



Training Ohio's Workforce – Bringing Digital Skills to the Workplace



February 2014

In today's fast-paced workplace, Ohio businesses are increasingly relying on broadband technology to attract the best employees, market goods and services, and enhance efficiency. However, a broadband connection alone will not benefit a business; in order to fully capitalize on the opportunities provided by high-speed Internet, businesses need employees with digital skills.

Many Ohioans, however, have not had the time or opportunity to develop such digital literacy skills. This skillset gap now stands between these residents and their ability to find and secure a rewarding career. To overcome this barrier, it is important to recognize the need for digital skills training, and provide Ohioans with the opportunity to learn how to use technology.

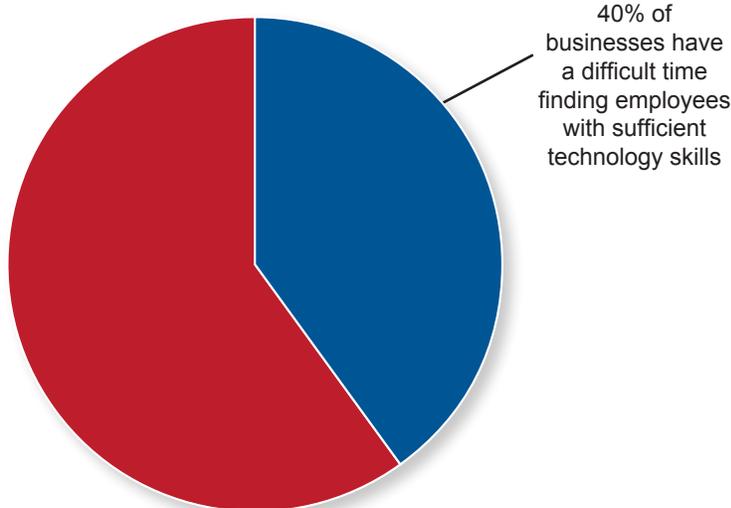
As part of its effort to close the digital divide, Connect Ohio examined the need for digital literacy training across the state. Based on the findings, Connect Ohio and Connected Nation have implemented two programs in Ohio to help Ohioans learn to use computers and the Internet, and connect newly-trained individuals with employers in need of digitally-skilled employees. Thousands of Ohioans have taken advantage of these training opportunities, benefitting themselves, their employers, and their communities.

The Need for Workers with the Right Technical Skills

When a person lacks the skills necessary to use a computer or go online, they miss out on the many advantages provided via high-speed Internet that individuals who possess the requisite skills can experience.

A lack of digital literacy skills, however, is more than simply an inconvenience; it may result in an inability to secure employment. Connected Nation surveys show that seven out of ten (70%) businesses nationally consider it "important" or "very important" for employees to have some Internet-related skills.¹ Unfortunately, 40% of businesses nationally report that they have a difficult time finding employees with the necessary technical skills (Figure 1).²

Figure 1.



¹ 2013 Connected Nation Business Technology Assessment. http://www.connectednation.org/sites/default/files/connected-nation/files/2013bizcn_final.pdf

² Ibid.

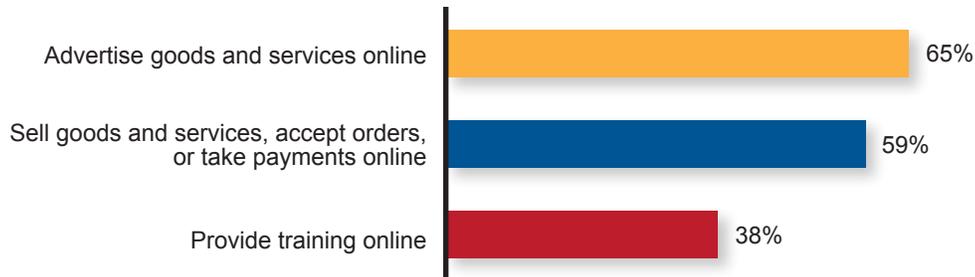
Among the findings from this report:

- Nationally, **70%** of businesses consider it "important" or "very important" for employees to have some Internet-related skills, yet **40%** report that they have a difficult time finding employees with the necessary technical skills.
- In Ohio, **two out of three** business establishments (**67%**) use broadband and need employees who can use technology for business-related tasks.
- Many Ohio adults lack the digital skills that employers are seeking – **one in eight** Ohio households that do not subscribe to broadband cite a lack of digital literacy skills as their main reason for not subscribing, and more than **2.7 million** working-age Ohio adults would have difficulty completing computer-related tasks that many employers require.
- Connect Ohio and Connected Nation have launched two programs that seek to address these issues – **Every Citizen Online** provided Ohio residents with basic computing and online skills, while **Digital Works** trains and places Ohio job-seekers with employers who need skilled workers.

In Ohio, there is a similar need for skilled workers as many Ohio businesses rely on broadband technology for their day-to-day functions. Connect Ohio business surveys show that two out of three Ohio businesses (67%) rely on broadband for their daily business activities.³ Broadband represents a means to advertise and sell goods and services, and an avenue to learn new tactics to enhance office efficiency. As a result, for many of these businesses, broadband can be the difference between a successful year versus finishing “in the red.”

Statewide, approximately 118,000 businesses (representing 65% of broadband-connected businesses in the state) advertise their products and services online (Figure 2). Over one-half of Ohio businesses that use broadband do so in order to sell or accept payments for their wares, and more than one in three of these broadband-connected businesses provide online training for their employees.

Figure 2.
How Broadband-Connected Businesses Use the Internet



The emphasis that Ohio businesses place on broadband technology highlights the importance of Ohio job seekers possessing the skills that employers need. For many Ohio job seekers, a lack of digital literacy skills can make finding a job difficult or impossible.

Identifying a Digital Skills Gap in Ohio

A lack of digital literacy skills can hinder Ohioans in a number of ways. According to Connect Ohio’s 2013 residential surveys, one in eight Ohio adults who do not subscribe to broadband say that a lack of digital literacy skills is the main barrier to home broadband adoption. This means that over 300,000 Ohio adults cannot go online to look for jobs because they lack the necessary digital literacy skills.

The challenge goes beyond those who do not subscribe to home broadband service – many Ohio residents report that they would have a difficult time using several common technology tools that are often found at the workplace.

One in three working-age Ohio adults (33% of adults age 18-64) say it would be “difficult” or “very difficult” for them to use a computer to create or edit a spreadsheet without assistance from someone else. One in seven (14%) would find it challenging to go online using a mobile device, while 13% say it would be difficult to write a letter using word processing software, and 7% say they would have difficulty sending or receiving an e-mail without outside assistance. Overall, more than 2.7 million Ohio adults who are below retirement age (38% of adults age 18-64) would have difficulty conducting at least one of these tasks without assistance.

1 in 8
Ohio households that do not subscribe to broadband cite a lack of digital literacy skills as their main reason for not subscribing.

³ 2010 Connect Ohio Business Technology Assessment. http://connectohio.org/_documents/OH_BizWhitePaper_FINAL.pdf

Among Working-Age Ohioans



33% would have difficulty creating or editing a spreadsheet



14% would have difficulty accessing the Internet via a cell phone or mobile device



13% would have difficulty using a word processing program to write a letter



7% would have difficulty sending or receiving e-mail

In addition to the difficulty employers face in finding qualified candidates, these challenges make it difficult for many Ohio residents to find work in the twenty-first century business world that increasingly relies on technology.

Addressing the Need for Digital Training in Ohio

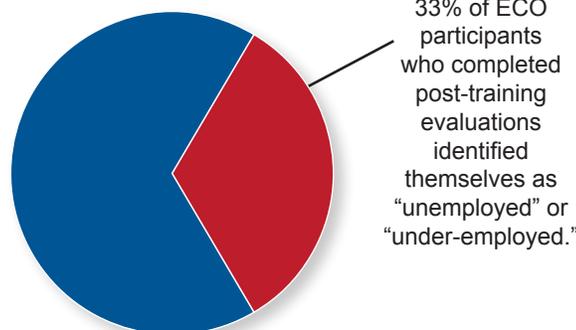
With the impact that technology has on businesses, developing a skilled and educated workforce will be instrumental to the US economy in years to come. Connected Nation estimates that online sales represent \$1.7 trillion in annual sales revenue for US businesses, and that number is anticipated to grow.⁴ This means that efforts to improve digital literacy skills in Ohio are vital to promoting economic growth and supporting economic development efforts statewide.

One such effort has been Every Citizen Online (ECO), a collaboration between Connect Ohio and local community anchor institutions including libraries, community centers, and community colleges. Connect Ohio's Every Citizen Online program launched with instructor-led training in 2010, funded in part by the Broadband Technology Opportunities Program (BTOP), to address the need for enhanced digital literacy skills by offering basic computer and Internet training at public computing centers statewide. Funding for the instructor-led training expired in 2013, self-paced ECO training continues to be offered (<http://training.connectohio.org>). Training starts with very basic computer skills and progresses through the basics of Internet usage and safety. The goal of the training is to make participants feel comfortable using the Internet and explores how broadband can be useful at home and in the workplace.



Every Citizen Online attracted individuals from all walks of life, including those who recognized the need for digital skills in their effort to find a new (or better) job. One-third of ECO participants (33%) who completed a post-training survey identified themselves as either unemployed or under-employed. The skills gained through this program proved to be helpful for many participants: 35% of survey respondents reported that they plan to use their newfound skills to look for a job online, and 13% said they intend to use broadband to start or enhance a small business.

Figure 3.



33% of ECO participants who completed post-training evaluations identified themselves as "unemployed" or "under-employed."

⁴ Source: Connected Nation 2013 Business Technology Assessment.

Another program designed to address the need for a digitally-skilled workforce in Ohio is Digital Works, an initiative spearheaded by Connect Ohio's parent company, Connected Nation. Digital Works locates co-working centers throughout Ohio, then trains and mentors high-quality candidates for call center and Information Technology jobs. Upon completion of the training, participants are placed in customer service telework positions with various online companies.



Digital Works brings together eager Ohioans who need digital skills with employers that need a trained, skilled workforce. The results have had an overwhelming impact on Ohio residents, communities, and businesses. In its first six months of operation since launching in May 2013, Digital Works opened eight facilities throughout Ohio and received nearly 800 applications from individuals who wanted to participate in the free training.



The training has paid off for many Digital Works participants. Roberta Molinero, who completed the program in Portsmouth, OH said, "Digital Works training is thorough and actually teaches you skills. Previously when I worked in customer service there really wasn't much training. It was nice to actually learn techniques and build skills to work off of. The money is pretty good; I'm making more than what I thought I would be able to make."

Conclusions

Across Ohio there is a demand for digital skills, both from employers who need technology-savvy employees and from Ohioans who would benefit from the ability to go online both at home and at work. Connected Nation surveys show that two out of five businesses nationally have a difficult time finding employees with the necessary technological skills, while in Ohio, nearly two out of five working-age adults would require assistance to use several common technology tools that are often found at the workplace. These findings demonstrate that there is a need to improve the digital skills of many Ohioans and connect them to jobs where those skills can be put to use.

To accomplish those goals, Connect Ohio and Connected Nation have launched several projects. Every Citizen Online helped Ohioans learn basic computing and online skills, while Digital Works helps job seekers take their computing skills to the next level and connects them to an employer that is looking for workers with skills and experience in the Information Technology and customer service fields.

Through these and other efforts, Connect Ohio is continuing its pursuit of closing the digital divide in Ohio and helping increase broadband access, adoption, and use across the state.



Methodology

Between November 18 and December 5, 2013, Connect Ohio conducted random digit dial telephone surveys of 1,214 adult heads of households across Ohio including 909 who are age 18-64. This sample included 1,012 adults age 18 or older who were contacted via landline and 202 adults who were contacted via cell phone. Once the respondent agreed to participate, these surveys took approximately ten (10) minutes to complete and were designed to measure technology adoption and usage, as well as the need for digital literacy training.

Quotas were set by age, gender, and county of residence (urban, suburban, or rural), based on United States Census data. The data were weighted using a rim weighting process to account for any minor variances between the statewide population and the survey sample based on these factors. Based on the effective sample size for this statewide sample, the margin of error = $\pm 3.52\%$ at a 95% level of confidence.

In addition, Connect Ohio surveyed a total of 2,401 adult heads of households who do not subscribe to home broadband service (including 200 adults who were contacted on a cell phone) to explore barriers to broadband adoption and measure these adults' willingness to subscribe at different prices. Once respondents agreed to participate, these surveys took approximately seven (7) minutes to complete. This sample was also weighted by age, gender, and county of residence using a rim weighting process to account for minor variances between the sample and the population of non-adopters, as identified through the residential survey. At a 95% level of confidence, this sample provides a margin of error of $\pm 2.66\%$ among all residents who do not subscribe to home broadband service.

As with any survey, question wording and the practical challenges of data collection may introduce an element of error or bias that is not reflected in these margins of error. For this report, "rural" residents are defined as those living in counties that are not part of a Metropolitan Statistical Area (MSA). Surveys were conducted by Thoroughbred Research, with weighting and research design consultation provided by Lucidity Research LLC.

These surveys were conducted as part of the State Broadband Initiative (SBI) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009.

To learn more about Connect Ohio please visit www.connectohio.org or e-mail us at info@connectohio.org.

To learn more about Digital Works, please visit www.digitalworksjobs.com.

To learn more about Every Citizen Online, please visit www.connectohio.org/every-citizen-online.