

DIGITAL MEDIA AND LEARNING

The MacArthur Foundation's digital media and learning initiative aims to determine how digital media are changing the way young people learn, play, socialize, and participate in civic life. Answers are critical to education and other social institutions that must meet the needs of this and future generations.



AT A GLANCE

- MacArthur launched the digital media and learning initiative in 2006 to explore how digital media are changing the way young people learn, socialize, communicate, and play.
- Since 2006, the Foundation has awarded grants totaling more than \$100 million for research, development of innovative new technologies, new learning environments for youth, including a school model based on game design principles, and efforts to build the new field of digital media and learning.
- The goal of the grantmaking in digital media and learning is to create more opportunities for more young people to achieve the time-honored outcomes of a good education—career, academic, and civic success—through the adoption and use of a simple set of principles that re-imagines how young people learn and how that learning is supported.
- A new framework for thinking about learning—connected learning—has emerged as a result of the grantmaking. It draws on successful approaches of the past, is based on evidence of what works best in the contemporary context, and is designed for the digital age.
- MacArthur supports demonstration sites that put the connected learning approach into action. They include Hive Learning Networks, Quest to Learn schools, and YOUmedia, an innovative teen space for engagement and learning.

BACKGROUND

Contemporary society is reinventing how knowledge is created, organized, accessed, and shared, with far-reaching implications for institutions of learning—schools, libraries, museums, and more. Digital media may facilitate a new way of thinking about learning that acknowledges and nurtures individual talents, skills, and interests. The initiative in digital media and learning aims to support positive change in American education that builds on new modes of learning observed among young people using digital media and related tools.

The initiative is examining what may be new ways to think about learning for young people who are “growing up digital” that could be facilitated and supported. When it was launched in 2006, the hypothesis was that young people are different because of their exposure to digital media and the Internet—differences that are reflected in their sense of self, in how they express their independence and creativity, and in their ability to learn, exercise judgment, make ethical decisions, and think systematically.

Phase 1: Exploration, 2006-2011

In Phase 1, we focused on inquiry and raising awareness, with the goal of understanding how learning is changing as a result of digital media. We considered questions such as:

- How are young people changing as a result of their use of digital media?
- How are learning environments changing? How should they change in the future?
- How are civic and social institutions changing? How should they change in the future?



The first significant projects received support in March 2006. We funded research on how young people use digital media, new theoretical work, and experimentation in the design of learning environments. Grants explored how informal learning institutions, such as libraries, museums, and after-school programs, could support learning and provide pathways to success in school and in life. All of this shaped the creation of new learning environments, policies to support learning, and innovative practices.

A New Framework for Learning: Connected Learning

What emerged from this work was a new framework for thinking about learning that, while drawing on successful approaches of the past, is based on evidence of what works best in the contemporary context, and is designed for the digital age. This framework, called connected learning, is a set of educational and design values and principles that can

be adapted and applied in any context. It re-imagines the learning experience of young people to connect the three spheres of their lives that matter most to them—peer culture, interests, and academics. It ensures that young people learn traditional reading, writing, and numeracy skills, while enabling and inspiring them to be creative, analytical problem solvers. It provides for more engaging, relevant, and enduring learning experiences that prepare them for college, the workforce, and citizenship in a democracy.

Phase 2: Influence and Impact, 2011-present

In Phase 2, the focus is on creating, at sufficient scale, the conditions to continually test, refine, and expand the ideas, practices, and policies that emerged from Phase 1 and now constitute connected learning. The goal is to create more opportunities for more young people to achieve the time-honored outcomes of a good education—career, academic, and



civic success—through the adoption and use of a simple set of principles that re-imagines how young people learn, and how that learning is supported.

Grantmaking Priorities

Research. Foundation-funded research is contributing to a growing body of evidence about how young people learn today. Ethnographic studies, surveys, interdisciplinary research networks—one on youth and participatory politics and

another on connected learning—and other projects are examining what young people are doing online, their views on such activities, and the knowledge, skills, and competencies they are gaining.

Practice. Grants also support efforts to develop new learning environments to understand how schools, libraries, museums, and other formal and informal institutions need to adapt, change, and collaborate to meet the needs of youth in

the 21st century. Projects are looking at learning in virtual worlds, through game design, with mobile devices, and through the interactions in social networks—in and out of school. Resources support new school design, including a model in operation in Chicago and New York based on the principles of game design that shapes and informs all aspects of teaching and learning. We support Hive learning networks in Chicago and New York City, in which collaborations of civic

and cultural institutions are working together to help young people integrate learning across formal and informal, virtual, and physical environments.

Field Building. To help build the emerging digital media and learning field, the portfolio includes the MacArthur Foundation Series on Digital Media and Learning and the MacArthur Foundation Reports on Digital Media and Learning. A website with resources and research

related to connected learning—www.connectedlearning.tv—and the Digital Media and Learning Research Hub, an international research center at the University of California, Irvine, are additional resources for the field.

Digital Media and Learning Competition. To encourage innovation and provide resources for new learning environments, the Foundation funds the Digital Media and Learning Competition.

This annual endeavor, administered by HASTAC, invites U.S. and international participants to compete for \$2 million in grant awards for domestic and international projects that use digital or new media as platforms for participatory learning. The most recent competition is supporting 30 teams of practitioners and designers to develop digital badge systems, an alternative assessment and credentialing mechanism housed and managed online. More information at www.dmlcompetition.net.



DEMONSTRATION SITES

MacArthur has supported experimentation in several types of institutions—libraries, museums, schools, community centers, afterschool programs—to demonstrate what connected learning could look like in action. They include:

YOUmedia and Learning Labs

www.youmedia.org

YOUmedia—which first opened at the Chicago Public Library’s downtown Harold Washington Library Center in 2009—is an innovative learning space for teens. Based on research supported by MacArthur, YOUmedia was designed to respond to the interests of young people, while connecting them to books, media, and institutions around Chicago to encourage collaboration and creativity. YOUmedia has since expanded to three branch locations in Chicago and has become the model for a number of YOUmedia-like teen learning spaces in other museums and libraries. The MacArthur Foundation, in partnership with the Institute for Museum and Library Services, also is supporting planning grants for up to 30 additional YOUmedia-inspired teen learning labs across the country.

Quest to Learn

New York City: www.q2l.org

Chicago: www.chicagoquest.org

The design and development of the Quest to Learn model was supported by MacArthur and first

launched in 2009 in a public school in New York City. ChicagoQuest was opened in the fall of 2011. The Quest model was developed in response to growing evidence that digital media and games offer powerful models for reconsidering how and where young people learn. At Quest schools, educators partner with game designers to develop curriculum that truly engages young people in learning through a series of quests that simulate game play. In pursuit of both traditional skills in reading and math as well as 21st century skills, students take on the identities and behaviors of explorers, mathematicians, historians, etc., as they work through the challenge-based curriculum.

Hive Learning Networks

www.hivelearningnetwork.org

The Hive Learning Network is a community of organizations that serve youth in the out-of-school space. The Hive is currently active in Chicago and New York City, with other locations under development. Hive Learning Networks are designed to create connected learning experiences to not only engage youth and promote learning that aligns with their interests, but to support them as they develop necessary 21st century skills. Through public-private partnership support, Hive Learning Networks fund innovative youth programming to connect learning across the three spheres that matter most to youth: peer culture, interests, and academics.

REPRESENTATIVE GRANTS

Research

HARVARD LAW SCHOOL, BERKMAN CENTER FOR INTERNET AND SOCIETY
Cambridge, MA
\$500,000 to research, evaluate, develop curriculum, and conduct youth outreach to address online meanness and bullying.

HARVARD UNIVERSITY, GRADUATE SCHOOL OF EDUCATION
Cambridge, MA
\$900,000 in support for a study of the effect of digital media on young people’s ethical development and the creation of curricula for parents and teachers.

MILLS COLLEGE
Oakland, CA
\$4,500,000 in support of the MacArthur Research Network on Youth and Participatory Politics.

UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA
\$4,500,000 in support of the MacArthur Research Network on Connected Learning.





UNIVERSITY OF SOUTHERN CALIFORNIA, ANNENBERG CENTER FOR COMMUNICATION
Los Angeles, CA

Two grants totaling \$1,426,580 in partial support of a multi-site ethnographic study of how and to what effect young people use digital media.

Practice/Demonstration Sites

THE CHICAGO COMMUNITY FOUNDATION
Chicago, IL

\$1,500,000 in support of the Smart Chicago Collaborative for activities of the Chicago Hive Learning Network.

COMMUNITY FUNDS
New York, NY

\$1,500,000 in support of a fund for activities of the Hive New York City Learning Network

INSTITUTE OF MUSEUM AND LIBRARY SERVICES
Washington, DC

\$1,250,000 in support of the scale-up of YOUmedia teen learning space.

INSTITUTE OF PLAY
New York, NY

\$1,800,000 to develop the Quest to Learn schools in New York City and Chicago.

\$3,300,000 to support the Games Learning and Assessment Lab.

MOZILLA FOUNDATION
Mountain View, CA

\$1,000,000 to develop and design a digital badge system for accreditation of learning and skills

UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA

\$5,632,000 to operate, publicize, and

support the winners of an open-call competition at HASTAC to build the field of digital media and learning.

Field Building

UNIVERSITY OF CALIFORNIA, IRVINE
Irvine, CA

\$4,500,000 in support of the Digital Media and Learning Research Hub.

\$490,000 to support the publication of new monographs in the “MacArthur Reports on Digital Media and Learning” series.

ADDITIONAL RESOURCES

Digital Media and Learning Research Hub: www.dmlcentral.net

Connected learning: www.connectedlearning.tv

The Digital Media and Learning Competition: www.dmlcompetition.net

The International Journal of Learning and Media: www.ijlm.net

Spotlight on Digital Media and Learning: www.spotlight.macfound.org

MacArthur Research Network on Youth and Participatory Politics: www.ypp.dmlcentral.net

MacArthur Research Network on Connected Learning: www.clrn.dmlhub.net



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About The MacArthur Foundation

The John D. and Catherine T. MacArthur Foundation supports creative people and effective institutions committed to building a more just, verdant, and peaceful world. In addition to selecting the MacArthur Fellows, the Foundation works to defend human rights, advance global conservation and security, make cities better places, and understand how technology is affecting children and society.

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