

# Empowering Afterschool Professionals for

# DIGITAL LEARNING



National Afterschool Association commissioned **POLICY STUDIES ASSOCIATES (PSA)** to conduct the research for this report. PSA provides research and program evaluation services that are rigorous, policy-relevant, and have practical applications. For over 35 years, PSA experts have applied lessons learned about the quality, implementation, and effectiveness of initiatives in education and afterschool to help leaders make sound decisions.

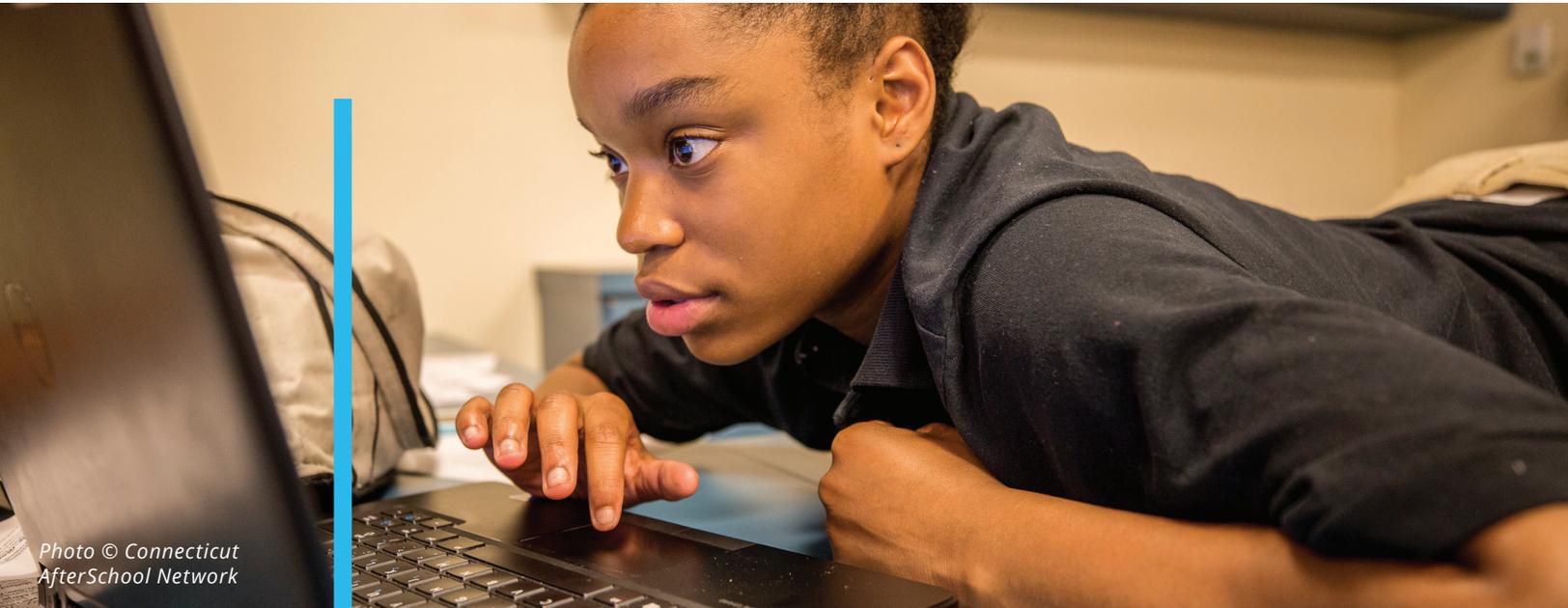


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# INTRODUCTION

Each year, more than 10 million elementary, middle and high school students participate in afterschool programs that expand learning opportunities in school- and community-based settings. Two decades of investments by public and private organizations have contributed to growth in the capacity and quality of afterschool programs. *A strong research base indicates that high-quality afterschool programs complement school-day learning, support families and offer welcoming and safe environments that allow students, including those from low-income families, to develop, practice, and master both academic and social-emotional skills.*

Afterschool is a dynamic and flexible field, and the learning environments it provides continue to adapt and evolve. *As school-day classrooms incorporate more technology and digital learning, how must the role of afterschool adapt?* How can afterschool directors who plan curricula, manage staff and develop the program vision create strategies aligned with the goal of ensuring that all students—especially underserved students—have equitable access to high-quality digital learning opportunities? What resources and supports will empower afterschool educators—including staff from community-based organizations, certified teachers, college students and volunteers—to facilitate high-quality digital learning?



Technology has become embedded in schools as a “tool that assists and enhances the learning process” for students.<sup>1</sup> According to a 2017 survey by the Consortium for School Networking, 40 percent of classrooms have access to one internet-connected device per student and districts expect this adoption of technology in the classroom to grow.<sup>2</sup>

Teachers assign homework projects that require students to use online resources to gather information and create digital products. Students also learn to interact with technology in ways that will prepare them for success in an economy where digital knowledge is increasingly required across sectors of the workforce.<sup>3</sup>

*As technology has proliferated over the last decade, expectations for technology have extended to the afterschool hours.* In a 2015 survey, nearly half (48 percent) of students in grades 4-12 reported needing to be connected to the internet at home to complete school work every day; an additional third (33 percent) said they needed to be connected at home 2-5 times per week.<sup>4</sup>

## THIS REPORT:

- **EXAMINES** the inequities in *digital access* and *digital use* faced by students in low-income communities, including a growing “homework gap”
- **EXPLORES** the potential of afterschool programs to play a role in closing this digital learning gap
- **PRESENTS** the competencies needed by afterschool professionals to effectively support high-quality digital learning
- **RECOMMENDS** strategies for strengthening the capacity of afterschool professionals to increase access and effective use of digital learning



# THE DIGITAL ACCESS DIVIDE:

## HOW AFTERSCHOOL CAN HELP

### DIGITAL LEARNING IS

### THE NEW NORM.

Students spend 80 percent of their total waking hours over the course of a year outside of the classroom.<sup>5</sup> But inequities persist in access to digital learning during the crucial after school hours.

- **Low-income students lack consistent internet access after school.** Five million households with school-age children do not have internet service at home, according to a Pew Research Center analysis of U.S. Census Bureau’s American Community Survey. This lack of access is especially pronounced for low-income students. Almost a third (31.4 percent) of households with school-age children and annual incomes under \$50,000—and 40 percent of households with incomes below \$25,000—don’t have a high-speed internet connection, compared to only 8.4 percent of households with higher incomes. Low-income black and Hispanic children are less likely to have home access than their white peers.<sup>6</sup> As a result, fewer than 60 percent of children under the age of 10 from families in the lowest income quartile used the internet at home, compared to more than 90 percent of their higher-income peers.<sup>7</sup>
- **Without equitable access to technology after school, students fall behind: this is often referred to as “the homework gap.”** Teachers in high-poverty schools are more than twice as likely to report that lack of access to technology after school is a challenge for their students. Ninety-seven percent of teachers in high-poverty schools say that students do not have access to the digital resources they need to complete assignments at home.<sup>8</sup>

In a 2015 survey, nearly half of all students reported that they have been prevented from completing a homework assignment because they lacked access to the internet or a computer. Another study found that 42 percent of students believed they received a lower grade on an assignment because they lacked access to the internet.<sup>9</sup>

# AFTERSCHOOL PROGRAMS CAN BUILD ON THIS FOUNDATION TO ENHANCE ACCESS TO DIGITAL LEARNING.



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***A key to access? Afterschool programs reach large numbers of low-income students.*** The Afterschool Alliance reports that 10.2 million children participate in afterschool programs each year throughout the United States. Nearly a quarter (23 percent) of all elementary school students participate in an afterschool program, as do 19 percent of middle school students, and 12 percent of high school students.<sup>10</sup> Across all afterschool programs, 45 percent of enrolled students are from low-income households.<sup>11</sup> The federally-funded 21<sup>st</sup> Community Learning Center (21<sup>st</sup> CCLC) program alone serves more than 1.6 million students in grades K-12, more than two-thirds (67 percent) of whom are from low-income families.<sup>12</sup> 21<sup>st</sup> CCLC programs, which are primarily school-based, offer students and their families educational and other support services provided by licensed teachers and youth development professionals.

***There is also clear evidence that school-day learning can be enhanced by regular participation in high-quality afterschool programs.***<sup>13, 14, 15</sup> Over more than 25 years, for instance, afterschool models have been shown to lead to improved performance on state assessments,<sup>16</sup> support on-time high school completion,<sup>17</sup> engage students in STEM<sup>18</sup> and help students develop teamwork and interpersonal skills,<sup>19</sup> among other benefits.

***Afterschool professionals play an especially important role in supporting learning for low-income students:*** there is evidence that consistent participation in high-quality afterschool can eliminate gaps in achievement based on income.<sup>20</sup> And about 8 in 10 parents in communities of concentrated poverty say that afterschool learning supports students by providing homework help, opportunities for STEM learning, reading and writing.<sup>21</sup>

***Afterschool programs can build on this foundation to enhance access to digital learning.*** Indeed, Bob Wise, former West Virginia Governor and current President of the Alliance for Excellent Education, has advocated that education leaders “should tap the rich array of available and reliable community, business and college partners to deliver and support digital learning during the after school hours, weekends and summers.”<sup>22</sup>



# A NEW DIGITAL DIVIDE:

## EQUITABLE ACCESS TO TRANSFORMATIVE LEARNING

**ACCESS TO TECHNOLOGY IS NOT**

**A “SILVER BULLET.”**<sup>23</sup>

A new digital use divide separates students who use technology to simply *complete* activities from those who use technology to engage in learning in more *active* and *transformative* ways.<sup>24</sup>

To be prepared for the careers of the 21<sup>st</sup> century, students must learn to be critical users of digital content. Yet compared to their more affluent peers, low-income students are more likely to be simply digital consumers rather than producers.<sup>25</sup> Without opportunities to engage actively with digital learning, these students will not have the chance to develop the skills needed to succeed in postsecondary education and work, including creativity and innovation; problem solving; communication; and information and media literacy.<sup>26, 27</sup>

Educators must put technology in a “supportive” rather than a “starring” role to address this divide.<sup>28</sup>

***This requires a change in instructional practice for afterschool professionals—as it does for their colleagues in the school day.*** While access to internet-connected devices has increased exponentially in schools over the last decade, students are often using these devices for rote activities. In fact, the gap between the percent of time fourth-grade students use computers for passive math drills compared to activities that involve more critical thinking skills, like making charts or graphs, has increased rather than decreased over time.<sup>29</sup> Educators need to implement more creative and design-oriented learning strategies to help students explore concepts and actively engage in learning.<sup>30</sup>



## TO BE PREPARED FOR THE CAREERS OF THE 21<sup>ST</sup> CENTURY, STUDENTS MUST LEARN TO BE CRITICAL USERS OF DIGITAL CONTENT.

### *The approaches that ground afterschool programs position them to help close this digital use divide.*

Afterschool programs are a natural fit for providing time and access to high-quality digital learning, including but not limited to time to complete homework assignments requiring digital access. With planning, vision and support, afterschool programs have the capacity to extend deep digital learning opportunities into the after school hours, particularly for students who otherwise don't have equitable access. **Notably, afterschool programs:**

- Are not bound by the curricular or schedule requirements of the school day, and have the flexibility to support students in exploring topics in depth using approaches that meaningfully leverage technology.<sup>31</sup>
- Offer engaging, creative, project-based opportunities that encourage students to apply their skills to solve real-world problems. Afterschool professionals help to develop young people as “creators, makers and innovators.”<sup>32</sup>
- Can use technology to help students develop content knowledge, gather evidence, and share information.<sup>33</sup>
- Employ educators who serve as mentors to students, recognize the value of relationships; design activities that both support and challenge students; and consider the interests, abilities and skill levels of students when providing guidance.<sup>34</sup>



# EMPOWERING AFTERSCHOOL PROFESSIONALS

## TO PROVIDE MORE DIGITAL ACCESS

Afterschool programs can help students in low-income communities develop 21st century skills through digital learning<sup>35</sup>—if digital learning is implemented well. But implementation isn't easy.

*Afterschool professionals will need more tools and training to become effective facilitators of digital learning.* Afterschool directors need support in articulating and launching a vision for an integrated digital learning environment that emphasizes creation, not consumption of technology. Afterschool educators need comfort with using technology and capacity to serve as facilitators in a digital environment that encourages students to explore and pursue topics of interest.<sup>36</sup> Both need tools to create a safe, facilitated setting for students to actively navigate technology while engaging in authentic learning experiences and developing digital citizenship and responsibility.<sup>37, 38</sup>

This need is not unique to afterschool. In a global study, school administrators reported that the biggest challenge to digital learning is providing relevant and effective professional development.<sup>39</sup> An Education Week Research Center analysis found that new teachers feel unprepared to navigate digital learning environments in the classroom, and that professional development for teachers on effectively integrating computers into learning has remained flat since 2009. The need is particularly acute in low-income communities: teachers in high-poverty schools are less likely than teachers in more affluent schools to report having received technology-integrated training.<sup>40</sup>

The 2017 National Education Technology Plan and other sources have identified specific competencies that educators need to plan for and lead powerful digital learning approaches. **Afterschool professionals need these same competencies, including the capacity to:**

- Use technology for interactive learning, focused on exploring and creating rather than drill-and-practice<sup>41, 42</sup>
- Use informal learning experiences to support formal learning<sup>43</sup>
- Select engaging and relevant digital content<sup>44</sup>
- Encourage higher order thinking through technology-embedded instruction<sup>45</sup>
- Balance the role of the instructor and of the technology in guiding learning<sup>46</sup>
- Promote digital citizenship and responsibility<sup>47</sup>
- Empower students to safely navigate digital learning platforms<sup>48</sup>

Developing forums for high-quality professional development has been a priority for the afterschool sector. Workshops are enhanced by site-based learning opportunities for afterschool educators to reflect on their practice. There are emerging opportunities for credentialing programs and for cross-sector professional development that increases career pathways for afterschool professionals.<sup>49, 50, 51</sup>

*However, there have been few systematic efforts to-date to develop the capacity of afterschool professionals to support digital learning.*

**AFTERSCHOOL DIRECTORS NEED SUPPORT IN  
ARTICULATING AND LAUNCHING A VISION  
FOR AN INTEGRATED DIGITAL LEARNING  
ENVIRONMENT THAT EMPHASIZES CREATION,  
NOT CONSUMPTION OF TECHNOLOGY.**

# AFTERSCHOOL PROFESSIONALS WILL NEED MORE TOOLS AND TRAINING TO BECOME EFFECTIVE FACILITATORS OF DIGITAL LEARNING.



A field scan surfaces some exceptions. For example, *Remake Learning*<sup>52</sup> is a regional cross-sector coalition designed to share strategies and practices that promote the development of skills needed to navigate and use technological change in and out of formal education settings. A *Digital Corps* initiative launched in Pittsburgh responded to concerns of many afterschool professionals who stated that they were unprepared to deliver technology-embedded instruction by recruiting tech-savvy professionals to run workshops and training them in the youth development competencies central to afterschool.<sup>53</sup>

Other afterschool professional development opportunities have typically been grounded in training modules or materials for the use of specific curricula or software packages. Training frameworks have also been developed to guide afterschool professionals in helping youth build technology content, skills and engagement, for example through robotics programs and maker spaces.<sup>54,55,56</sup> But these fall short of the broader goal of giving afterschool educators the skills needed to help students develop 21<sup>st</sup> century competencies through digital learning.

The afterschool field can leverage emerging lessons and approaches from K-12 teacher professional development to build the capacity of afterschool professionals, including:<sup>57</sup>

- **Emphasize coaching.** Coaching is an effective professional development approach for supporting educators in the meaningful integration of technology, when the coach brings proficiency in the technology, instructional expertise and content skills.<sup>58</sup> For afterschool professionals, effective coaching will also need to bridge digital learning instruction with the youth development frameworks that are central to afterschool programs.<sup>59</sup>
- **Create online platforms that encourage ongoing professional learning.** Digital learning is a powerful tool for educators as well as students. User-friendly online platforms and professional learning communities, facilitated by experts, can help afterschool professionals learn new strategies, share ideas and build capacity at their own pace, based on their experiences, interests and prior knowledge.<sup>60, 61, 62</sup>
- **Implement site-based collaborative planning and peer observation.** As instructional expectations in afterschool evolve, many afterschool professionals will need to develop increased comfort as users of technology, identities as adaptive and creative problem-solvers, and ability to address challenges.<sup>63, 64</sup> Planning on-site forums within afterschool programs to reflect on digital learning implementation—for example through staff meetings or retreats—will encourage afterschool professionals to share promising practices, common challenges and learn from their peers.
- **Offer connections to expert organizations and institutions.** Resources that offer connections to human capital and knowledge banks from trusted organizations can help afterschool professionals access better digital learning experiences for their students and continued resources and tools for their own learning.<sup>65</sup>



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# RECOMMENDATIONS

Afterschool programs are well-positioned to play a role in reducing inequities in digital learning and in closing the “homework gap” that results from unequal access to technology during the afterschool hours. However, there is still much to be learned to empower afterschool professionals to facilitate high-quality digital learning opportunities and to increase access to digital learning for students.

***First, continue to examine the barriers and possible solutions to increase access to technology-rich afterschool programs.*** For every child participating in an afterschool program, two more are waiting for a spot: an additional 19.4 million children would participate in a program were available.<sup>66</sup> Too few high-quality, safe and easily accessible programs are available to low-income families.

Within afterschool programs, there also needs to be sufficient access to technology infrastructure to support the growing digital learning needs of students. Reliable, individual student access to internet-connected devices is important during the after school hours, especially for low-income students who are less likely to have that access at home. For school-based afterschool programs, this means ensuring that agreements are in place for access to technology resources in school classrooms and digital media labs. Community-based programs may need to leverage partnerships or shift resource allocations to offer access to mobile or on-site technology labs.

***Second, create targeted professional development resources that promote the effective integration of digital learning in afterschool.*** Afterschool professionals bring different levels of expertise with technology, with creative project-based instruction, and with transformative learning approaches to their work with students.

For afterschool directors, professional development tools need to offer clear guidance for developing a vision for creating access to technology; for planning for effective use of digital learning across content areas; and for developing strategies for continuous improvement.

For afterschool educators, training resources must articulate the distinction between facilitating the “consumption” of technology through passive activities and the “creation” of digital content through activities that help students build critical 21<sup>st</sup> century skills. Educators need concrete examples, strategies and links to resources to enable educators to facilitate this active approach to digital learning.

Afterschool professionals also work in a variety settings—such as schools, community centers, libraries, and museums—in both rural and urban communities, and across age ranges. This diversity of settings is one of the strengths of afterschool programs, which engage students, including those who may be disengaged from school, where they are ready to learn. Professional development approaches must anticipate this dynamic afterschool landscape. Strategies need to be flexible and explicitly address the adaptations that may be needed to create and implement a vision for digital learning that can scale to the many contexts in which students benefit from afterschool learning.

## AFTERSCHOOL EDUCATORS NEED CONCRETE EXAMPLES, STRATEGIES AND LINKS TO RESOURCES TO FACILITATE THIS ACTIVE APPROACH TO DIGITAL LEARNING.

### *Third, develop plans for collecting and disseminating new knowledge.*

As technology rapidly proliferates, educators are still learning how to harness the new devices and resources as tools to engage students in meaningful learning experiences. New resources created to help afterschool professionals build capacity to plan for, manage and implement effective digital learning approaches will generate important lessons. How do training needs vary based on the characteristics and prior experiences of afterschool educators? Based on the settings in which they work? How is new knowledge about digital learning best shared within and across afterschool programs? What professional development approaches are most effective, and under what conditions? Exploring questions such as these during early phases of adoption will inform refinements and approaches for scaling emerging resources and supports, in turn increasing the pace of adoption of effective practices for digital learning for afterschool professionals.



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