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# The Digital Economy and Closing the Opportunity Gap

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## The Digital Economy and Closing the Opportunity Gap

The steady decline in the U.S. unemployment rate to a post-recession low of 5.5 percent exemplifies the long-term vibrancy of the American economy. The improvement is certainly worthy of applause considering where we were in 2009, when the jobless rate officially hit double-digits and millions of Americans were so bereft that they had simply quit looking for work.

But the overall unemployment numbers, reassuring as they are, cannot mask the harsh reality that large numbers of Americans – especially African Americans and those of Hispanic heritage – continue to struggle to find the jobs and income necessary to meet their basic needs, let alone to advance themselves upward. In May 2015, for example, joblessness among African Americans stood at 10.2 percent more than double the rate for whites, and the 6.7 percent unemployment rate for Hispanics also remained uncomfortably high. Beyond the need to create jobs and eliminate the disparity among the races, the United States also must make sure those jobs pay enough to provide a decent quality of life. Today, millions of full-time workers could not make ends meet if not for a range of government support programs that help them put food on the table and keep a roof over their heads.

As we look for an engine of growth to help meet these challenges, the explosion of digital technology offers significant hope. Combined with broadband connectivity and the coming of the so-called Internet of Everything, digitization and the technology that supports it are opening vast new fields of opportunity for those who are now lagging behind. Studies by the McKinsey Global Institute and Cisco, among others, suggest that the ability to link machines to communicate with one another should eventually add upwards of \$2 trillion annually to the world economy because of increased efficiency and productivity. In addition, history shows that significant advances in technology typically create new types of high-value jobs that we cannot always anticipate in advance.

Indeed, a recent report by economists Michael Mandel and Diana Carew demonstrates that tech jobs are already the leading edge of America's post-recession employment gains and "have created tremendous opportunity for blacks and Hispanics during the recovery .... Segments of the population previously left behind by the finance and housing boom of the early 2000 are finally participating in the growing economy."<sup>1</sup>

For those who are able to go to college, there's a clear demand for their skills in tech jobs – even if some high-profile employers are falling short in the diversity of their hiring programs. By their own admission, Silicon Valley giants such as Apple, Google, and Facebook have poor diversity records and employ relatively few African Americans and Hispanics. They need to do better and deserve long-term scrutiny

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<sup>1</sup> Michael Mandel and Diana G. Carew, "Tech Opportunity for Minorities and Women: A Good News, Bad News Story," Progressive Policy Institute, April 2015, [http://www.progressivepolicy.org/wp-content/uploads/2015/04/2015.04\\_Mandel-Carew\\_Tech-Opportunity-for-Minorities-and-Women\\_A-Good-News-Bad-News-Story.pdf](http://www.progressivepolicy.org/wp-content/uploads/2015/04/2015.04_Mandel-Carew_Tech-Opportunity-for-Minorities-and-Women_A-Good-News-Bad-News-Story.pdf)

to see if they match action with their recent public promises. But in the broader universe of technology companies, including broadband service providers, and other industries that rely increasingly on digital technology, African American and Hispanic college graduates are winning a significant share of technology-based jobs.

The Mandel-Carew study shows that the number of African American college graduates employed in tech occupations climbed 56 percent from 2009 to 2014 and Hispanic tech employment more than doubled during the same period. Combined, the study reports that the share of tech jobs held by black and Hispanic college graduates rose from 9 percent to 12 percent. The jobs pay well. At every level, jobs that require technology skills tend to out pay those that don't.

But converting the digital economy's potential to close gaps in employment and pay into reality is not guaranteed.

The digital economy can and should be a great leveler that raises up all groups by connecting them to new knowledge and an array of enhanced services. In addition to generating direct jobs in digital age companies, providing digital skills and knowledge should mean a smarter, more skilled, and more productive work force that can match up with the new jobs that are on the way.

But that favorable outcome assumes that every person – beginning with our school children – has equal access to the tools made possible by digitization. If we mishandle this opportunity so that access to digital technology and skills is unequal, this great leveler could become one more source of disparity that winds up widening the gap between the haves and the have-nots. Indeed, there is some evidence that these potential negative impacts are already taking place in some parts of the United States.

To make sure the positive outcomes predominate, the first task is to keep the existing job pipeline full for college graduates by making sure that we send more African Americans and Hispanics to colleges and universities. In that way, we can help ensure that people of color get their fair share of the digital jobs that require a college degree.

We also must extend the opportunities created by the digital economy to those who do not have college degrees – and, today, that remains the reality for a majority of African-Americans and Hispanics. Motivated, but less educated workers deserve innovative training programs such as coding boot camps and other focused initiatives that enable the non-college population to acquire the skills for jobs in the digital economy. It also means that businesses must increasingly be willing to take smart and ambitious workers who lack the right technical skills and invest the time and money to bring them up to speed.

Perhaps most importantly, we must make sure that broadband and other 21<sup>st</sup> century tools and technologies are available to every American – particularly school children – so they can take advantage of tech job opportunities and also enjoy the general broadening experience of digital life. For our youngest citizens, immersion in the digital experience is a foundational experience; a 21<sup>st</sup> century supplement to the three R's that will open the broadest pathway to opportunity. To do that, we must acknowledge and address the affordability barrier that is preventing millions of Americans from full membership in the digital economy. While many older Americans have deliberately opted out of the Internet experience because they doubt its personal relevance or don't wish to learn new skills, millions

of others who want to participate say the cost is keeping them away. They just don't have the money to buy the devices and/or connect to the broadband services needed for digital equality.

The racial gaps in broadband service access have narrowed in recent years, but substantial and dramatic income divides remain. Recent data indicate that just over half of households with incomes below \$30,000 a year enjoy broadband at home compared to more than ninety percent when household incomes exceed \$75,000. For many, smartphones have mitigated the negative impact by bringing Internet service to many who cannot afford a permanent connection at home. But the fact remains that large numbers of Americans, including millions of low income schoolchildren,<sup>2</sup> lack reliable high-speed connectivity or enjoy it only sporadically. A report from the Pew Foundation shows that more than 30 percent of all households with schoolchildren and incomes below \$50,000 don't have high-speed connectivity at home – and a disproportionate share of these lower income households are African American or Hispanic.<sup>3</sup>

High-speed Internet connectivity can greatly enrich the learning environment for young students by providing virtual access to vast digital libraries, online tutorials, artwork, collaborative learning environments, cultural experiences, and a wide-range of video and audio interactions. Instead of just telling kids about a historic or archaeological site, for example, connectivity enables virtual field trips so students can see it and experience it. Instead of simply reading about an event or discovery, students can see where it happened, listen to a participant, or talk to somebody who was involved to bring the experience alive right in the classroom. This capability has unique benefits for low income students in both urban and rural areas who do not have the finances or the opportunity to travel beyond their community to get a taste of the wider world around them. With broadband, the only limit to what students can learn is their own imagination and ambition.

But students who can't get online, who can do so only sporadically because they don't have access to a regular broadband connection, or whose mobile connection constrains their efforts face a real-life cap on the digital benefits they experience. More than half of teachers of low-income children say their students' lack of technology resources is a major challenge that limits the incorporation of digital tools into lesson plans.<sup>4</sup> These teachers face a conundrum – assign work that requires or would benefit from online resources even if that means some students are disadvantaged, or limit the assignments in a way that shortchanges every student equally. That's a Hobson's choice that we must not tolerate. Either choice exacerbates the disadvantages that resource-deprived and lower-income children already face in the job market where they have to compete against more fortunate and better-prepared peers.

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<sup>2</sup> The Pew Research Center estimates that some 5 million *households* with school-aged children lack high-speed broadband at home. Since many of these households have more than one child, the number of young students without a reliable home connection is higher still.

<sup>3</sup> John B. Horrigan, "The Numbers Behind the Broadband Homework Gap," Pew Research Center, April 2015, <http://www.pewresearch.org/fact-tank/2015/04/20/the-numbers-behind-the-broadband-homework-gap/>

<sup>4</sup> Kristen Purcell et al, "How Teachers Are Using Technology at Home and in Their Classrooms," Pew Research Center, February 2013, <http://www.pewinternet.org/2013/02/28/how-teachers-are-using-technology-at-home-and-in-their-classrooms/>

Some youngsters, of course, find a way to surmount obstacles. A widely-circulated *Wall Street Journal* article tells of students who flock to McDonald's and Starbucks to access free Wi-Fi and create informal study lounges to research and complete school assignments that require them to go online.<sup>5</sup> But others simply fall behind. In a country that prides itself on equal opportunity, the quality of a young person's education should not rest on proximity to restaurant chains. But for too many kids, that's reality. It's also why a majority of teachers surveyed by Pew fear that technology is widening the gaps between have and have-not school districts and students instead of closing them.<sup>6</sup>

Walling off students from full participation in the digital economy sets them behind in educational opportunity and economic competition. Some will overcome because exceptional people with grit and determination manage to succeed against great odds. But most will start behind and stay behind – not because they lack skills, or intelligence, or ambition, but because they weren't given the right tools when it mattered most.

That outcome is not inevitable. Commitment and smart public policies can help deliver digital opportunity to every American school child from every income group and every race and every nationality. We must ensure that every youngster is given the right educational foundation and the opportunity to learn about and to use 21<sup>st</sup> century technologies. There is a near-term opportunity for the country to do the right thing by its youngest and most vulnerable citizens. That opportunity is called reforming the Lifeline program.

More than eight decades ago, as the telephone became an increasingly integral part of daily life, the Communications Act of 1934 established the notion that access to bedrock communications technology was a basic right. Back then, phone service was the *sine qua non* of modern communication. Today, broadband has overtaken phone service as the essential communications medium of the digital economy. Common sense dictates that any government subsidy programs to make communications connectivity affordable for all should be expanded to include subsidies for high-speed Internet connectivity.

The mechanism for meeting this objective is Lifeline service, created in 1985 by the Reagan Administration to help bring basic phone service to low-income Americans on the principle that access to core communication technology is “crucial to full participation in our society and economy, which are increasingly dependent upon the rapid exchange of information.”<sup>7</sup>

The FCC's Lifeline program, if updated to cover broadband, can help ensure that young students and other lower income Americans can fully participate in the 21<sup>st</sup> century economy. First, the Lifeline program needs to be revised so that consumers are empowered to decide for themselves what communications services best meet their needs, and are provided the financial assistance to take

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<sup>5</sup> Anton Troianovski, “The Web-Deprived Study at McDonald's,” *The Wall Street Journal*, January 28, 2013, <http://www.wsj.com/articles/SB10001424127887324731304578189794161056954>

<sup>6</sup> Op. Cit. “How Teachers Are Using Technology.”

<sup>7</sup> Federal Communications Commission, “In the Matter of Lifeline and Link Up Reform and Modernization,” WC Docket 11-42, released Feb 6, 2012.

advantage of this right to choose. In addition, and this is critical to success, the program must be reformed to wring out waste, fraud, and abuse in order to maximize the dollars available to those who qualify for assistance.

The FCC has made it clear that updating Lifeline is a top agency priority because, in FCC Chairman Tom Wheeler's words, "we have entered the broadband era – but Lifeline has not." Accordingly, the Commission majority voted on June 18, 2015, to open a new rulemaking proceeding to solicit the best ideas from the brightest minds to identify the most important reforms and the best way to implement them. That means closing one of the biggest sources of Lifeline fraud by giving the government, not providers, the responsibility for identifying the consumers who are eligible for Lifeline subsidies. To further streamline the administrative process, it would make sense to adopt a coordinated enrollment process so that consumers can sign up for Lifeline at the same time as they apply for other government benefits. Automatic Lifeline de-enrollment that occurs when consumers have been de-enrolled from the government program that affirmed their Lifeline eligibility would provide an additional boost in administrative efficiency and program controls.

As FCC Commissioner Mignon Clyburn has noted, putting the government in charge of eligibility as with other programs such as SNAP (food stamps) and Medicaid would eliminate both the temptation for and the ability of bad actors to game the system by enrolling ineligible consumers. It's also possible that such an adjustment will encourage more providers to offer Lifeline service, giving low income consumers a wider range of providers and competitive offerings to choose from.

The digital revolution has opened a universe of new possibilities. In the past, such historic opportunities have often bypassed people of color. Today, it appears that students and adults in communities of color are sharing some of the new fruits. Low-income Americans, too, must be given a fair opportunity to take advantage of the digital age. Providing students with a digital-era education and ready access to broadband must be a foundational part of our strategy to close the digital divide and arm the country with the best-educated workforce possible. If we can do that, Americans of every race, ethnicity, and income group will have a fairer chance to seize the digital future and enjoy the jobs, higher incomes, and economic opportunities that will go with it.