family workshops inspire an appreciation for the arts that extends beyond participants to their families and community. The program culminates in a three-day rehearsal and camping retreat in the Santa Monica Mountains. The program is intended to tap into the creative potential within each young person, build self-confidence, and enable students to voice individual ideas and concerns.

Consistent with Shirley Brice Heath's observations that afterschool arts programs can accomplish much more than improving artistic skills, Coming Up Taller award-winners Project YIELD in Oakland, California (2003) and the Castle Performing Arts Learning Center (CPAC) on the Hawaiian island of Oahu (2005) improved school attendance and increased standardized test scores. At the same time, their creative projects and performances build stronger relationships between the school and community.

The Museum of Children's Art (MOCHA) in Oakland, California, is dedicated to making the arts a fundamental part of the lives of all children. Its Project YIELD (Youth in Education and Leadership Development) is a

comprehensive afterschool arts education and youth development program. Local professional artists teach classes in the visual, literary, performing, media, and public arts using a curriculum that is linked to the academic school day and responsive to school district learning standards, as well as to new and emerging curricula and learning theories. This extended-day program takes place at a school site to reinforce the connection between in-school and out-of-school learning. Participating students also create artworks for the benefit of the community, including street pole banners that promote positive youth voices; public art messages against violence posted on buses, kiosks, and bus shelters; an exhibition of photographic biographies of community leaders; and a collaborative mural that reflects the contributions of individuals to the community. Because half of the youth participating in Project YIELD improved in-school attendance, nearly half increased their basic skills and problem-solving scores on standardized tests in reading, and 43 percent achieved similar improvements in math, the Oakland Unified School District is supporting MOCHA's expansion into five more school sites (Gibbens, 2003).

The Castle Performing Arts Learning Center (CPAC) on Oahu provides young people grades 5–12 with intensive, hands-on afterschool fine arts education from trained theater and vocal music professionals. These programs are state-sponsored and located on the campus of James B. Castle High School in Windward, which serves a largely rural area. “KidStart,” the annual musical revue by fifth graders, is presented in partnership with The Alliance for Drama Education. Participating schools then sponsor their own Parents’ Night, where the students share their new skills with their families and the community. In addition, Castle Danceforce Concerts, in collaboration with a local dance studio, provides professional contemporary dance training with performance opportunities to both beginning and advanced dance students. Evaluations reveal that CPAC students have higher graduation rates, grade point averages, and SAT scores than the general public high school population. Annual attendance for all CPAC programs

exceeds 15,000. Many program graduates pursue professional theater careers and assume technical positions at venues throughout Oahu.

In a survey of the U.S. Department of Education's 21st Century Community Learning Center programs (Peterson et al, 2007), the coordinators and local leaders rated "exposing students in afterschool programs to the arts" as "very important and significant." They rated highly the statement that "the students in my program would enjoy and be motivated by the arts in their afterschool activities."

It is clear that offering flexible options for arts instruction at existing afterschool programs is a strategy to reach a new generation of youth after school and in the summers. The survey of 21st Century Community Learning Center program managers reveals arts in afterschool can help involve families, connect students to other academic subjects in addition to the arts, and build positive school-community partnerships.

In addition to the Coming Up Taller Awards, successful examples of arts in afterschool programs have been identified by Dr. Suzanne Stigelbauer of the National Partnership for Quality Afterschool Learning at the Southwest Educational Development Laboratory (SEDL) in Austin, Texas. Stigelbauer found that afterschool arts programs are also an excellent way to enhance cultural understanding among students. One such exemplary afterschool site was the KEWA 21st Century Community Learning Center Afterschool Program in Santo Domingo Pueblo, New Mexico.

This elementary school on the edge of the historic Santo Domingo Pueblo has an afterschool program that relates to the unique culture of the school and Native American community, as well as the academic and social needs of students. Director JoAnn Melchor explains, "The afterschool program and our school in general need to address the cultural aspects of our pueblo life because our culture is so critical in the lives of our students, parents, and families. Some of our children come from families that have strong

traditions, and these students appreciate knowing that the arts of jewelry and pottery-making have sustained our people since time immemorial.”

As a result, the program teaches children to work with jewelry, pottery-making and design, storytelling and illustrating, as well as homework, leadership, and sports. Throughout the program, community members, artists, and teachers combine their efforts to support students in their artistic development, as well as their academic skills. Many of the classes are taught in Keres, the native language spoken at seven pueblos in New Mexico. The connection between the school staff and community creates a learning environment that supports both students and their parents in learning and enhances the cultural continuity of developing traditional artists of the future. One important feature of this program, according to the Southwest Educational Development Laboratory, is its use of traditional artists as teachers and its ongoing emphasis on giving students choices of classes, but at the same time emphasizing the need for continuity and skill development in art forms.

The authors of this chapter observe that effective afterschool arts programs typically demonstrate the following characteristics:

- **Instruction is provided by qualified, professional artists and educators**
- **Learning objectives are consistent with school curriculum standards**
- **Instruction includes project activities designed to engage parents and build community support**
- **Collaborating community groups, whether focused on the arts, education, or social services, have goals that align closely with the benefits youth derive from arts learning**
- **Rigorous evaluation procedures facilitate program improvement and document program benefits.**

## *For further information, visit:*

<http://www.cominguptaller.org>

Information on awards programs for afterschool learning in the arts and humanities, including free online profiles of exemplary programs.

<http://www.artsusa.org/youtharts>

Site designed to give free and downloadable information about how to plan, run, provide training for, and evaluate arts programs for at-risk youth.

<http://www.nasaa-arts.org/publications/critical-evidence.shtml>

Pamphlet, online and available for free download, summarizing and documenting evidence of the benefits to students of learning in the arts.

<http://www.aep-arts.org/resources/toolkits/criticallinks/toolkit.htm>

Compendium of studies, online and available for free download, exploring how learning in the arts is related to student academic and social development.

<http://www.nea.gov/pub/ArtsAfterSchool/artседpub.html>

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Entrepreneurial Advantage:  
*“Out-of-the-Box” Afterschool*

BY PAUL F. DELARGY

The importance of entrepreneurship training, long overlooked, is finally gaining traction as an important component of economic development, not only at the state level but also at the national and international levels. Forty-four states are now interested in preparing strategies to develop entrepreneurial support systems. But the lack of focus on youth in entrepreneurial planning remains a major concern, one that must be addressed and can be addressed throughout the school system and in afterschool programs.

There is abundant evidence indicating a payoff in the early development of entrepreneurship activities and training for youth. Some research indicates that about a quarter of students entering kindergarten or first grade demonstrate entrepreneurial attributes. By the time they graduate from high

school, however, that number has shrunk to about five percent, indicating the need for adult-level entrepreneurship training and support to recover the twenty percent of youth lost along the way.

It is very important to develop a process to foster rather than discourage entrepreneurial skills in young students. A broad definition of an entrepreneur is a person who recognizes an opportunity and organizes and assumes the risks involved to take advantage of the opportunity as an individual, a family member, and a community member. The ability to recognize the opportunity and to undertake a plan to develop it is an important skill. Using this definition of an entrepreneur provides a rationale for economic and entrepreneurship training at an early age and on a continual basis.

Statistics abound that reflect nationally a poor understanding of fiscal responsibility. Compared to the rest of the world, for example, we are poor savers; that contributes to the probability of increased future personal bankruptcy. Education in entrepreneurial skills can reverse these alarming trends beginning with the youngest learners. It can become particularly relevant when students fail to see the connection between what they learn in school and the real world. Indeed, using life experiences to apply entrepreneurial and economic concepts gives relevant and personal meaning to the curriculum.

In addition to providing business skills, a strong entrepreneurial training and support program can provide countless other skills that help build student interests and improve achievement. Therefore, students become:

- **better able to recognize entrepreneurial opportunity, socially and in business;**
- **more productive as workers and consumers throughout their lives;**

- **better able to provide for their own well-being and that of their families;**
- **more prudent in their spending and savings, therefore contributing to the economic well-being of our nation;**
- **better able to analyze economic information to apply in the political process;**
- **better able to apply reasoning skills and economic knowledge as lifelong learners and decision-makers;**
- **more knowledgeable of the interrelationships between countries in the world economy and of the traits necessary to compete in a global marketplace.**

All of those skills are particularly important given the growing complexity and competitiveness of the world.

The best place to start teaching economic and entrepreneurial concepts is in the very early years, at home, but certainly no later than when students enter school at age five. The concepts can then be expanded at subsequent grade levels so the knowledge becomes consistently applied. Many elementary and middle schools have demonstrated an effective interdisciplinary approach without significantly altering the school schedule or state-adopted curriculum. But a particularly productive and conducive setting in which to test and explore entrepreneurial concepts is afterschool. Indeed, entrepreneurial activities can be important parts of afterschool programs and can be especially successful if they are merged within activities that are a continuation of the regular school program.

Most existing afterschool programs that lend themselves to the exploration and development of entrepreneurship programming and skill development involve elementary and middle school students, but there are also opportunities for high school students. To get started, ask students if they

would like to run their own business. The resounding answer will be “Yes!” Then one can start building the knowledge students need to open a business enterprise. Because of the hands-on, experiential nature of the activities, student attendance is nearly guaranteed to increase. The time devoted to entrepreneurial activities and learning will vary with the age of the children and the focus of the afterschool program. However, the activities and principles can be interspersed throughout the day.

With the rise in the number of K-5-aged children needing afterschool care and the desperate need to introduce positive use of time for the middle-school-aged learner, the use of entrepreneurial skills is an asset to engage students in ventures that are healthy, wholesome, and intellectually challenging. This is a new horizon, but one that has potential for growth and provides an excellent alternative to youth who return home unattended after school.

Examples of afterschool ventures include both services and production of goods/products for sale:

- **Neck Massages for Teachers:** One fifth-grade student determined that teachers looked tired at the end of the day. After giving well-received neck massages to her mother, the student launched her business venture at school. Initially, she gave samples for free as teachers signed out for the day. As business boomed, she scheduled her visits to the teachers’ classrooms by appointment as well as setting up in a central location.
- **Bulletin Board Assistance:** Students were frequently hired to assist in the classrooms after school, and making die-cut letters for bulletin boards was one of the major tasks. Sometimes teachers hired personal assistants for certain days/times during the week; at other times teachers would leave lists of tasks for trained students. Students would be assigned these jobs and paid a standard rate.

- **Wash, Fluff, and Press Services:** This service industry was born to meet a community need in rural Mississippi. A special education class at the high school decided to wash and fold linens for the school staff. As this service grew, students learned to iron and expanded their service to more articles. The community soon began to drop off their clothing and linens. Finally, the students obtained a grant and bought used pressing equipment. This original class of students operates the only dry cleaner service in this rural Mississippi community and continues to provide the training for other high school students in a “real-life” business.
- **Recycling Services:** Schools sometimes try to operate a recycling service with varying degrees of success. One school faced budget cuts, and a reduced custodial staff could not always effectively monitor recycling efforts. The students decided to take on the task. They researched recycling efforts, informed the classes of recycling needs, provided and emptied containers of the refuse designated for collection, and determined the best – and, in two instances, the most profitable – way to dispose of the recycled items. In many schools, students were allowed to decide how the profits would be spent.
- **Tutorial Services:** Reading is the key to success, so one school hired older students to sit and read with younger students for a period of time each day. They had to fill in logs detailing the material read, the method of reading (student alone, choral reading, or “turn” reading, etc.), and, in some instances, an evaluation of the students’ reading.
- **Gardening:** If time during the school day does not allow gardening opportunities, afterschool is a perfect venue. It can be as simple as assisting the groundskeepers on a periodic basis, working alongside a garden club partnership, or constructing square-foot garden plots for students to raise produce or ornamental items.

Examples for product-oriented enterprises are countless:

- **Magnets:** Given the inexpensive magnets available at craft stores, students can use assembly line techniques to produce a variety of themed refrigerator magnets or other kinds of magnets for sale.
- **Frames:** Inexpensive frames can be personalized for spirit or seasonal functions and sold to the public. These are sometimes sold at athletic banquets, sports concession stands and, in one instance, at the school prom.
- **Flowers and Herbs:** Raising flowers and herbs is also a marketable venture for students of all ages. Small plants or herbs can come in decorated pots with a special recipe or message attached. Students could write (or print) their message/recipe and give a little information about the care process and/or the grower.
- **Snacks:** One enterprising group at one school realized that snack food was important to people who worked late at the school. They initially took over the inventorying, ordering, and dispensing of the afterschool snack program. Then they branched out to providing homemade (at school) snacks such as trail mix, dried fruit, and brownies. This was an instant success, especially with parents picking up their children in the program. It then expanded to tea for parents and/or staff working late at the school. Now, as they continue to experience continued success, the students aspire to a full café.

Again, there is no limit to what students can achieve when empowered to try to make things happen. For additional information on entrepreneurial afterschool ideas visit: [www.gareal.com](http://www.gareal.com) (Georgia REAL); [www.entre-ed.org](http://www.entre-ed.org) (The Consortium for Entrepreneurship Education); [www.nfte.com](http://www.nfte.com) (The National Foundation for Teaching Entrepreneurship, Inc.); and [www.ja.org](http://www.ja.org) (Junior Achievement). Paul F. DeLargy may be contacted at [paul@gareal.org](mailto:paul@gareal.org).

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## CHAPTER 5



# After-school for the Global Age

BY MICHAEL H. LEVINE, ALEXIS MENTEN, AND CLAUDIA WEISBURD

*“We live in one world. What we do affects others, and what others do affects us as never before. To recognize that we are all members of a world community and that we all have responsibilities to each other is not romantic rhetoric, but modern economic and social reality.”*

—DEPARTMENT FOR EDUCATION AND SKILLS, ENGLAND



Learning opportunities have changed dramatically in the past decade, and afterschool and summer programs have a new challenge. In today's interconnected world, knowledge of other peoples, economies, and languages is no longer a luxury reserved for a business or policymaking elite, but an absolute necessity for all citizens. Every major problem our society faces, from managing environmental and health concerns to averting conflict and opening new markets and opportunities for businesses, now requires more international knowledge and cooperation. Given the diversity of the United States, knowledge of other cultures is essential to strengthening the functioning of our own democracy and education system.

In a global age, a new set of skills is needed to achieve business and professional success. According to Michael Eskew, CEO of United Parcel Service, which employs more than 400,000 people worldwide, the new skill set must go well beyond the nation's current emphasis on the basics and the growing focus on science and math. While agreeing that these skills are necessary, business experience suggests they are no longer sufficient to meet the changing market demands. Eskew believes that today's effective employees must demonstrate:

- **sensitivity to foreign cultures;**
- **fluency in foreign languages;**
- **understanding of international trade;**
- **technological savvy;**
- **ability to manage complexity; and**
- **a strong ethical core.**

Too often, however, several of these key attributes are overlooked in education policies and practices. Research on what young people know and the skills they are developing to compete internationally demonstrate

# What Is International Education?

1. **Global Knowledge:** Knowledge of other world regions and cultures, as well as global economic, political, and social issues, should go beyond basic information to build perspective and context.
2. **Skills for a Global Age:** Communication, technology, and cross-cultural skills are essential to success in the international marketplace.
3. **World Languages:** By learning new languages, such as Spanish, Mandarin, Russian, Japanese, Arabic, or English as an additional language, students gain insights into the very nature of language and culture, including their own.
4. **Global Values:** Students need help to project what we value as a country – freedom of thought, respect for diversity, and openness to new ideas – onto the global stage.

Source: "Educating Leaders for a Global Society," Goldman Sachs Foundation & Asia Society, 2005.

that most are falling short of their potential. Consider the following findings from National Geographic Society's research on recent high school graduates' international knowledge and skills – according to the 2006 National Geographic-Roper Survey of Geographic Literacy:

- **Six in ten cannot find Iraq on a map of the Middle East.**
- **Nearly three-quarters incorrectly select English as the most widely spoken native tongue in the world (the correct answer is Mandarin).**
- **Three-quarters do not know that a majority of Indonesia's population is Muslim, making it the largest Muslim country in the world.**

Recognition of the gaps in young people's knowledge and skills has led to several national, state, and school initiatives in the K-12 field that have demonstrated

a purposeful, but not yet coherent, educational response to globalization. Integrating international content into afterschool and summer programs is a logical, but yet untapped, strategy that would help to prepare young people for employment and citizenship in the global age. As Terry Peterson, director of the Afterschool and Community Learning Network and coeditor of this publication, has stated, “While we wait for the formal education systems to respond, there is a giant challenge and opportunity for all of us who care about youth development and afterschool and summer learning to begin to expose our kids to the larger world beyond U.S. borders.”

## *D*esigning New Approaches to Global Literacy After School

What works best in afterschool and summer programs is often what works best for international education: connections to the real world, project-based learning, and technology. Like the out-of-school learning environment itself, global literacy provides many opportunities to extend students’ academic and social development skills simultaneously. In recent years, the afterschool field has learned similar lessons from the integration of arts, math, and literacy. The best programs integrate youth development in meaningful ways and develop interpersonal skills alongside subject matter skills, creating a unique environment for learning outside of the school day. Global education programs can also foster mastery in a broad range of skills, from literacy, science, and math to creativity, communication, and collaboration. These skills are becoming a new currency that can offer American students an advantage in the international marketplace of ideas and commerce.

Global awareness does not start with a distant foreign land or exotic culture; it starts at home. Young people are not always introduced to international topics through their teachers or even the media, but often through their parents, friends, and peers in America’s diverse communities. Out-of-school programs often work with underserved, underperforming, low-income, or

minority groups and have strong connections to these diverse communities and populations. Afterschool and summer programs can leverage this diversity as a point of departure to engage students, encourage creativity, and provide rigorous activities that move beyond the “country report,” or the “food, flags, and festivals” approach that too often typifies school initiatives in this area.

High-quality international learning ties in a historical global context that enables students to both learn about themselves and find their place in the world. Global literacy programs can facilitate students’ learning about people and cultures within their communities but outside their immediate knowledge, experience, or linguistic comfort zone. According to the U.S. Department of Education, 19 percent of school-age children in the U.S. speak a language other than English at home, and those “other languages” total more than 460, according to the Office of English Language Acquisition. As these almost ten million children increasingly become part of afterschool, programs can deliberately build upon and draw from linguistically and culturally mixed groupings and communities.

Global education skills can be pegged to developmentally appropriate activities and interests. In addition to understanding the rich ethno-cultural fabric of their own community, programs can build on these experiences by engaging other cultures outside the community. Content could also be expanded to include project-based opportunities for students to collaborate with peers in other countries via technology on topics of mutual interest. Cross-cultural collaboration allows students to learn *with* rather than only *about* other students, building connections between international issues and personal and local realities. By starting with what most afterschool programs already do – such as the common elements of arts, environment and community-based activities, food and nutrition, and sports – global content can be woven throughout afterschool programs using interdisciplinary approaches. Some examples of international content and program ideas follow.

# What a Wonderful World: Ideas for Elementary/Middle School Programs

- **Early Literacy:** Since literacy and writing skills are a major concern of all afterschool programs, content should be internationally themed. Activities could encourage children to read stories from different countries by using books and anthologies, as well as video and interactive learning games featuring characters with an international identity (such as *Sesame Street's* Global Grover). Children could read, discuss, and creatively respond to these stories. Technology connections could help children create their own storybooks or research and compare common elements in stories from around the world.

**International Children's Digital Library:** <http://www.icdlbooks.org>

**Global Grover:** <http://pbskids.org/sesame/grover/>

**Asia Society:** <http://www.askasia.org/kids/stories.htm>

- **Food and Nutrition:** Programs could enhance children's exposure to world cuisines, providing hands-on experiences preparing international foods accompanied by stories about the cultural significance of dishes. Students will enjoy practicing problem-solving and teamwork as well as math and nutrition by examining the ingredients, literacy by creating menus, and science by studying plant and food production. Content on international social and economic issues such as global food insecurity and trade could also be included. Culminating activities might include an international bake sale or cookbook of world recipes.

**iEARN Cultural Recipe Book Project:** <http://www.earn.org/projects/foods.html>

- **Games and Sports:** Children will be excited by learning about the geographic, historic, and cultural elements of various sports and games from around the world. Activities could be built around a particular region/country and sport, such as Africa and distance running, or presented as companion projects to worldwide sporting events, such as the Olympics or World Cup. The study of world sports and games is a way to enhance children's knowledge and appreciation of such concepts as fairness and gamesmanship, strategy and competitiveness, and play and leisure in other cultures.

**Kids World Sports:** <http://pbskids.org/kws/>

## *T*he World in Our Community: Ideas for High School Programs

- **World Music:** Activities featuring the instruments and performance genres of other cultures offer an exciting way to raise awareness about their traditions. Students might research information about the geographic and historical settings for musical innovations. Students could explore local traditional music and instruments, comparing and sharing what they find with peers in other countries via technology. Digital audio software enables youth to produce their own compositions by collaborating with their peers to blend sounds from around the world.

**GlobalArts to Go:** <http://www.globalartstogo.com/>

- **World Languages:** Students could be exposed to a variety of world languages after school through links with local cultural and linguistic institutions. Depending on the program, the goal might not be language proficiency, but rather language exposure and cultural and linguistic skill development. Language assets in the community,

such as international university students, could help expose students to critical world languages, such as Arabic, Mandarin, Japanese, Russian, and others, along with English for English language learners. The activities could also include field trips to cultural institutions, museums, and other related events.

**OneWorld Now!** <http://oneworld-now.org/>

**Foundations, Inc. Afterschool Style Guide: More Than Just Talk:**  
<http://www.caceafterschool.org/>

- **Service Learning and Career Exploration:** Programs could engage their students in local research projects while considering the international implications of their work. This action-oriented program could enhance students' involvement in and commitment to their local and global communities while promoting knowledge of current events, world history, and geography both locally and globally. Youth could explore service learning opportunities with nonprofits, museums, and other civic organizations with international connections. Internships and summer jobs could also be considered as an extension to the program.

**New Global Citizens:** <http://www.newglobalcitizens.org/home.html>

**TakingItGlobal:** <http://www.takingitglobal.org/home.html>

## Conclusion

There is a growing demand for a more urgent and creative educational response to globalization. Businesses, governors, and universities have defined a new vision, but the formal education community has yet to adequately respond. There is a clear opportunity for afterschool and summer

programs to continue their pioneering work in preparing America's youth for success. Many of the skills that young people will need for future careers, such as working in global teams, recognizing multiple perspectives, researching with technology, learning language skills, and debating current issues and events, can be encouraged in out-of-school settings.

Afterschool and summer programs already create connections to local communities, people, and the arts, providing a unique opportunity to promote understanding and tolerance, as well as social development and life skills. Global literacy, at its core, is also about character development and authentic learning gained through exposure to global diversity and complexity. As Henry Jenkins, director of the Comparative Media Studies Program at the Massachusetts Institute of Technology, stated in a recent occasional paper on digital media and learning published by the MacArthur Foundation, "We make a mistake when we use afterschool programs simply to play catch-up on school-based standards or to merely reinforce what schools are already teaching. Afterschool programs should be a site of experimentation and innovation, a place where educators catch up with the changing culture and teach new subjects that expand children's understanding of the world."

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## CHAPTER 6



BY RICHARD TAGLE, TERRY K. PETERSON, AND TRACY BROWN

### *I*ntroduction

Families across America are searching for ways to help their young adolescents keep up, stay out of trouble, get on a track to high school graduation, and then, to some college or career education. Afterschool programs, when well designed and delivered, can become essential in helping students get on and stick to this path to success. They particularly can provide opportunities and support to minority students in poor and disadvantaged communities in need.

Many students in middle and high school go home to an empty household. According to the Afterschool Alliance, about fourteen million middle and high school-age youth are left unsupervised during the afterschool hours from 2:00 p.m. to 6:00 p.m., and during these hours the highest crime

and risky activity take place among juveniles (Fight Crime Invest in School, 2004). These students need constructive, meaningful activities that will keep them safe and out of the crime scene during these prime hours.

It is also at this critical age that students are at the greatest risk of dropping out and becoming part of the great American dropout crisis. The years between the ages of nine and fourteen represent, for many young people, the “last best chance” to choose a path toward a productive and fulfilling life (Carnegie Foundation, 1989). A special essay by the U.S. Department of Education on first generation post-secondary students suggests that most high school students formalize their educational plans between eighth and tenth grades, which indicates that interventions to influence educational aspirations are most likely to succeed if they take place before then.

This observation was confirmed in a report by the Philadelphia Education Fund and Johns Hopkins University (Balfanz and Herzog, 2006), which found that students who enter high school two or more years behind grade level in math and literacy have only a fifty-fifty chance of on-time promotion to the tenth grade; and that ninth-grade retention is the biggest risk factor for dropping out of high school. As a result, the target age between twelve and fifteen or sixteen described above becomes the opportune time to intervene with these students.

Also, parents and community and business leaders are concerned that many young people today are not prepared or motivated to pursue any post-secondary education, yet up to 85 percent of jobs and careers that pay a reasonable wage are projected to demand a high school diploma plus additional training and some college education by 2014-2015 (Hecker, 2005). Therefore, it is imperative that we find ways to help students stay busy after school, stay in school, and prepare to pursue some form of higher education. Afterschool programs could be essential in doing just that.

## Pathways to College

The challenges presented by lack of family supervision, dropout rates, and the treacherous transitions during the middle and high school years can be more effectively met when there are greater opportunities for students to excel. Consider the examples of two Washington, D.C., students who, by attending exemplary afterschool academic enrichment programs, began pursuing their educational goals:

Tariq West is one of a family of eight children born and raised in Anacostia, a historic, predominantly African American neighborhood in southeast Washington, where many neighborhoods suffer from concentrated poverty and high crime. Tariq is also one of four siblings who attended Higher Achievement, a rigorous year-round summer and afterschool academic enrichment program to help place disadvantaged middle-grade D.C. students in top high schools that will make them college-ready. The program is based on the theory that students increase their efforts to achieve when motivated by increased opportunities: the outcome is higher academic performance and students with greater confidence in their goals.

Tariq distinguished himself as Higher Achievement's Ambassador in 2001–2002 and for his talents in writing and poetry. After finishing Higher Achievement, Tariq advanced to Washington International School, where he was vice president of the International Student Union, editor for the International Dateline, and recipient of the school's Student Leadership, Lifetime Achievement, Community Service, and Socrates awards. In fall 2006 Tariq entered Stanford University with the goal of pursuing a degree in political science.

Yizhuo Chen came to Higher Achievement in sixth grade, two years after he moved to the United States. At the time, he was working thirty hours a week washing dishes in Chinatown, where both his parents worked nearly one hundred hours per week. When he joined Higher Achievement he discovered

his love for science and never missed a day of school. Chances are very good that Yizhuo's life would have stayed in Chinatown were it not for the education and opportunity he received from Higher Achievement. Instead, he graduated from high school in 2006 with high honors and a 3.88 GPA, and he enrolled at the University of California, San Diego, to major in astrophysics.

These are stories of two young men who faced adversity and challenge in pursuing what is elusive for many students: finishing high school, being admitted to a prestigious university, and working toward a college degree. But these two young people also shared a combination of deep motivation to succeed and, in their middle school years, greatly expanded opportunities and time to learn. Higher Achievement intervened during Tariq's and Yizhuo's critical adolescent years and helped build the skills and attitudes that affect all future academic achievement.

Each year between fifth and eighth grades, students at Higher Achievement commit 650 hours per year to school beyond the regular school day. These hours are split between three components of the program: the After-School Academy, the Summer Academy, and High School Placement. The After-School Academy offers academic enrichment activities three days a week from 3:00 p.m. to 8:00 p.m., for a total of fifteen hours a week. Each week, students are teamed with three academic mentors for two hours of class work in math, literature, and technology. In addition, centers have homework help, dinner, cultural/artistic studios, and academic competitions including Spelling Bee, Literary Love Poetry Performance, and Ambassador Debate.

Higher Achievement's impact goes beyond academic performance. Its program model is based on the notion that in a culture of excellence that is fostered through strong partnerships between and among scholars, their families, teachers, and mentors, all children rise to meet high expectations. Participating middle school students have better grades, better test scores, less truancy, and better high school placements.

Higher Achievement is a more comprehensive, rigorous model than most; nonetheless, it clearly shows that preparing for college is a demanding and time-consuming process that demands engaging academic support but also much more. Extra time, support, and motivation are critical to young people who are struggling through the process. Giving students the opportunity to work through this process in an afterschool setting with academic tutors and mentors increases the likelihood that they will do the required work and helps increase their likelihood of success.

In addition, in an afterschool setting college preparation sessions can be properly implemented to orient students to the requirements and processes of applying to the colleges and universities of their choice. As a supplement to these sessions, parents can be invited to workshops on the college application process and financial aid information (California's Next After-School Challenge, 2004). SAT and ACT preparation courses can also be offered (California State University Bakersfield, 2007). Also, to foster a solid connection between students and the college experience, college visitation trips can be arranged to campuses in the area, or students can be paired with a college faculty member as a mentor (CNAC, 2004). A long-term strategy would be to staff the afterschool program with well-trained college students who would be consistently available to offer advice (4-H After School, 2006).

To keep students on track to high school completion, which is an obvious first step to college access, some high school afterschool programs offer credit-recovery programs that allow students to make up courses, often using computer-assisted instruction, so that they don't fall behind their peer group (Peterson and Fox, 2004). However, to be truly on the pathway to college necessitates not only keeping up with the courses needed for high school graduation, or moving with peers from eighth to ninth grade, but also taking the so-called gate-opener courses. Many middle and high school students, especially low-income youth and those who are struggling academically, frequently don't have the encouragement, opportunity, or support to take

these courses. Afterschool programs can provide the perfect time to take them, as well as the necessary support to succeed in them.

Students from all income levels who in high school take an Advanced Placement course, physics, a math course beyond Algebra II, and/or four years of the same foreign language go to post-secondary education in much higher percentages than students who don't (Adelman, 2006). Furthermore, the positive impact of these courses on the performance of low-income students is dramatic: in some cases their participation can literally "open the gate to higher education." Yet, many typical and struggling students don't have time in their regular course schedules to take these gate-opener courses, nor do they have the encouragement or extra support to succeed in them.

Similarly, eighth-grade students who took algebra or a foreign language went on to college in much higher percentages. Again, however, many students in middle schools may not have room in their normal schedule to take these courses, and they may also need extra help and support. Afterschool programs can address that needed time and encouragement.

The table below summarizes a series of useful strategies for afterschool programs to become instrumental aids to get students on the path to college:

## College Preparation Strategies

1. Provide academic tutoring or college preparation sessions.
2. Provide a mentor program pairing a student with a college student or college professor.
3. Hold information sessions and social events to inform students and their parents about the college application process.

4. Provide parents with information about financial aid.
5. Provide SAT and ACT preparation courses.
6. Take students on college visitations to local campuses.
7. Staff the afterschool program with well-trained college students who will serve as role models.
8. Develop school-university partnerships to implement college exploration.
9. Have students complete a skills and interest checklist to brainstorm possible careers/college majors.
10. Have students conduct interviews with professionals who work in fields in which they are interested.
11. Provide technology training such as graphic design, Web development, and video production.
12. Offer computer education classes on typing, word processing, spreadsheets, Internet research, and Power Point.
13. Provide opportunities for students to advocate for a specific issue and/or conduct a small research project.
14. Encourage and support students to take the “gate-opener” math, science, and foreign language courses in middle and high school and offer some of these courses after school and in the summers so more students can participate.



15. Provide opportunities for students to earn dual high school and college credits for career or college preparation classes in afterschool programs.

## Conclusion

Clearly, many of our young adolescents in middle and high school need extra time, support, connections, and opportunities to keep up academically with their peers, stay out of trouble, and get on a track to high school graduation and post-secondary education and/or career training. The growing afterschool movement in America could and should be expanded to lend the needed additional support, motivation, and connections to link youth with post-secondary education and career preparation. It could – and would – make a difference.

### *For further information, visit:*

<http://www.pathwaystocollege.net/>

<https://ois.ucop.edu/ace/programs.htm>

[http://www.afterschoolalliance.org/issue\\_briefs/issue\\_high\\_2.pdf](http://www.afterschoolalliance.org/issue_briefs/issue_high_2.pdf)

[http://www.afterschoolalliance.org/issue\\_briefs/issue\\_tomorrow.doc](http://www.afterschoolalliance.org/issue_briefs/issue_tomorrow.doc)

[http://www.afterschoolalliance.org/issue\\_briefs/issue\\_STEM.doc](http://www.afterschoolalliance.org/issue_briefs/issue_STEM.doc)

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## CONCLUSION



# Afterschool Must No Longer Be an Afterthought

BY RHONDA H. LAUER AND TERRY K. PETERSON

Today, the parents of more than 28 million school-age children work outside the home, according to the U.S. Department of Education, and, according to Corporate Voices for Working Families, the gap between a child's school week and a parent's work week can be as much as twenty-five hours. For our children and our nation to thrive, we must fill those hours carefully.

Afterschool programs offer secure, structured environments for children otherwise left unsupervised while their parents are still at work. Research shows that youth who regularly attend quality afterschool programs exhibit improved academic performance, attendance in school, and self-confidence, and have lower incidences of violence, drug use, and pregnancy. Participants also demonstrate better social and interpersonal skills and indicate greater intentions to pursue higher education, according to the U.S. Department of Education.

Clearly, many afterschool programs offer so much more than a safe haven for children to reinforce school-day learning. With young people, according to Corporate Voices for Working Families, spending only twenty percent of their waking hours in school, and many of them ill-equipped for life beyond school, afterschool programs have become a vital part of our nation's educational system.

We are fortunate that so many sectors of American society are concerned about the development of today's young people, including the contributors to this small but important book. National leaders in a variety of disciplines – the arts, technology, science, business, education, philanthropy – these authors view the fact that formal learning only occurs twenty percent of the day as an invitation to develop programs for children that are exciting, enriching, and positive. In these pages, they move beyond discussions of theory, instead offering realistic and inspiring examples, ideas, and resources that practitioners and parent, community, state and national leaders can use to design meaningful afterschool programs for their own communities.

Throughout the chapters, the authors call for a broader, more modern set of engaging and enriching afterschool opportunities geared to our children's futures. As noted in Chapter 6, "Afterschool: Creating Pathways to College," comprehensive afterschool programs that reach children at critical stages in their lives can improve skills, attitudes, and motivation, which, in turn, can increase academic success and elevate aspirations.

The authors also emphasize that young people need more than proficiency in reading and math. Although mastery of basic content remains essential, today's youth also require a new set of skills to succeed in school and in life: 21st-century skills. Formal, in-school learning fills only a small portion of a child's day, making afterschool programs pivotal in helping children acquire and reinforce many types of skills. For disadvantaged youth and those living in families with low incomes, these programs often serve as lifelines.

As these chapters detail, well-designed afterschool programs can help broaden children's experiences and options in creative, engaging ways. They blend academic content with youth development principles in fun and exciting ways. They foster creativity, innovation, and interpersonal skills through exploration of the arts and science, music and sports, technology, college and entrepreneurship, and diverse cultures and languages.

As the authors point out, our current educational system, by itself, cannot provide our children with all the skills that they need to lead fulfilling and productive adult lives. Local communities must pool their resources and expertise to help children learn in the hours before and after school, during the summer, and on weekends. Afterschool leaders must forge partnerships with museums, universities, schools, government, science and health centers, and businesses, and engage local volunteers, artists, musicians, and retired citizens to help implement their programs.

As this book underscores, the hours after school are no longer just a time for safe, structured play and homework help. Quality afterschool programs are integral to the growing effort to build a seamless system of learning, one that provides our children with a variety of authentic learning opportunities throughout the day and throughout the year. And, with the innovative projects and proven techniques presented here, we now have some practical advice on how to use these afterschool hours wisely and deliberately.

Building skills after school provides tangible benefits for all of us – children, parents, educators, even employers – but securing sufficient funding to run afterschool programs is challenging. In October 2006, The Afterschool Alliance conducted a survey of more than two thousand afterschool program leaders; nearly half of them noted that funding is down either a little or a lot in the past two years, and only twenty percent feel fully secure about their funding for the next three to five years (Casner-Lotto 2006).

To ensure that our nation's children and youth have access to quality afterschool programming, we must become tenacious advocates for sustainable funding such that every school district and mayor has afterschool funding in their local budgets, every state has a line-item in their state budget for afterschool, and/or afterschool is explicitly included in their statewide school financing formula. And, in the future the federal budgets should include \$5 billion for the 21st Century Community Learning Centers, not just \$1 billion, as was the case in 2007.

Likewise, we should treat afterschool practitioners as seriously as we do their in-school counterparts, by providing them with regular, organized professional development and training. Out-of-school time does not simply mimic in-school time; afterschool programs require staff specifically trained for the afterschool setting. Afterschool staff do not need deep content knowledge of all subjects, as noted in Chapter 4 titled "Science in Afterschool: Undisputed Advantage," but they must be equipped to direct students accurately and confidently in a variety of activities.

Finally, because afterschool programming will continue to play a crucial role in our children's learning in the years ahead, we must establish a system of accountability. This means instituting formal evaluation and continuous improvement processes designed specifically for afterschool programs. By doing so, we can ensure that these programs are credible, that they meet or exceed explicit, unambiguous standards, and that they deserve ongoing public and private funding.

Afterschool time provides us with a great opportunity to expand, complement, and enhance students' learning. But, as educators, leaders, parents, and community members, we must remember that with every great opportunity comes great responsibility. Together, we must develop afterschool programs thoughtfully, so that they can help our nation's children acquire the skills that they need to thrive in the 21st century.

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**TRACY BROWN** is graduate research assistant at the Center for Partnerships to Improve Education at the College of Charleston, in South Carolina. She recently completed a literature review on afterschool programs and how they can help create pathways to college. Ms. Brown is pursuing a master's degree in special education at the College of Charleston and intends to teach early childhood/special education. She graduated summa cum laude from West Chester University with a bachelor's degree in early childhood education.

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**SYBIL FIX** is a former newspaper journalist based in Charleston, S.C., who has written extensively about educational issues, both at the K-12 and the post-secondary levels. She has served as a consultant researcher and investigator in education adequacy legal cases in South Carolina, Nebraska, and Georgia, and is a researcher, writer, and editor in an ongoing education study led by the Richard W. Riley Institute of Government, Politics and Public Leadership at Furman University. She has edited a coffee-table book of essays by African American youth, recipients of the Ron Brown Scholarship, and is now an editor for *Gardener&Gun* magazine. Ms. Fix graduated from Yale University and the Columbia University Graduate School of Journalism.

**LUCY N. FRIEDMAN** is founding president of The After-School Corporation (TASC), a nonprofit whose mission is to enhance the quality, availability, and sustainability of afterschool programs in New York and beyond, with the goal of making afterschool a public responsibility. Under Dr. Friedman's leadership TASC has supported more than three hundred afterschool programs and helped more than 250,000 kids. Before TASC, Dr. Friedman was the founder and, for twenty years, executive director of Victim Services (now known as Safe Horizon), the leading and largest crime victim assistance and advocacy organization in the country.

**SYLVIA M. JAMES** is a program officer with the National Science Foundation's Informal Science Education (ISE) Program, where she focuses on youth and community programs. She is also the lead program officer for the Information Technology Experiences for Students and Teachers Program (ITEST). Prior to coming to NSF, Ms. James was director of education for the National Aquarium in Baltimore and was an education consultant for museum, radio, and print projects. Ms. James is also the author of seven children's books on marine animals.

**JONATHAN KATZ** is chief executive officer of the National Assembly of State Arts Agencies (NASAA) and one of the nation's primary spokespersons

on behalf of the public value of the arts and cultural activities. NASAA and the Council of Chief State School Officers co-manage the Arts Education Partnership, the national forum supported by the U.S. Department of Education and the National Endowment for the Arts to advance the arts in education. Dr. Katz consults extensively in cultural policy planning and organizational and leadership development. Prior to his work with NASAA, Dr. Katz was a tenured professor of public policy and administration at the University of Illinois at Springfield; he also directed the Kansas Arts Commission, one of the first state arts agencies to focus its resources on the development of a local arts agency network.

**KEN KAY** is chairman and co-founder of Infotech Strategies and the head of its education technology practice. Mr. Kay conceived and led two landmark education initiatives: The CEO Forum on Education & Technology and the Partnership for 21st Century Skills. As executive director for the CEO Forum, Mr. Kay facilitated dialogue between leaders in business, government, and education and led the group through development of the School Technology and Readiness (STaR) Chart, used by schools across the country to make better use of technology in the classroom. As president of the Partnership for 21st Century Skills, a coalition of businesses and education groups, he leads efforts to bring together representatives from education, government, and business to promote the teaching of 21st-century skills in K–12 schools.

**RHONDA H. LAUER** has served for the past decade as chief executive officer of Foundations, Inc., a nonprofit committed to providing quality educational opportunities for underserved youth. Through its Afterschool Education, School Services, and Community Initiatives, Foundations serves thousands of students nationwide from pre-kindergarten through twelfth grade. Prior to joining Foundations, Ms. Lauer worked for many years in the Philadelphia school district, one of the nation's largest, as associate superintendent, management negotiator, principal, administrator, and

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**MICHAEL H. LEVINE** is executive director of the Joan Ganz Cooney Center for Educational Media and Research based at Sesame Workshop in New York City, which is galvanizing leadership in research, innovative media applications, and policy reforms to harness the educational power of new media. Before that, Dr. Levine oversaw the Asia Society's interactive media and educational initiatives to promote knowledge and understanding of Asia and other world regions, languages, and cultures. Dr. Levine writes for various public affairs journals and appears frequently in the media.

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**TERRY K. PETERSON** is director of the Afterschool and Community Learning Network. He develops strategies, partnerships, and presentations on comprehensive education reforms and expanded learning opportunities. Dr. Peterson chairs the Afterschool Alliance and serves on numerous other committees. He has recently worked on afterschool projects in Argentina, Mongolia, Brazil, Northern Ireland, China, and Ireland. Dr. Peterson served as counselor to U.S. Secretary of Education Richard Riley on many initiatives, including growing the 21st Century Community Learning Centers from \$1 million serving a thousand children to almost \$1 billion

annually serving almost one million children. He co-founded the national Arts Education Partnership, Pathways to College Network, and Partnership for Family Involvement. He has been the senior fellow for education policies and partnerships at the University of South Carolina and now at the College of Charleston.

**SCOTT SHANKLIN-PETERSON** is director of the arts management program and associate professor in the School of the Arts at the College of Charleston. Between 1993 and 2004 she held leadership positions at the National Endowment for the Arts (NEA), including as senior deputy chairman, and was co-founder of the Arts Education Partnership. In 2002 Dr. Shanklin-Peterson was invited to guide Mongolia's arts, government, and business leaders in establishing the Arts Council of Mongolia, and remains on their advisory board. Dr. Shanklin-Peterson has recently served as a presenter/consultant to a number of state and national organizations, including the Massachusetts Commission on Higher Education, Americans for the Arts, the Arts Education Partnership, and the SC Alliance for Arts Education, as well as groups in Argentina and Ireland. Dr. Shanklin-Peterson was executive director of the South Carolina Arts Commission from 1980 to 1994.

**RICHARD TAGLE** is executive director of Higher Achievement, a year-round academic enrichment program in Washington, D.C., that is a national demonstration model for academic achievement during out-of-school time. He is committed to making academic excellence and college access valued goals in undeserved communities. Prior to joining Higher Achievement, Mr. Tagle held several senior positions at the Public Education Network (PEN), most recently chief of staff. Mr. Tagle was instrumental in a number of initiatives aimed at improving the lives of students, from gender and racial equality to access to adequate healthcare coverage and academic enrichment programs. He is the board chairman of the Center for Summer Learning at Johns Hopkins University.

**CLAUDIA WEISBURD** is executive director of the Center for Afterschool Education at Foundations, Inc. She directs the development and production of publications, training programs, and technical assistance for afterschool educators nationally, as well as the design and operations of Foundations' pre-K through high school programs in Philadelphia and Camden. Dr. Weisburd earned her degrees at Cornell University, focusing on international development and non-formal education, subsequently working in urban planning in Senegal, small scale agriculture in the Caribbean and East Africa, and teaching in France.

**JOHN I. WILSON** is executive director of the National Education Association. The nation's largest teachers union, NEA also represents education support professionals, higher education faculty, school administrators, retired educators, and education students, for a total membership of more than three million. Mr. Wilson has also chaired the Partnership for 21st Century Skills. Mr. Wilson previously served the NEA as executive director of the North Carolina state affiliate; before that, he spent twenty years in the Raleigh and Wake County public school systems as a middle school teacher of special needs students.

# Notes

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