

**CONNECTED LEARNING:** HARNESSING THE INFORMATION AGE TO MAKE LEARNING MORE POWERFUL

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Educators across the country are urgently trying to address how best to engage students in their learning. Many educators are implementing a number of different strategies. ranging from work-based learning opportunities to project-based or expeditionary approaches to the incorporation and utilization of technology—all in an effort to deepen students' active participation in learning and thus achieve better learning outcomes. While today's economic and social challenges are considerable, there is a unique opportunity to provide learning that is more powerful and more meaningful to more young people and, in doing so, to both close the learning divide and also allow a reevaluation of the U.S. approach to education. This paper will introduce connected learning, a promising approach that uses digital media to engage young people's interests and instill deeper learning skills.

The current levels of student disengagement are startling and troublesome. In 2012, Gallup surveyed nearly 500,000 students in grades five through twelve, representing approximately 1,700 public schools in thirty-seven states, and found that the longer students are in school, the more disengaged they become.<sup>1</sup> More specifically, at the elementary level eight out of ten students surveyed indicated that they were engaged with school, but by middle school engagement dropped to six in ten students, and by high school only four in ten students indicated that they were engaged. These numbers are especially worrisome because we know that nearly 50 percent of the students who drop out of high school say they do so simply because they are either bored or disengaged.<sup>2</sup> Nationwide, 25 percent of all students do not graduate from high school on time. For students of color, the number is closer to 40 percent.<sup>3</sup> Of those who do graduate from high school, many are not ready for college or a meaningful career. Keeping students engaged in their learning process and in school has never been more important, both to their own future and to the future of the nation.

There is overwhelming evidence that students who fail to graduate from high school will face far greater difficulties as adults: non-graduates are less likely to have a career and more likely to have a low-wage-earning job; they have greater health disparities; they are more likely to become parents at a young age; they are at greater risk of being involved with the criminal justice system; and they are more likely to need social welfare assistance.<sup>4</sup>

The twenty-first century ushered in a technology-driven and globally connected era that requires individuals to possess the kinds of deeper learning skills—the ability to work collaboratively, think critically and solve complex problems, and communicate effectively—that prepare them for college and/or a meaningful career, as well as





full participation in their communities. All students, not just a select few, should be receiving an education that prepares them for the demands of our global economy. Students of color, who attend underperforming schools in larger numbers than white students, now comprise the majority of K–12 public school enrollment in a dozen states and between 40 and 50 percent in ten additional states, making the situation more dire. The education system must ensure that all students are prepared for the economic realities of the twenty-first century.

For too many decades, students of color and students from low-income families have graduated from high school at much lower rates than their peers, resulting in comparably low employment rates and earnings. Today's students become tomorrow's workforce and consumers; when students attain higher levels of education and possess deeper learning knowledge and skills, they are better prepared for life after high school. This offers economic benefits not only to students, but also to their families and the surrounding community. Conversely, low educational attainment is closely associated with low wage earnings and increased rates of homelessness, teen pregnancy, and community violence.<sup>5</sup> With two-thirds of the economy dependent on consumer activity, America cannot afford to ignore the gaps in educational opportunities and achievement that keep the country from ensuring that all students, and ultimately the nation's workforce, are prepared for the demands and opportunities of the information age.

The Internet, social networking, and digital technology provide the potential to even the playing field for learning and multiply the opportunities in many settings for all youth to find their place and thrive. There is substantial promise in the new learning ecosystem taking shape in the digital age. But educational equity will not be achieved without concerted, constant, and active efforts for reform that focus on providing opportunities to all students.

The importance of the "three Rs"—reading, writing, and arithmetic—is long established, but in the new global environment they represent just the beginning. There has always been a fourth R—relevance. In the connected learning context, relevance means

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- providing students with higher-order skills needed for twenty-first-century work;
- offering students the hands-on, real-worldoriented learning needed for them to acquire these skills;
- leveraging every learner's passion and interest to foster more durable learning, including learning how to continue the quest for knowledge in a constantly changing world; and
- connecting learners to the vast and easily accessible resources, knowledge, expertise, and social connections available on the Internet and through the use of technology.

Providing an education that builds on the basics and develops global citizenship is a necessity in a young person's learning experiences. With relevance at its core, *connected learning* is a framework that seeks to connect learning across multiple settings in a young person's life. Connected learning recognizes that in today's society learning never stops, and a learner's interest and expertise can be developed in school but also at home and in the community.

CONNECTED LEARNING IS NOT ABOUT A SPECIFIC TECHNOLOGY, TOOL, PLATFORM, OR TECHNIQUE, BUT INSTEAD SEEKS TO DESIGN EXPERIENCES FOR LEARNERS THAT TAKE ADVANTAGE OF TODAY'S ABUNDANT LEARNING OPPORTUNITIES.

# WHAT IS CONNECTED LEARNING?

Connected learning is an educational approach that seeks to make learning relevant to all populations in both everyday life and work, taking into consideration the opportunities and realities of the digital age. The connected learning approach includes the following concepts:

- Learners are the focus. The goal of connected learning is to develop lifelong learners who possess the higher-order skills needed to thrive in today's economy and society.
- Learning is powered by individual interests

   and supported by peers. Connected learning uses
   the tools of the digital age to connect academics to
   a learner's interests and to link the learner to inspiring
   peers and mentors—an approach proven to better
   engage more students and achieve more lasting
   learning outcomes.
- Learning is continuous. Connected learning also uses digital tools to link learning in school, home, and the community, thus reinforcing and supporting lessons in multiple settings.
- Learners become makers and producers.
   Connected learning asks learners to experiment and to create, produce, and design, positioning them as the makers and producers they will need to become in order to be successful in work and in life.

Connected learning draws on the potential of digital media to expand access to learning that is socially embedded, interest driven, and oriented toward educational, economic, and civic opportunity. Not only do youth have access to a wealth of information and knowledge online, but they can also be creators and engaged participants in their own self-directed learning. Connected learning is not about a specific technology, tool, platform, or technique, but instead seeks to design experiences for learners that take advantage of today's abundant learning opportunities. Connected learning happens when a young person is pursuing knowledge and expertise around a subject they care deeply about something that is relevant to them and their communities—and when they are supported in this pursuit by mentors, friends, peers, institutions, and caring adults. Connected learning sees teachers as designers and creators who help young people make critical connections to different pathways that can lead to success in college, career, and everyday life.

# Connected learning's three contexts for learning

The foundation of connected learning is the integration of three spheres of learning that are often treated separately under the current education system. Those spheres are *learning that is supported by peers, learning that is driven by individual interests, and learning that is academically oriented.* 

Bringing together and integrating the motivation, content, and abilities from social, interest-driven, and formal education areas can expand the reach of meaningful and sustained learning. Combined, these three spheres provide a rich set of learning opportunities for young people.

- Peer supported. In their everyday exchanges with peers and friends, young people contribute, share, and give feedback in inclusive social experiences that are both fluid and highly engaging. In these connected learning spaces, students can contribute their expertise and questions to other students' work in a fun, informal, and socially inclusive manner.
- Interest powered. When a subject is personally interesting and relevant, learners achieve learning outcomes that are of a noticeably higher order. In



connected learning environments, students not only are interested in learning but also are empowered to assume responsibility for their learning. This empowerment comes from developing interest-based groups; having the ability to explore different facets of the interest; increasing expertise; and accessing supports and pathways for mastery through experiences. For example, young screenwriters can create an online community where they post and review their peers' scripts, and have access to mentors and professional screenwriters who can assist virtually.

Academically oriented. Learners flourish and realize their potential when they can connect their interests and social engagement to academic studies, civic engagement, and career opportunity. In connected learning settings, mentors are present to help learners in this process. In academic settings, opportunities for engaging a learner's interest are visible and supported. For example, a student who is interested in video game graphic design has access to educators and a school culture that support their interest and also can make connections to core academic competencies and deeper learning skills.



# Core properties for a connected learning experience

Students in connected learning environments should have experiences that align to the three contexts discussed above. The properties below will help ensure that youth are able to access a wealth of knowledge and be active participants in a self-directed learning process.

 Production centered. Digital tools provide opportunities for producing and creating a wide variety of media, knowledge, and cultural content in experimental and active ways. In these learning spaces, youth not only have access to digital production tools but also work in structures that support editing and learning from another person's work in a shared network. For example, a workshop or class on robotics can include a skills-based curriculum as well as an online community where youth can share their work.

- Shared purpose. Social media and web-based communities provide unprecedented opportunities for cross-generational and cross-cultural learning and connection in a way that supports and encourages common goals and interests. Collective goal-based projects, collaborative/competitive situations, and cross-generational experiences are key elements of a shared purpose. For example, these elements can be seen in schools where students are placed in teams with an experienced game developer competing for the best role-playing game, in which students and the professionals vote and create the rubric for judging.
- Openly networked. Online platforms and digital tools can make learning resources abundant, accessible, and visible across all learner settings. In a connected learning experience, youth have access to inclusive and cross-institutional networks with multiple points of access and open assessment, badges, and certificates. For example, a video-editing and production workshop program can be offered free of charge at a high school, community college, and community center within one city, while students also have access to an online community that allows each participant to communicate without regard of physical location.

### **CONNECTED LEARNING AT WORK**

The following examples describe connected learning in real settings, both in and out of school.

#### **Boss Level at Quest to Learn Public School**

A Boss Level is a special two-week period that takes place at the end of each trimester at Quest to Learn, a public school serving grades six through twelve that opened in Manhattan in the fall of 2009. Quest is the first school in the country to organize its entire curriculum to be "gamelike." The school is also attempting to incorporate many of the connected learning principles into its school climate; these principles are most fully realized during the Boss Level periods. During Boss Levels, regular classes are suspended, classrooms are rearranged into workspaces, teachers fall into the background, and students work in small teams on a single "challenge" that culminates in a showcase and party for the school's educators, staff, and family members. Quest educators have challenged students to write and perform short plays based on fairy tales; design and orchestrate a series of outdoor games for an end-of-the-year field day; research and construct a travel website featuring three New York City neighborhoods; build a sculpture from recycled materials; and so forth. In each case, Boss Levels attempt to weave connected learning principles with the structure of schoolbased practices.

**Boss Levels are peer supported.** Students drive activity during Boss Levels more than at any other time during the year. While educators put students in teams and define the challenges, students take the lead in designing, discovering, and evaluating possible solutions as well as providing each other with ongoing feedback about each other's ideas and work styles.

#### Boss Levels are powered by individual interests.

While Quest educators define the Boss Level challenges, students have extensive opportunities for connecting Boss Level projects to their own interests. For example, when a Boss Level challenge recently asked students to write, stage, and perform short plays based on fairy tales, students wove numerous interests and cultural forms from their out-of-school lives into the productions. One scene took place in a medieval coffee shop called "Moonbucks." Plots and characters drew inspiration from popular books, video games, music, and movies, and several students with an interest in fashion worked on costumes. The Boss Level thus blurred conventional divisions between education and peer cultures.

Boss Levels are academically oriented. By treating the Boss Level as the culminating academic experience for every trimester, and by showcasing the students' work in front of family members and members of the New York City design community, Quest bestows academic legitimacy on forms of work that are not easily measured by standardized assessments. At the same time, Quest attempts to link Boss Level challenges to more widely recognized academic domains and competencies. For example, the Rube Goldberg machine challenge required students to put into practice knowledge about physics and simple machines that they had been learning over the course of the trimester. Similarly, Boss Levels encourage students to approach design challenges from the perspective of "systems thinking," a twenty-first-century literacy that educators emphasize in their instruction throughout the year.

#### YOUmedia Chicago at the Harold Washington Library Center

YOUmedia is a teen learning area in various libraries, museums, and afterschool spaces throughout the country. YOUmedia's flagship is in the Chicago Public Library's downtown Harold Washington Library Center. YOUmedia, supported by the MacArthur Foundation's Digital Media and Learning Initiative, is dedicated to the interests of young people and supported by librarians and mentors with expertise in digital media production.

The space has ample digital production equipment, including a sound studio, video cameras, and banks of computers with production software. There is also an online social network, iRemix, where young people can share their work and communicate with peers and mentors. YOUmedia welcomes young people engaged in casual social time with friends, as well as offering workshops and mentoring in interest areas that stretch knowledge and expertise and the connection to academic achievement and career opportunity. For young people who become highly engaged in the interest-driven activities and mentorship opportunities, YOUmedia exemplifies the principles of connected learning.

**YOUmedia is powered by individual interests.** YOUmedia programs and mentorships are centered on specific digital media specialties. These programs include music, spoken-word literacy, electronic gaming, writing, and design. The specialties were chosen to appeal directly to diverse youth interests and identities. Mentors are chosen for their expertise as artists in these interest areas and their ability to connect with youth. In other words, they embody the culture and identity of the core interests supported in the space. The staff at the site have also actively adapted their programming to respond to the interests that young people bring to the space. For example, after noticing young gamers' interest in reviewing games, a librarian developed and implemented a game review podcast.

YOUmedia is peer-supported. Although the structured activities of the space are centered around media production interests, the majority of the space is designed to invite unstructured socializing. The space welcomes all teens and allows them to bring their own peer activity and diverse interests into the space. While supporting informal peer interaction, the presence of caring adults in the space ensures that young people feel protected from the more negative aspects of their peer relationships. IRemix is similarly a safe space for young people to communicate with each other and adult mentors. Taken together, the space supports a peer culture that young people describe as different from what they experience in their schools and neighborhoods. One participant notes that YOUmedia is "a place for me to hang out with the people that I relate to-nerds."

**YOUmedia is academically oriented.** YOUmedia mentors are professional and practicing artists who are passionate about their areas of expertise and interest, and who make efforts to expose YOUmedia participants to the broader world of activity associated with their interest areas. In order to forge these broader connections, mentors bring others from their field into the YOUmedia site to give performances and presentations, and they support young people in shared projects and competitions that connect them to peers and experts outside of the space. For example, YOUmedia participants have written for major online news outlets and worked on design for Lady Gaga's Born This Way Foundation. While many young people pursue interests in areas such as hip-hop and video games, only a small minority are able to connect these interests to achievement and opportunity in the ways that YOUmedia seeks to enable.

Mentors also function as role models and provide support for academic achievement and career mentoring, including helping young people consider pathways to college with an eye toward longer-term career aspirations in their areas of interest and aptitude. One young woman describes how she talks about future plans with the staff at YOUmedia: "They help me in how to make my college essay stronger, and, you know, they picked out what should be taken out, what should be put in, and stuff like that."

### CONCLUSION

For too many young people, particularly our most vulnerable populations, formal education is disconnected from other meaningful social contexts in their everyday lives. A young person's peer relations, family life, or career aspirations should not be detached from the learning that takes place in school. The connected learning model posits that focusing educational attention on the links between different spheres of learning-peer culture, interests, and academic subjects-better supports interest-driven and meaningful learning in ways that take advantage of the potential of digital networks and online resources to provide access to an engaging learning experience. This requires a shift to instructional strategies that include thoughtful approaches to leveraging these different spheres to achieve maximum student learning outcomes.

Online information and social media provide opportunities for expanding the entry points and pathways to learning, education, and civic engagement for all students. Educators should explore these different CONNECTED LEARNING HAS THE UNIQUE ABILITY TO CUT ACROSS BOUNDARIES THAT HAVE TRADITIONALLY SEPARATED SCHOOLS, POPULAR CULTURE, HOME, AND THE GREATER COMMUNITY.

entry points and use them as a tool to increase student engagement. As seen in the vignettes, connected learning has the unique ability to cut across boundaries that have traditionally separated schools, popular culture, home, and the greater community.

To learn more about how connected learning is engaging youth across the country, please visit clrn.dmlhub.net.

#### **Acknowledgments**

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The **Alliance for Excellent Education** is a Washington, DC–based national policy and advocacy organization dedicated to ensuring that all students, particularly those traditionally underserved, graduate from high school ready for success in college, work, and citizenship. www.all4ed.org

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## **ENDNOTES**

- <sup>1</sup> B. Busteed, "The School Cliff: Student Engagement Drops with Each School Year," http://thegallupblog.gallup.com/2013/01/theschool-cliff-student-engagement.html (accessed May 2, 2013).
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- <sup>3</sup> Editorial Projects in Education, "Diplomas Count 2012: Trailing Behind, Moving Forward: Latino Students in U.S. Schools," Special Issue, *Education Week* 31, no. 34 (2012).
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