

Neil D. Grimes

grimesn@wpunj.edu

Debra Matell Cohen

drdebramcohen@gmail.com

How can schools enhance learning and make 21st-century knowledge development more meaningful for teachers and students? School leaders, including librarians, can easily tap into a variety of partnerships with community stakeholders to maximize results.

As K-12 schools strive to enhance education for their students while enabling educators to focus on core competencies, schools must look toward strategic partnerships with outside groups and organizations. Partnerships with families, libraries, museums, businesses, nonprofit organizations, and subject matter experts hold the promise of a brighter future and more-engaging educational experiences for today's K-I2 students. These partnerships enable schools, librarians, and other educators to expand teaching tools, and enhance and deepen students' learning experiences. The "National School Library Standards Crosswalk with Future Ready Librarians" calls for cultivating community partnerships such as these within the school and local community to promote engagement and a community of readers (AASL 2018). Future ready librarians must think about how to develop community partnerships to prepare students for college and their careers.

To be successful in their lives beyond school, students need to develop skills and abilities that enable them to become proficient creators, collaborators, communicators, and critical thinkers (Cohen 2019; NEA 2015; Renzulli 2012). These skills must be taught in addition to "traditional" subject areas and other skills students need to become active world citizens and part of the global workforce. The Partnership for 21st Century Learning (P2I) refers to these skills as the 4 Cs: creativity, collaboration, communication, and critical thinking (Battelle for Kids. n.d.). These skills prepare students for the twenty-first century while building their readiness for future

Importance of Teaching 21st-Century Skills

Not only are creativity, collaboration, communication, and critical-thinking skills needed by learners at all grade levels, but according to Lotta C. Larson and Teresa Northern Miller (2011) and Elena Silva (2009), they should be integrated across all curricula. These are not truly "new" skills; however, they are "newly important as today's advancements in computers and automation require workers to be able to find and analyze information across multiple sources and use this

information to make decisions and create new ideas" (Larson and Miller 2011, 121–22). Even critics of an emphasis on teaching 21st-century skills, such as the Core Knowledge Foundation, agree "learning factual knowledge and the ability to apply, analyze, and create new knowledge go hand-in-hand" (Silva 2009, 632).

Today's students need skills that differ from those of previous generations. As businesses and society move toward "knowledge creation" rather than simply improving on existing technologies and practices, it is incumbent upon the educational system to guide young people in the creation of knowledge to participate fully in this new reality (Cohen 2019, 38). While traditional means of educating students still have a place within current and future classrooms, learners will be prepared for life outside of the classroom only if these traditional methods are used in conjunction with new processes for teaching and learning that incorporate 21st-century skills across the curriculum.

Ways to Help Students Develop Skills They Need

To foster the development of knowledge and skills students will need for future success, Anna Rosefsky Saavedra and V. Darleen Opfer (2012) have described nine lessons relevant to teaching 21stcentury skills.

- I. Make [the curriculum] relevant [to students' lives].
- 2. Teach through the disciplines, "including native and foreign languages, hard and social sciences, mathematics and the arts."
- 3. Develop thinking skills.
- 4. Encourage learning transfer [across disciplines].
- 5. Teach students how to learn [on their own].
- 6. Address misunderstandings directly [about how the world works].
- 7. Treat teamwork like an outcome.
- 8. Exploit technology to support learning.
- 9. Foster creativity. (Saavedra and Opfer 2012, 10–11)

Establishing partnerships with external organizations and entities enables the intentional teaching of these skills in a more active manner, rather than "education practices that are dominated by passive learning of verified true beliefs" (Chai et al. 2015, 390).

Children are inherently curious about the world around them, and offering them opportunities to increase and deepen their learning through an expanded world of possible experiences helps to make that learning more "sticky." John Dewey believed students learn best when engaging in experiences that hold meaning and significance, and Jean Piaget described learning through "scaffolding," in which learners build new knowledge

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upon their existing ideas. Providing opportunities to have such experiences through these collaborative partnerships helps students—and their teachers—reach this goal. The National Council for the Social Studies C3 (College, Career, and Civic Life) Framework advocates this type of inquirybased learning and "emphasizes the disciplinary concepts and practices that support students as they develop the capacity to know, analyze, explain, and argue about interdisciplinary challenges in our social world" (NCSS 2017, 6).

Teaching 21st-century skills requires incorporating student-driven experiences through project-based learning activities, often including academic competitions such as National History Day, Science Olympiad, Future Problem Solving, Odyssey of the Mind, and others. This work is enhanced through collaboration with external partners and community members, including librarians, museum educators, university professors, scientists, and historians.

Why Not Enlist the Help of Readily Available Sources Beyond the Classroom?

Using an inquiry-based teaching model to promote projectbased "authentic learning" offers tremendous benefits for students. Not only does this type of teaching and learning enhance students' experiences and help instill a love of learning, it enables students to take ownership of their learning while fostering curiosity and deepening understanding. Particularly as schools prepare to return to prepandemic models, there are often factors that lead to the need for schools to employ "ready-to-use" curriculum options to serve student needs. Funding constraints, teacher experience levels, differentiation efforts, and equity goals often prompt the need to seek out and employ options that will help learning become more "real" for students more quickly. "Teaching and learning in a twenty-first century context involves making content relevant to life outside of school" (Cramer 2007, 129) and

is facilitated through this type of authentic teaching and means of assessment (Cohen 2019).

Partnerships: Critical Components of This Educational Approach

Administrators, school librarians, teachers, and students can take advantage of external partnerships as a ready-made tool. They should look to embrace these partnerships and the possibilities they offer to most effectively utilize collaborations to successfully integrate 2Ist-century skills into students' learning. Among these partnerships are those with families, with community entities, and with subject matter experts.

Partnering with Families

A simple partnership immediately available to schools is partnering with families. A partnership between a school library and families of the students it serves can include inviting family members to participate

in read-aloud activities in the school library, organizing a school library advisory board made up of parents/guardians, or working with the school's PTA on library programming and fundraising.

Students whose parents are involved in their education are more likely to earn higher grades, enroll in higher-level programs, pass their classes, attend school regularly, develop better social skills, and graduate on to postsecondary education (Organizing Engagement 2022; Johns Hopkins University 2020). Dr. Joyce Epstein developed a framework outlining six types of family involvement for successful partnerships with schools: parenting, communicating, volunteering, learning at home, decisionmaking, and collaborating with a community (Johns Hopkins University 2022). Enlisting the involvement of students' familieswhether as classroom speakers, school volunteers, or at-home

reinforcement for school lessons offers a simple way to take advantage of these partnerships.

Partnering with the Community

Educational leaders in the K–I2 environment have access to resources beyond their schools or districts for external partnerships to support faculty and student experiences. School librarians can work with their building principals to establish partnerships with community stakeholders, bringing support and expertise for guest speakers from public libraries, academic libraries, museums, and other organizations.

The Lunch and Learn program in co-author Dr. Debra Cohen's middle school classroom brought members of the business community face-to-face with students for career education opportunities. Providing students access to information about careers—giving learners the opportunity to interact in meaningful ways with



scientists, police officers, Peace Corps volunteers, entrepreneurs, chefs, and other professionalsoffered these young people the chance to learn about careers in a low-risk, straightforward manner. Opportunities such as these can help guide students' educational choices and better prepare them for future success (Strom 2019). These in-person or virtual collaborations offer opportunities to provide speakers for professional development for faculty, offer research support and access to high quality resources for project-based learning activities, and provide virtual field trips.

Partnering with Other Libraries

Partnership between K–I2 schools and various types of libraries is essential. Over II5,000 libraries are in the United States today (ALA 2022). More than 90,000 public and private K–I2 schools serve 49.4

million students (NCES 2020; ALA 2019). Increased use of online meeting platforms such as Zoom and Google Meet offers public librarians, school librarians, and academic librarians the ability to connect virtually with any public or private K—12 school across the country (ALA 2019). Providing access to libraries, librarians, and their varied resources beyond the school walls makes possible a more-equitable education, even in America's schools with the most-underserved students.

A partnership between William
Paterson University and the Paterson
Public Schools in New Jersey has
resulted in academic librarians
providing virtual professional
development for school librarians.
Connecting with schools, academic
librarians can offer online
professional development about
subjects ranging from children's
literature, project-based learning,

and using library resources, to incorporating technology into teaching. This type of academic library-school library partnership can be a model for universities and schools across the United States.

Student researchers participating in the National History Day (NHD) academic competition have regularly accessed and collaborated with libraries and archives. Dr. Cohen worked with archivists and university librarians to schedule an annual "research day" at Rutgers University's library, enabling NHD participants to begin their research with resources they would not typically be able to access. Additionally, specialized libraries and state archives, such as the Thomas A. Edison Papers at Rutgers University, are useful sources for students looking for primary sources for their research work.



Partnering with Museums

Partnerships with museums and historic sites offer the potential for both in-person and virtual field trip experiences. Not everyone can travel to Cooperstown, New York, yet a one-hour virtual visit with a museum educator from the National Baseball Hall of Fame and Museum is available for a \$100 fee and can provide a meaningful experience for students to learn about the history of baseball or racial integration in professional sports (National Baseball Hall of Fame n.d.). Enthusiastic, knowledgeable local, state, and national museum educators are available to assist students online or in person in supporting their research for in-school projects or academic competitions. Additionally, opportunities for these projects to be exhibited in person or through museums' websites or social media accounts offer students authentic

learning experiences as they share their work with a larger audience. This has been a successful feature of the National History Day program, which has previously shared students' work within the exhibit halls of the Smithsonian National Museum of American History (National History Day 2018).

Museum educators are available to conduct professional development for K–12 educators to enable them to bring unique teaching methods and perspectives to their students as both teachers and students learn about the museums' subject matter. These museum educators also support project-based learning experiences for students. An example of this can be seen through a partnership between museum educators at the Paterson Great Falls National Historical Park and the Paterson Public Schools through William Paterson University's Professional Development Schools Network's Batter Up grant supported by

Michelle Hamlett, a history teacher at Eastside High School and Dina Scacchetti, a Professor-in-Residence. This partnership led to high school students researching the history of the Negro Leagues; Larry Doby, a Paterson alumnus and Hall of Fame MLB player; and Hinchliffe Stadium, one of the last Negro League stadiums in the United States. Not only does this type of partnership help museums and historic sites fulfill their missions, it expands opportunities for them to promote their collections and educational services

Partnering with Businesses and Nonprofits

Partnerships with businesses and nonprofit organizations offer an opportunity for financial support as well as for subject expertise.

Whether students are learning about living a healthy lifestyle from a local healthcare or fitness provider, or receiving a lesson in estimating square footage inside a moving van from the local moving company, these unique collaborations can make learning more engaging for

students as they understand the real-world applications of their classroom learning. What better way is there for students learning about entrepreneurship, accounting, the stock market, and other aspects of running a business than to learn from members of the business community who work with these concepts every day?

School partnerships with businesses also have the potential to yield volunteers for reading programs such as the Real Men Read literacy initiative that originated in the Chicago Public Schools in 2006. There are recognized benefits when men from outside a school are involved in the education

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of, and literacy efforts on behalf of. America's children (Grimes 2021). Co-author Neil Grimes, who started the Real Men Read initiative at William Paterson University in March of 2020 believes it can increase K-I2 students' interest in reading while providing support for their overall reading activities at participating schools in northern New Jersey.

Collaborations with businesses and nonprofit organizations also have the possibility of providing jobshadowing experiences for K–12 students, potentially resulting in academic scholarships, as well as program sponsorship, and subsidized attendance for faculty at professional conferences and workshops. Depending upon the types of businesses involved, these partnerships can also provide sponsorship or funding for school resources, whether in the form of books and computers, guest speakers, or curricular materials.

Partnering with Subject Matter Experts

Partnerships with subject matter experts provide both students and educators the opportunity to learn from leaders in an unlimited number of fields. University professors, scientific researchers, engineers, mathematicians, artists, musicians, and historians can provide unique professional development opportunities for K–I2 teachers. These experts are often available to speak directly with students to share their knowledge and introduce young learners to information that is unique to specific professions. The concept of "Career Day" can expand to enhance the educational experience of both K–I2 students and their teachers while offering students a glimpse into the skills they will need for future careers. School librarians can lead efforts

at their schools to recruit subject matter experts to speak virtually or in person with classes and students at any grade level. More than 65 percent of today's young people will work in jobs that don't currently exist (World Economic Forum 2016). Varied opportunities to learn about careers provide students with invaluable insights into the range of college and career possibilities and with new appreciation for the importance of skills that can help people adapt to evolving workplace expectations and challenges.

Moving Forward

To be properly prepared for college and career, students must develop the 21st-century skills that are

integral to functioning within society. Creativity, collaboration, communication, and critical thinking are essential skills for students' success. For the sake of their students, school librarians can initiate partnerships with families, community entities, and subject matter experts to help equip students with needed skills and knowledge. Librarians can also serve as leaders to give other educators opportunities to tap into these readily available resources to enhance students' and teachers' educational experiences. It's time for school librarians to take the initiative and make the most of these collaborative opportunities for our students, for whatever their future holds.



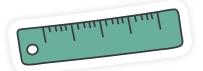
Neil D. Grimes is the Education and Curriculum Materials Librarian at the David and Lorraine Cheng Library at William Paterson

University and serves as the library liaison for Education Leadership and Teacher Education: Pre-K-12. A former school librarian, he presented "Virtual Library Outreach to Support the Virtual Teaching and Learning Experiences of Faculty and Students: Supporting Teachers and Students in a Local Public School District" at the 2021 AASL National Conference. He is the author of "Real Men Read—A Library Led Reading Initiative Program" published in 2021 by College & Undergraduate Libraries. He currently serves on ALA's Education and Behavioral Sciences Section Curriculum Materials Center Committee as well as the New Jersey Library Association's Professional Development Committee and the NJLA College and University Section/ Association of College and Research Libraries Marketing and Outreach Committee.



Dr. Debra Matell Cohen is the John Winthrop Wright Director of Ethical Education for Character.org and has

more than twenty-five years of experience as a teacher and administrator. As a teacher of gifted students and instructional coach, she created and managed district-wide programs at the West Windsor-Plainsboro (NI) Regional School District to increase student engagement and social-emotional learning. Prior to moving to teaching, she spent decades in workforce development and has extensive expertise in results-driven marketing and sales management for B2B and B2C organizations. She received her doctorate in education from Drexel University. Her dissertation "Developing Students' Skills for the 21st Century: The National History Day Model as Academic Enrichment" was published in 2019.







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