



Information Technology Making a Difference in Children's Lives:



An Issue Brief for Leaders for Children

Computers have changed the way the world works. And we need to make sure our children have the skills to compete in this new global economy. Every single child deserves the opportunity to succeed in the 21st century.

– Former U.S. Secretary of Education, Rod Paige¹

Foreword: Children and the Digital Revolution

Computers, the Internet, and other Information and Communications Technology (ICT)* are changing the way families live. They are changing how schools teach; how students learn; and how families manage their health and finances, connect to their community, and find opportunities for their children. They are also changing how we communicate and do business and how government provides services.

These dramatic changes both caused by and enabled by technology present leaders for children with a new set of issues on which children urgently need their leadership.

* Information and Communications Technology involves those computer-based information and communications systems that process, transmit, store, and share data and information. ICT encompasses, but is not limited to, the Internet, computers, hardware, applications, and advanced media technology.

Though the technology revolution is still relatively young, The Children's Partnership (TCP) has long been committed to ensuring that the opportunities of digital technology benefit all children and families. We recognized early on that there is cause for concern that low-income, geographically isolated, and other underserved groups of children are missing out on the powerful opportunities offered by computers and the Internet.

We wrote this Issue Brief to share with you stories of how technology is transforming every aspect of children's lives—education, workforce preparation, economic security, health, social inclusion, and civic engagement. Our goal is to provide some initial tools for how you—leaders for children—can help ensure that the children in your community do not get left behind in the digital revolution. In addition, we encourage you to consider how the application of ICT can improve the lives of the children you serve. Finally, this Brief explores the many tools technology offers to help leaders speak out on behalf of children.

We hope this Brief provides you with new ways to think about child advocacy and to improve the lives of children. And we look forward to joining with you in ensuring that 21st century technology changes the lives of children in positive ways.

– **Wendy Lazarus and Laurie Lipper**
Founders and Co-Presidents
The Children's Partnership



How Technology Has Shaped a New Era for Children

Digital Rungs Now Make Up the “Ladder of Opportunity”

Computers, the Internet, and other digital tools have revolutionized how young people prepare for their future. In schools, children are expected to master a new set of digital literacy skills as part of being ready for continued studies and the workforce. Young people who are able to use information technology skillfully will have more opportunities in the workforce. For example, of all Fortune 500 companies, 89 percent recruited for jobs on their company’s Web site, and 34 percent accepted only online applications.² Even entry-level jobs now require computer skills, not only for their daily tasks but to apply for jobs online. Basic transactions for young people—such as finding out about summer jobs, training programs, and educational opportunities—are most easily carried out online.

Technology Affects Virtually Every Children’s Issue

Technology also impacts every issue affecting underserved children: poverty; housing; food security; family economic security; foster care; child care; health; juvenile justice; and disabilities; among other issues. In fact, a variety of children’s services are now delivered by means of ICT. For example, many families can go online to determine if they are eligible for health and social services, and, in some cases, they can even enroll in programs online. Families for whom English is a second language can find information about a number of issues—such as health and health care, finances, public and private programs, and others—on Web sites in their own language. Children with chronic medical conditions, such as asthma, can use the Internet to connect to medical care and more effectively manage their illness, avoiding delayed care and emergency room visits and missing fewer days of school.

Technology Offers New Tools for Conducting Child Advocacy

In addition to the direct benefits technology offers children and families, the digital revolution is changing the way child advocates work on behalf of children. Information and Communications Technology is transforming how advocates reach, educate, and organize constituencies; communicate messages to policy-makers and the media; research and disseminate information; and raise money to support their organizations and other causes.

Children’s Advocacy and Technology: How Technology Impacts Children’s Advocacy Organizations

To provide a baseline picture of the ways in which child advocacy organizations are working on youth and technology issues and to encourage their greater involvement, The Children’s Partnership recently surveyed the Web sites of 55 city- and state-based children’s advocacy organizations across the country.³ Our goals were to determine how they are using technology to achieve their missions and to explore the landscape of activity around youth and technology in the field itself. Organizations were selected for the

Introduction

In this day and age, we cannot focus effectively on opportunities for children, and the barriers they face, without addressing technology. Leaders for children have a critical role to play in ensuring that children both reap the benefits of technology and that practical applications of technology benefit children’s lives in measurable ways.

This Issue Brief provides a briefing on how technology impacts children and the close connection it has to issues of concern to those who advocate for children, such as health, education, workforce development, social services, and other issues. This Brief also discusses how leaders for children are using technology to enhance their advocacy for children, and suggests ways leaders for children can make the most difference in this new arena. More specifically, this Issue Brief covers:

- How technology has shaped a new era for children;
- Examples of how technology is being deployed to improve children’s lives related to their education, health, and other arenas;
- New tools technology offers for conducting child advocacy;
- A National Digital Opportunity Agenda for Children; and
- Ways leaders for children can take action.

survey based on their membership in Voices for America's Children, a nonprofit organization that coordinates a nationwide network of state and local child advocacy organizations in the United States.

The Majority of Children's Advocacy Organizations Use Technology to Further Their Agendas

While all of Voices for America's Children members have Web sites, how they use their Web sites and other ICT tools to further their missions vary. Of the organizations surveyed:

- 85% use their Web sites to disseminate publications, policy papers, and reports;
- 76% provide electronic alerts through e-mail distribution lists and/or electronic newsletters;
- 65% offer current news and events on their Web sites and through their electronic alerts;
- 65% use online payment systems to seek donations from site visitors; and
- 29% provide contact information for, or allow users to directly contact, their legislators through their Web sites.

Few Children's Advocacy Organizations Address Technology in Their Work

Only a small fraction of children's advocates have addressed access to technology and technology literacy as its own program area or, more broadly, as technology affects education, health, and other outcomes for children. Of the organizations surveyed:

- Only 25% address children's access to technology in any context;
- Of those that do address children's technology access, the majority (79%) are concerned with technology as it relates to children's education; and
- Just 5% discuss outcome indicators related to youth and technology.

Further findings from the survey can be found at: www.childrenspartnership.org/Report/ChildAdvocacy.



<http://www.voices.org>

How Children's Advocates Are Working on Youth and Technology

From the The Children's Partnership's survey, of the 14 organizations that work on youth and technology:

- 11 focus this work on education (79%);
- 4 focus in the area of economic opportunity / workforce preparedness (29%);
- 2 focus in the area of health / safety (14%);
- 1 focuses in the area of civic / community participation (7%); and
- 4 focus in more than one of the areas above (29%).

Survey results available at www.childrenspartnership.org/Report/ChildAdvocacy.

Evidence Shows that Technology Can Improve Children's Lives in Powerful Ways

Children today still need what they have always needed to become healthy and productive adults. Caring parents, a safe place to live, adequate nutrition, a strong education, and health care are among the basics. But technology is proving to be a new enabling force for meeting these needs in effective ways.

Technology is Critical to Children and Youth in Today's World

- According to the U.S. Department of Commerce, 95% of newly created jobs demand computer skills.⁴ Furthermore, technology sector jobs pay almost double the average private-sector hourly earnings.⁵
- Online learning offers the possibility of delivering rich curricula to students who do not have access to a wide course selection. For example, 40 percent of U.S. high schools do not offer Advanced Placement courses.⁶ Online learning could be a practical alternative.⁷ According to one survey, over 70 percent of U.S. school administrators surveyed agreed that online learning was an important way to meet the needs of specific groups of students, including those who are trying to graduate early and those who have to make up credits in order to graduate.⁸
- Telemedicine can deliver needed care to the millions of children who, today, live in medically underserved areas.⁹
- Classroom use of computer technology allows children with disabilities to take their own tests, write their own papers, and do their own research. For example, assistive technologies allow children who cannot speak to communicate with their peers and instructors.¹⁰

As the gap between rich and poor in the United States continues to grow, the ability to benefit from the opportunities

Digital Gaps Facing Special Populations

- Children in low-income families are half as likely to have a computer as children in households with annual incomes over \$75,000, are a third as likely to have Internet access, and a sixth as likely to have access to broadband.*¹¹
- Home Internet access among children ages 7 to 17 varies widely by ethnicity. Just 41% of Native American youth, 43% of African American youth, and 44% of Latino youth have access; compared to 75% of Asian American youth and 80% of white youth.¹²
- Among people age 15 or older, only 24.3% of those with disabilities use the Internet at home, compared to 50.5% of those without disabilities.¹³
- Of school children, ages of 7 to 17, only 29% of those in households with annual incomes of less than \$15,000 use a home computer to complete school assignments, compared to 77% of those in households with annual incomes of \$75,000 or more.¹⁴

* Broadband refers to a high-speed, always-on connection to the Internet, which enables information to be transferred with very little delay in receiving or sending (Communications Workers of America).

delivered through computers and the Internet can help a generation of young people move out of poverty. Digital opportunity for kids is the equity issue of the 21st century. The following examples show how technology, when properly applied, can improve children's lives.

Technology Can Improve Children's Health

Information and Communications Technology is transforming the way health care is delivered, received, managed, and paid for in very positive ways. Technology can streamline and facilitate enrollment and retention in public health insurance programs and facilitate increased access to quality health care through telehealth and telemedicine—the application of ICT to provide health care at a distance. Web-based communications tools can help young people manage chronic conditions, such as diabetes and asthma, and enable parents and young people to take advantage of quality health information online. Personal health records facilitate continuity of care for children who are especially mobile, such as those in foster care. Finally, immunization and disease registries can facilitate coordinated care for children and adults, as well as assist public health experts manage a community's health.

Health insurance is the ticket to the health care children need to grow up healthy and strong. However, even if health coverage is available, enrolling in coverage for children is not always easy for families. One example where

technology is helping children obtain health insurance is California's One-e-App program, a Web-based system that helps families enroll in a number of health and social service programs online. It allows providers, community-based organizations, county agencies, and schools to collect the information that a family must provide to apply for health programs and submit it. The system makes a preliminary determination for which program the child is eligible and electronically sends his or her application information to that program.¹⁵

Visit www.childrenspartnership.org/Report/EHealth to learn how technology is being used to improve public health insurance programs.

Another way the advancement of ICT has led to increased access to health care is through telemedicine, which allows children and adults, particularly those in rural or underserved areas, to receive high-quality health care from a distance. Low-income children living in medically underserved areas, including rural and parts of urban areas, face geographic and economic barriers to accessing health care. Telemedicine is a tool to help them obtain care they would otherwise face great difficulty accessing.

For example, the Health-e-Access program of the University of Rochester Medical Center in Rochester, New York, uses video conferencing to link pediatricians with children in inner-city child care centers.¹⁶ Specialized cameras are also used to provide diagnostic-quality images of the eardrum, throat, eyes, and skin, and electronic stethoscopes capture high-quality lung and heart sounds. After evaluating the child via telemedicine, the pediatricians make a diagnosis, prescribe treatments, and provide a treatment report to the family and to the child's pediatrician, when applicable.¹⁷ The program demonstrated a 63 percent reduction in illness-related absences, and nearly 94 percent of problems managed by telemedicine would otherwise have led to a doctor's office or emergency department visit.¹⁸ Finally, more than 91 percent of the parents of the children in the program stated that telemedicine allowed them to stay at work.¹⁹



<http://www.oneeapp.org>



For more information on how telemedicine is meeting the health care needs of children, see TCP report, *Meeting the Health Care Needs of California's Children: The Role of Telemedicine*, available at <http://www.childrenspartnership.org/Report/Telemedicine>.

Technology Can Improve Student Achievement

Getting computers, access to the Internet, and computer training into the hands of underserved children and their families offers them a wealth of educational benefits. The Internet enhances homework help, specialized test preparation, communication with teachers and other school resources, and information about educational opportunities. Online access at home allows students and parents to use these Internet resources after school, after work, and on the weekends. Not only do students benefit from access to computers and the Internet at home, the entire family benefits, improving families' access to workforce training, civic and community engagement opportunities, and government and health information and services.

Take IT Home, a program of Computers for Youth (CFY), works with middle-school students, their families, and their schools in Atlanta, New York City, and Philadelphia to improve children's academic performance by focusing on computer use and literacy in the home.²⁰ The program distributes a free refurbished or new computer to participating families. Participants also receive educational math, social studies, science, and reading and writing software; one year of free Internet access; bilingual program content; access to workshops; technical support; and additional training for parents to help their children at home. Parent and teacher workshops help unite learning in the classroom with at-home study and teach parents how to help their children learn.²¹ Each year, the program serves more than 2,300 families.²²

Seventy percent of students in CFY programs reported feeling more curious and confident because they had a computer in the home. Furthermore, those who reported working harder because they had a home computer showed signs of corresponding academic improvement. Additionally, over 90 percent of parents who participated in CFY's parent training program reported feeling more confident in helping their children learn as a result of the program.²³

As the gap between rich and poor in the United States continues to grow, the ability to benefit from the opportunities delivered through computers and the Internet can help a generation of young people move out of poverty. Digital opportunity for kids is the equity issue of the 21st century.

Technology can also be used to improve the student achievement of children with special needs. Oregon's Cottage Grove High School provides students with special needs personal digital assistants (PDAs) to help them build organization skills. After one year, students had increased their classroom participation and turned in nearly 100 percent of their written assignments. They never lost their homework assignments, and the PDAs, combined with desktop computers, assisted the children in submitting more legible work, in which they took pride.²⁴

Technology Can Prepare Youth for 21st Century Jobs

Youth who have skills in computer use and other ICT applications will have more and better options for higher paying jobs. For many low-income youth, having access to computers, other ICT applications, and training is critical to their ability to overcome traditional socio-economic barriers to success.

Hopeworks 'N Camden, a Camden, New Jersey-based organization, creates job opportunities for inner-city youth who are at risk for dropping out or have already dropped out of school by training them in Web design, Geographic Information Systems (GIS),[†] computer networking and repair, and video.²⁵ The program requires that trainees enroll in college and has a partnership with Camden

[†] A Geographic Information System (GIS) is a system for capturing, storing, analyzing, and managing data and associated attributes which are spatially referenced to the Earth. A GIS allows users to create interactive queries, analyze spatial information, edit data and maps, and present the results of all these operations.

Community College to provide college credits for the training students receive at Hopeworks.²⁶ Hopeworks also runs two nonprofit businesses that generate revenue and provide trainees with opportunities to work on real client projects as part of their training.²⁷ Participants in the program have built Web sites and developed GIS maps for at least 75 different businesses and organizations, such as the Food Bank of South Jersey, Catholic Charities, United Way, and Campbell's Soup.²⁸ Since the program began in 2000, more than 1,300 youth have participated in Hopeworks, and trainees have gone on to get jobs, pass General Education Development (GED) tests, and attend college.²⁹

Youth are often the drivers of technology adoption among their families and community members. "Digital natives"—or those who have grown up immersed in computer technology—already possess basic technology skills and are able to quickly acquire new skills, such as using streaming audio and video, creating multimedia, and participating in Web 2.0 applications.[‡] Utilizing youths' technological expertise benefits both the youth, as they secure better paying jobs, and communities, as they gain technology support and training.

The One Economy Corporation's Digital Connectors program trains 14- to 21-year-olds in 12 locations across the U.S. to be "technology ambassadors" in their low-income communities. The youth participants not only develop their own technology skills, they share their knowledge by training their peers, adults, and seniors to use computers



and the Internet.³⁰ Since implementation in 2001, the Digital Connectors Program has had more than 1,200 youth participate, providing over 42,000 hours of community service.³¹

Technology Can Improve Care for At-Risk Children

Technology is facilitating improved services for children by streamlining how services for children are being delivered, reducing paperwork, increasing coordination, and providing readily accessible resources to those who care for children.

For example, leaders working on foster care and adoption issues know that a fragmented system—which includes such barriers as a lack of coordination between the courts and child welfare agencies, identifying appropriate home placements for children, staffing and paperwork issues related to case management, and complicated court systems—contributes to lengthy, confusing, and distressing experiences for children.³²

New Jersey is addressing this problem through a software system, called NJ SPIRIT (New Jersey Statewide Protective Investigation Reporting and Information Tool), to better coordinate and manage care for foster and other at-risk children. Using management and geographic information systems, NJ SPIRIT allows caseworkers to more easily identify information on the availability and characteristics of foster homes in certain geographic areas to better match children to homes. The system also automates tasks, such as requesting a child be transferred from one foster home to another. In addition, the system links the state's Department of Youth and Family Services, where foster care is managed, to the attorney general's office so that the two entities can coordinate services for children. Finally, the system allows caseworkers to document unmet needs, which helps the state know where they need to build capacity.³³

LivingITHome
1 Economy Corporation

Home What We Do Press Room About Contact Support Our Work

Digital Connectors:
Connecting Youth to Greater Opportunities
More than 1,300 youth have delivered over 42,000 hours of service to their communities.

At One Economy, we believe that youth should play a critical role in our efforts. Young people have the greatest digital opportunity. They are digital innovators, integrating cell phones, photo, text messaging, email, digital cameras and web media in their everyday lives. They are the technology experts in after school programs, schools, community centers and in the most important place: their homes. Youth train their peers, adults and seniors to use computers and the Internet.

One Economy's Digital Connectors program was created to address the barriers to technology adoption and use, especially among young people within low-income communities. Following the success of a pilot implementation in 2001, One Economy now operates the Digital Connectors program in sixteen locations across the country. The program is a best practice youth development model that identifies talented young people, immerses them in technology training, and helps them build their leadership and workplace skills to enter the new economy. Youth receive training and participate in community service opportunities in the areas of technology instruction, technical support, digital media, marketing, workforce readiness and leadership development. Participants are also introduced to the broader objectives of One Economy so that they can better understand and fulfill their role as technology ambassadors.

The Digital Connectors model has evolved as a key demand of our Digital Communities. In 2006, 338 youth provided over 13,352 hours of service to approximately 2,200 families across five cities. To date, over 1,200 youth have completed the program and since 2001 have provided over 42,000 hours of community service to their communities.

What We Do:

- Build teams of skilled young people, ages 14 - 21, to promote and support the adoption and use of technology in low-income communities.
- Develop technology skills, foster personal growth, strengthen leadership capacity, and inspire an ethic of community service among low-income youth.
- Expose low-income youth to higher education and careers via corporate site visits, job shadowing, campus tours, and mentoring.
- Create structural opportunities for youth to become "voice journalists" who promote resident engagement through the creation of content about their neighborhoods.

Map of Digital Connectors Program Sites
FAQs about Digital Communities
For more information, please contact Nicol Turner-Lee, Vice President at nlturnerlee@one-economy.com.

CONTACT:
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[‡] Web 2.0 is a term used to describe the second generation of Web-based services and is characterized by applications that let people connect and share information in ways previously unavailable. Examples include social networking sites, blogs, wikis, and video- and file-sharing applications.

tion for Retired People (AARP) has created a Web site for grandparents who are the sole caregivers for their grandchildren. The site offers tips, information about public assistance programs, and a Grandparent Support Database, which allows users to search for supports and resources based on location and type of resource.³⁴

Technology Can Connect Young People to One Another and Can Be Used to Engage Youth in Civic Participation

Though online advocacy is a relatively new concept, many youth already visit the Web to connect with other youth and to identify ways in which they can voice their opinions about issues important to them. By 2004, more than 400 civic engagement sites specifically targeted youth.³⁵ About 15 percent of young people in the U.S. between the ages of 15 and 25 reported that they had signed an e-petition to express their political views in 2006.³⁶

For example, Do Something (dosomething.org) is a Web site dedicated to encouraging and assisting youth to engage in social action around dozens of local, national, and international issues, such as teen homelessness, immigration awareness, recycling, animal welfare, global warming, international human rights, poverty, school violence, and many others. The site provides youth opportunities to learn about the issues, connect with each other, and engage in volunteer activities—either online or through organized community-based activities. Do Something also provides grants and support to help youth with their projects. Do Something has an average monthly rate of more than 500,000 pages viewed.³⁷



<http://www.dosomething.org>

Some community-based organizations are also using online tools to reach out to and engage young people. Family Resources, Inc., a Florida nonprofit that provides a variety of health and human services to children, youth, and families, hosts a Web site by and for teens called Break-It-Down.com. The site offers articles, advice columns, and other resources written for local teens by their peers. Teens can also find

volunteer opportunities and find help around issues such as abuse, grief and loss, and dating and sex. The site aims to create a safe and fun online community for teens, and licensed counselors monitor its content.³⁸

Why Leaders for Children Should Care About Youth and Technology

- **Opportunities for Children.** Technology, properly applied, can help improve children's health, educational achievement, job readiness, and other life opportunities.
- **Equity.** Children who can benefit most from new technologies—those who are low-income, geographically isolated, or have disabilities—are least likely to have access to them or the skills to use them.
- **New Partnerships.** Technology initiatives create opportunities for new partnerships among non-profits, governments, and businesses.
- **More Effective Advocacy.** The Internet and Web-based applications create new ways to reach, educate, and organize constituents; spur constituents to action; and raise funds from supporters.

The Role of Children's Advocates in Ensuring Children and Youth Can Take Full Advantage of Digital Opportunities

Though technology influences so many facets of children's lives, crucial policy decisions about deployment, cost, and access to ICT are being made at both the state and federal levels without taking into account the needs of children. Furthermore, decisions about public programs are being made without incorporating 21st century technology that could improve these programs, while making them more efficient for both families and government. Today's children are the ones who stand to lose, and many advocates are realizing that they must address technology as they work on behalf of children.

For more than a decade, The Children's Partnership has been working to apply advances in technology to benefit low-income and underserved children by, for instance, advocating for policies that ensure that all children and families have access to computers, the Internet, and the skills to use these tools. Over the past seven years, TCP, in partnership with the California Community Technology Policy Group (CCTPG), has helped enact ten laws to bring digital opportunity to underserved Californians. (To review these laws, please visit <http://www.childrenspartnership.org/tenstatelaws>.) TCP has also worked to ensure that, as advances in health information technology are made, children's needs are made a priority.

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How Technology is Shaping How We Build Constituencies and Advocate for Children

As results from The Children's Partnership's survey indicate, it is already common for advocacy organizations to use the Web for e-mail lists, action alerts, and electronic newsletters. However, some of the most effective uses of Internet advocacy draw on its interactivity to engage users and to direct their online involvement toward making change and raising awareness offline. Advocacy organizations are learning that the more traditional uses of e-advocacy—Web sites, online surveys and petitions, and fundraising tools—can be strengthened and made ultimately more effective by incorporating new interactive technologies. Web sites geared toward children's issues—the workhorse of online advocacy—can now include:

- Instant e-mails to policy-makers, where Web tools can identify the user's policy-maker by address and send an e-mail to that policy-maker on behalf of the user.
- Online letters to the editor where Web tools can identify the user's local newspapers.
- Web tools that make it easier to organize phone banks, rallies, house parties, and other events.
- Blogs—online publishing tools—which allow for people to express their views and for others to react.
- Audio and video files to highlight issues and call audiences to action.

Cell phones and instant messaging are increasingly being used to complement online advocacy efforts, leveraging their mobility and near-ubiquity attributes. For example, MomsRising—a national advocacy organization working for family-friendly policies at the state and national levels, with more than 140,000 members—is a leader in using technology tools to organize constituencies and influence decision-makers. During the 2007 holiday season, MomsRising sent an e-outreach to members telling them about a new text-for-info service they set up in partnership with HealthyToys.org. This innovative service allowed parents to use their cell phones while shopping to send a text message with the name of a toy and get a text message back

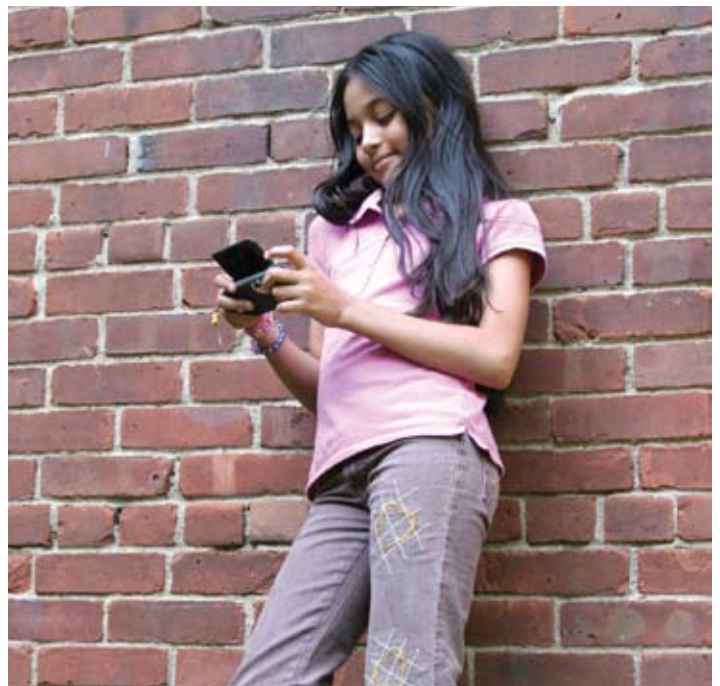
that indicated whether that toy contains potentially dangerous toxins. MomsRising also gathered over 12,000 signatures on a petition to demand that Congress strengthen the agencies responsible for protecting children from toxic products.

Broadband: A Prerequisite for Digital Opportunity

Many of the most promising applications that benefit children—including telemedicine, Web 2.0 applications, distance learning, and others—require a high-speed Internet connection. Much like the postal service and electricity were necessary for opportunity in the past, broadband (high-speed Internet) has become a prerequisite for digital opportunity. While broadband deployment, speed, and affordability are issues that once seemed unrelated to the world of child advocacy, it is now clear that leaders for children could substantially improve the lives of children by working to make broadband available to every home.

Without policies to ensure that broadband is deployed to all neighborhoods—including their households, schools, community centers, and other key locations—regardless of income or geographic location, children who could benefit most from technology use will continue to miss out on key 21st century opportunities. Most states and Congress are making decisions today that will affect who has access to broadband and at what cost. Advocates and policy-makers can support policies at the local, state, and national levels that ensure broadband deployment in all neighborhoods and affordable rates for families.

For further information on broadband and children, see the report by TCP, *Helping Our Children Succeed: What's Broadband Got to Do With It*, available at www.childrenspartnership.org/report/broadbandbrief.





Getting Behind a National Digital Opportunity Action Agenda for Children

Research over the past decade on what children need in the digital age provides the basis for setting out an action agenda to guide advocacy at the national level. The digital opportunity action agenda addresses five key elements:

1. 21st Century Skills. Digital literacy skills are critical for children and youth to be able to succeed in school, work, and other areas of life, and to lead successful lives as adults.

2. Digital Tools. Millions of children do not have a computer at home or the broadband connection they need to be productive members of a society that relies on the use of technology. Some families cannot afford broadband even if it is available.

3. Parent Involvement. Parents are often left behind in the digital revolution. They lack basic and enhanced computer skills needed to guide their children's computer and online activities, advance their own careers, and access the many valuable online resources that exist today in the areas of health, human, and government services.

4. Services for Children. Many public programs that provide critical health and human services to underserved children and families rely on outdated, inefficient, and expensive systems, making it difficult for families to access needed services. Too often, technologies that can provide children's services more effectively and efficiently are not being used.

5. Accountability for Digital Opportunity. National leadership is needed to establish goals and to measure progress toward ensuring digital opportunity for all children. Accountability, coordination, and transparency are needed to harness the benefits of technology for children.

National Digital Opportunity Action Agenda for Children

1. Prepare children for the 21st century. Establish 21st century skills as a national priority for children and integrate them into teaching at schools, in after-school programs, and at libraries or other places children spend their time. Invest in technologically sophisticated workforce training programs for young people that are directly connected to the needs of employers. This will require a concerted effort by leaders in all sectors to continuously define the skills needed for success in a global economy and to integrate them into education and training assessments.

2. Equip children with digital tools at home. Provide financial incentives to help low-income families acquire home computers and affordable broadband; and encourage their use at home to pursue educational, health, and other opportunities for youth.

3. Support parents in today's technology-based world. Support the development of model digital literacy efforts, online safety education, and other technology training to help parents guide their children wisely in the online world; and encourage businesses to offer technology training to their employees.

4. Use the power of technology to improve the lives of children. Support the application of technology to improve the delivery of health and human services; use the Internet to provide information to families about public and private resources; and offer incentives to develop new technology applications that can make education, job training, health care, and social services more effective for children and families and more efficient for taxpayers.

5. Establish accountability for the Digital Opportunity Agenda. Create a federal office to manage digital opportunity efforts across government, involve the private sector effectively in digital opportunity efforts, and track progress towards meeting national digital opportunity goals.

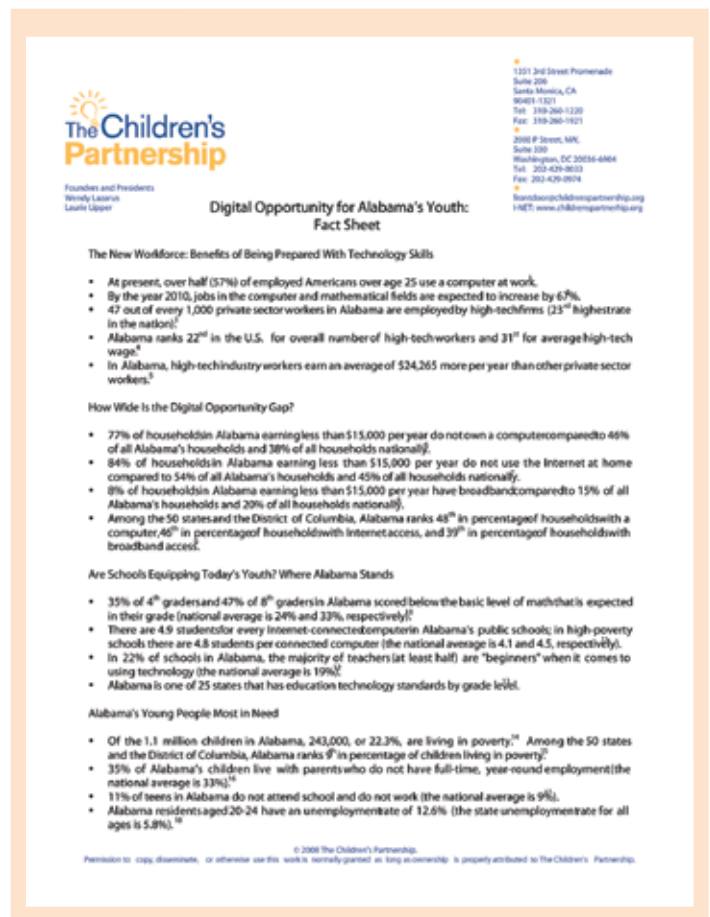
Policy-makers have a key role to play in accomplishing this agenda. There are also vital roles for leaders in the corporate and civic sectors and for parents. For further information and examples of policy and partnerships, please visit <http://www.techpolicybank.org>.

Taking Action

Leaders for children can make a difference in the lives of children, youth, and families by helping create digital opportunities for children and youth and by applying technology to organize and advocate more effectively. Here are specific things you can do:

- **Learn about the status of youth and technology in your state.** Start by finding your state's Youth and Digital Opportunities Fact Sheet on The Children's Partnership's Web site at: <http://www.techpolicybank.org/statefact-sheets>.
- **Advocate for technology solutions that advance your organization's mission.** Explore how technology can be used to make improvements in children's health care and education and other areas that impact children.
- **Partner with others in your state and nationally who are working on broadband deployment and other policy reforms related to technology.** Bring your expertise and constituency on children's issues.
- **Use technology—such as Web applications and other innovative tools—to educate, advocate, and engage others in advocacy.**
- **Learn from others.** Reach out to experts and organizations, such as The Children's Partnership and others listed in this Brief, to help identify how technology can best advance your agenda.

Visit www.childrenspartnership.org/Report/ChildAdvocacy/Resources for a list of resources on children and youth and technology.



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Endnotes

- 1 United States Department of Education, *Prepared Remarks for Secretary Paige at the Release of the National Education Technology Plan*, 7 Jan. 2005, 16. Jan 2008. (<http://www.ed.gov/news/speeches/2005/01/01072005.html>).
- 2 "iLogos Research Study Reveals Significant Careers Web Site Recruiting Trends of the Fortune 500," iLogos Research, 6 Dec. 2001, 26 Nov. 2007 (<http://www.taleo.com/news/press/ilogos-research-study-reveals-significant-careers-93.html>).
- 3 April KirkHart and Rebecca Shwalb, *The State of Youth and Technology in Children's Advocacy: A Survey of Children's Organizations Across the Nation* (Santa Monica CA: The Children's Partnership, July 2007) (<http://www.childrenspartnership.org/AM/Template.cfm?Section=Reports1&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=11647>).
- 4 Jim Kohlenberger, *Universal Affordable Broadband for All Americans: How to Modernize Universal Service for the 21st Century and Connect Americans to a New Era of Digital Opportunity* (Washington, DC: Benton Foundation, September 2007) 8.
- 5 Data from the Bureau of Labor Statistics, "Hours and Earnings," October 2007, calculations by The Children's Partnership (<http://www.bls.gov/data/home.htm>).
- 6 Expanding the Advanced Placement Incentive Program, *Initiatives*, U.S. Department of Education, 20 Jan. 2008 (<http://www.ed.gov/about/units/ed/competitiveness/expanding-apip.html>).
- 7 John Watson, *A National Primer on K-12 Online Learning* (Vienna, Virginia: North American Council for Online Learning, April 2007) (http://www.nacol.org/docs/national_report.pdf).
- 8 Anthony G. Picciano and Jeff Seaman, *K-12 Online Learning: A Survey of U.S. School District Administrators*, (Needham, MA: The Sloan Consortium, 2007) 9-10 (http://www.sloan-c.org/publications/survey/pdf/K-12_Online_Learning.pdf).
- 9 For example, more than 3.3 million children in California live in health care professional shortage areas, David Dixon, Office of Statewide Health Planning and Development, California Health and Human Services, E-mail to author, 27 Nov. 2007.
- 10 Diane Curtis, *Assistive Technology: Enabling Dreams*, Edutopia, 2 Feb. 2005, 26 Nov. 2007 (<http://www.edutopia.org/assistivetechology>).
- 11 U.S. Bureau of the Census, Current Population Survey, Internet and Computer Use, Oct. 2003.
- 12 U.S. Bureau of the Census, Current Population Survey, Internet and Computer Use, Oct. 2003.
- 13 U.S. Bureau of the Census, Current Population Survey Supplement, Oct. 2003. Analysis conducted by Dobransky and Hargittai, *The Disability Divide in Internet Access and Use Information, Communication & Society* Vol. 9, Issue 3 (June 2006): 331-334, as reported by Enders and Bridges, *Disability and the Digital Divide: Comparing Surveys with Disability Data*, Ruralfacts, Research and Training Center on Disability in Rural Communities, The University of Montana Rural Institute, June 2006, 27 Mar. 2007 (<http://rtc.ruralinstitute.umn.edu/TelCom/Divide.htm>).
- 14 U.S. Bureau of the Census. Current Population Survey, Internet and Computer Use, Oct. 2003.
- 15 *How it Works*, one-e-app, 13 Jan. 2008 (<http://www.oneeapp.org/works/>).
- 16 Kenneth M. McConnochie, et al., "Telemedicine Reduces Absence Resulting from Illness in Urban Child Care: Evaluation of an Innovation," *Pediatrics*, Vol 115, No. 5, (2005): 1273-1282.
- 17 *Hard Data Backs Up Value of Pediatric Telemedicine Program: Results Help Fuel Expansion, Create New Model of Care for Families*, University of Rochester Medical Center, 2 May 2005, 29 June 2007 (<http://www.urmc.rochester.edu/pr/news/story.cfm?id=776>).
- 18 Kenneth M. McConnochie, et al., "Telemedicine Reduces Absence Resulting from Illness in Urban Child Care: Evaluation of an Innovation," *Pediatrics*, Vol 115, No. 5, (2005): 1273-1282.
- 19 Kenneth M. McConnochie, et al., "Telemedicine Reduces Absence Resulting from Illness in Urban Child Care: Evaluation of an Innovation," *Pediatrics*, Vol 115, No. 5, (2005): 1273-1282.
- 20 *WHAT WE DO: Take IT Home*, Computers for Youth, 26 Nov. 2007 (<http://www.cfy.org/take-it-home.php>).
- 21 *WHAT WE DO: Take IT Home*, Computers for Youth, 26 Nov. 2007 (<http://www.cfy.org/take-it-home.php>).
- 22 *IMPACT: Numbers Served*, Computers for Youth, 26 Nov. 2007 (<http://www.cfy.org/numbers-served.php>).
- 23 *IMPACT: Family Impact*, Computers for Youth, 26 Nov. 2007 (<http://www.cfy.org/impact-on-families.php>).
- 24 Bettie Barrett, PDAs - The Culture of Our Children, *International Special Education Conference Inclusion: Celebrate Diversity*, Inclusive and Supportive Education Congress, 2005, 26 Nov. 2007 (http://www.isec2005.org.uk/isec/abstracts/papers_b/barrett_b.shtml); Eugene & South Lane School Districts, Palm, 26 Jan. 2008 (http://solutions.palm.com/regac/success_stories/education/education_details.jsp?storyId=1196).
- 25 *Hopeworks: Our Mission*, Hopeworks 'N Camden, 13 Jan. 2008 (<http://hopeworks.org/about/>).
- 26 *Hopeworks Training: Curriculum*, Hopeworks 'N Camden, 13 Jan. 2008 (<http://hopeworks.org/training/curriculum.html>).
- 27 *Hopeworks: Our Program*, Hopeworks 'N Camden, 13 Jan. 2008 (<http://hopeworks.org/about/>).
- 28 *Hopeworks Web: Web Gallery*, Hopeworks 'N Camden s, 26 Nov. 2007 (<http://hopeworks.org/web/gallery.html>); *Hopeworks GIS: Map Gallery*, Hopeworks 'N Camden s, 26 Nov. 2007 (<http://hopeworks.org/gis/gallery.html>).
- 29 Jeff Putthoff, SJ, Executive Director, Hopeworks, E-mail to author, 8 Jan. 2008; *Hopeworks: History*, Hopeworks 'N Camden, 13 Jan. 2008 (<http://hopeworks.org/about/history.html>).
- 30 *Digital Connectors: Connecting Youth to Greater Opportunities*, One Economy Corporation, 17 Jan. 2008 (<http://www.one-economy.com/whatwedo/digicons.asp>; <http://www.one-economy.com/whatwedo/digiconmap.asp>).
- 31 *About Us*, One Economy Corporation, 17 Jan. 2008 (Washington, DC: One Economy Corporation) (<http://www.one-economy.com/about/about-us-082107.pdf>).
- 32 *Foster Care Adoption in the United States: A State by State Analysis of Barriers & Promising Approaches*, National Adoption Day Coalition, 17 Nov. 2004 3, 7-8. (http://www.urban.org/UploadedPDF/411108_FosterCareAdoption.pdf).
- 33 David Rath, "Child Welfare System Boosts Oversight of New Jersey Foster Care and Adoption," *Government Technology*, 14 Jan. 2008. (http://www.govtech.com/gt/241674?id=&topic=117677&story_pg=2).
- 34 *Grandparenting*, American Association of Retired Persons, 26 Nov. 2007 (<http://www.aarp.org/families/grandparents/>).
- 35 Kathryn Montgomery, et al., *Youth as E-Citizens: Engaging the Digital Generation*, Center for Social Media, March 2004 (<http://www.civicyouth.org/PopUps/YouthasECitizens.pdf>).
- 36 Karlo Barrios Marcelo and Mark Hugo Lopez, *How Young People Expressed Their Political Views in 2006* (College Park, MD: The Center for Information & Research on Civic Learning & Engagement, Nov. 2007) 2-3 (http://civicyouth.org/PopUps/FactSheets/FS07_ExpressViews.pdf).
- 37 *About Us*, Do Something, 22 Jan. 2008 (<http://www.dosomething.org/about>); *Causes*, Do Something, 22 Jan. 2008 (<http://www.dosomething.org/causes>); *Grants*, Do Something, 22 Jan. 2008 (<http://www.dosomething.org/grants>).
- 38 Donna Wright, "New Web Site Vies to Be Virtual Haven for Teens," *The Bradenton Herald*, 6 Aug. 2006, 26 Nov. 2007, (http://www.redorbit.com/news/technology/603887/new_web_site_vies_to_be_virtual_haven_for_teens/index.html).

Other Resources From The Children's Partnership

Web Resources:

The Children's Partnership's four complementary Web sites inform and encourage sound policy and highlight best practices in applying technology to help young people thrive.

- ☀ **www.childrenspartnership.org** is home to our research and publications and is the best place to find more information about our organization.
- ☀ **www.techpolicybank.org** provides clear information and actionable steps for leaders for children to find policy handles to ensure digital opportunities for youth.
- ☀ **www.contentbank.org** provides resources for developing appropriate online information for low-income communities and includes guidelines for creating accessible content.
- ☀ **www.expresslaneinfo.org** provides information on implementing Express Lane, an innovative policy idea that uses technology to make it easier to enroll "eligible but uninsured" children in public health insurance.

Digital Opportunities Research and Resources:

- ☀ "Digital Opportunity for America's Youth: State Fact Sheets" (March 2008)
- ☀ *The State of Youth and Technology in Children's Advocacy: A Survey of Children's Organizations Across the Nation* (July 2007)
- ☀ *Helping Our Children With Disabilities Succeed: What's Broadband Got To Do With It?* (July 2007)
- ☀ *Helping Our Children Succeed: What's Broadband Got To Do With It? Number 1, 2nd Edition* (March 2007)
- ☀ "A Digital Opportunity Action Plan—California Competes: Deploying Technology to Help California Youth Compete in a 21st Century World" (May 2006)
- ☀ *Measuring Digital Opportunity for America's Children: Where We Stand and Where We Go From Here* (June 2005)
- ☀ *Impacts of Technology on Outcomes for Youth: A 2005 Review* (June 2005)

Available at <http://www.techpolicybank.org>

Content By and for Underserved Communities:

- ☀ *The Search for High-Quality Online Content for Low-Income and Underserved Communities: Evaluating and Producing What's Needed—An Issue Brief and Action Plan with Research Appendices* (October 2003)
- ☀ *Online Content for Low-Income and Underserved Americans: An Issue Brief* (June 2002)
- ☀ *Online Content for Low-Income and Underserved Americans, The Digital Divide's New Frontier: A Strategic Audit of Activities and Opportunities* (March 2000)

Available at <http://www.contentbank.org>

Parents' Guides and Child Safety on the Internet:

- ☀ "A Parent's Guide to Online Kids: 101," PowerPoint Presentation (February 2006)
- ☀ *The Parents' Guide to the Information Superhighway: Rules and Tools for Families Online, 2nd Edition* (May 1998)

Available at <http://www.childrenspartnership.org>

E-Health Resources:

- ☀ *Meeting the Health Care Needs of California's Children: The Role of Telemedicine* (September 2007)
- ☀ *Meeting the Health Care Needs of California Children in Schools and Child Care: Telemedicine Can Help* (July 2007)
- ☀ *E-Health Snapshot: Harnessing Technology to Improve Medicaid and SCHIP Enrollment and Retention Practices* (May 2007)

Available at <http://www.childrenspartnership.org>

Since 1993, The Children's Partnership, a national nonprofit child advocacy organization, has worked to ensure that all children — especially those at risk of being left behind — have the opportunity to grow up healthy and lead productive lives. Consistent with that mission, we have educated the public and policy-makers about how technology can measurably improve children's lives. We have also worked at the state and national levels to enact policies and build programs that extend digital opportunity to all children.



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