

# INVESTING THE STIMULUS

BYTE BACK EMPOWERS DISTRICT RESIDENTS THROUGH  
COMPUTER LITERACY, IT CERTIFICATION, AND JOB TRAINING



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Special Thanks to:  
D.C. Office of the  
Chief Technology Officer  
(OCTO)  
& The D.C. Public Library (DCPL)

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# CONTEXT & HIGHLIGHTS

Byte Back was awarded \$1,051,556 in grant funds through the D.C. Office of the Chief Technology Officer (OCTO) and the D.C. Public Library (DCPL) to provide computer training to residents of the District of Columbia. The funds were associated with a \$2.4 million Broadband Technology Opportunities Program (BTOP) grant through the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce. This grant was

part of the "stimulus" from the American Recovery and Reinvestment Act. With this financial support, Byte Back provided basic computer literacy courses and other intermediary or more advanced computer training to low-income District residents. The purpose was twofold: to assist students in obtaining the computer skills they needed to search for and obtain work; and to provide residents with technology skills that are increasingly necessary to function in today's society.

## HIGHLIGHTS



Byte Back's mission is to improve economic opportunities by providing computer and technology courses to low-income residents in D.C.

We aim to bridge the digital divide.

1,657 students enrolled

22% were employed at the start while 78% were not employed

71% resided in a combination of the three most disadvantaged wards of the city - Wards 5, 7, and 8

42% were homeless or precariously housed, 24% had a disability, and 14% were ex-offenders/returning citizens

75% of participants had no computer at home and 89% had no high speed internet access

221 courses were provided at 23 different locations in the District, including 11 neighborhood libraries, 10 nonprofit organizations, and 2 government agency locations

76% completion rate

97.1% satisfaction rate

98% percent of participants stated that they would recommend the course to others

Students reported increasing computer usage by 263%

82.2% reported feeling more confident in using the computer

63.7% of students indicated a desire to pursue further education, and 43% acted on that desire by pursuing a GED, college degree, certification or other educational goal

Combined increase in earnings for students overall: \$3.4 Million (estimated)

# SCOPE AND AVAILABILITY



Thanks to the funding of the DC-BETA program, Byte Back served a large number of District residents during the Great Recession, precisely when these services were most needed. The chart below illustrates the number of courses made available, the number of students enrolled, and the percentage of students that graduated.

Byte Back received a total of \$1,051,556 in stimulus funding through the D.C. Office of the Chief Technology Officer (OCTO) and the D.C. Public Library (DCPL) to provide computer training to residents of the District of Columbia. The funds were associated with a \$2.4 million Broadband Technology Opportunities Program (BTOP) grant through the

National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce for DC's Broadband Education, Training, and Adoption programs (DC-BETA). This grant was part of the "stimulus" from the American Recovery and Reinvestment Act. It was the first large government grant ever received by Byte Back.

| <b>Class Type</b>     | <b>Computer Literacy Classes</b> | <b>Office Track</b> | <b>Community Academy</b> | <b>Certification</b> | <b>Totals</b> |
|-----------------------|----------------------------------|---------------------|--------------------------|----------------------|---------------|
| <b># of Classes:</b>  | <b>155</b>                       | <b>50</b>           | <b>14</b>                | <b>2</b>             | <b>221</b>    |
| <b>Capacity:</b>      | <b>2256</b>                      | <b>735</b>          | <b>217</b>               | <b>23</b>            | <b>3231</b>   |
| <b>Enrolled:</b>      | <b>1588</b>                      | <b>450</b>          | <b>132</b>               | <b>8</b>             | <b>2178</b>   |
| <b>% of Capacity:</b> | <b>70%</b>                       | <b>61%</b>          | <b>61%</b>               | <b>35%</b>           | <b>67%</b>    |
| <b>Complete:</b>      | <b>1248</b>                      | <b>300</b>          | <b>95</b>                | <b>6</b>             | <b>1649</b>   |
| <b>% Complete:</b>    | <b>79%</b>                       | <b>67%</b>          | <b>72%</b>               | <b>75%</b>           | <b>76%</b>    |

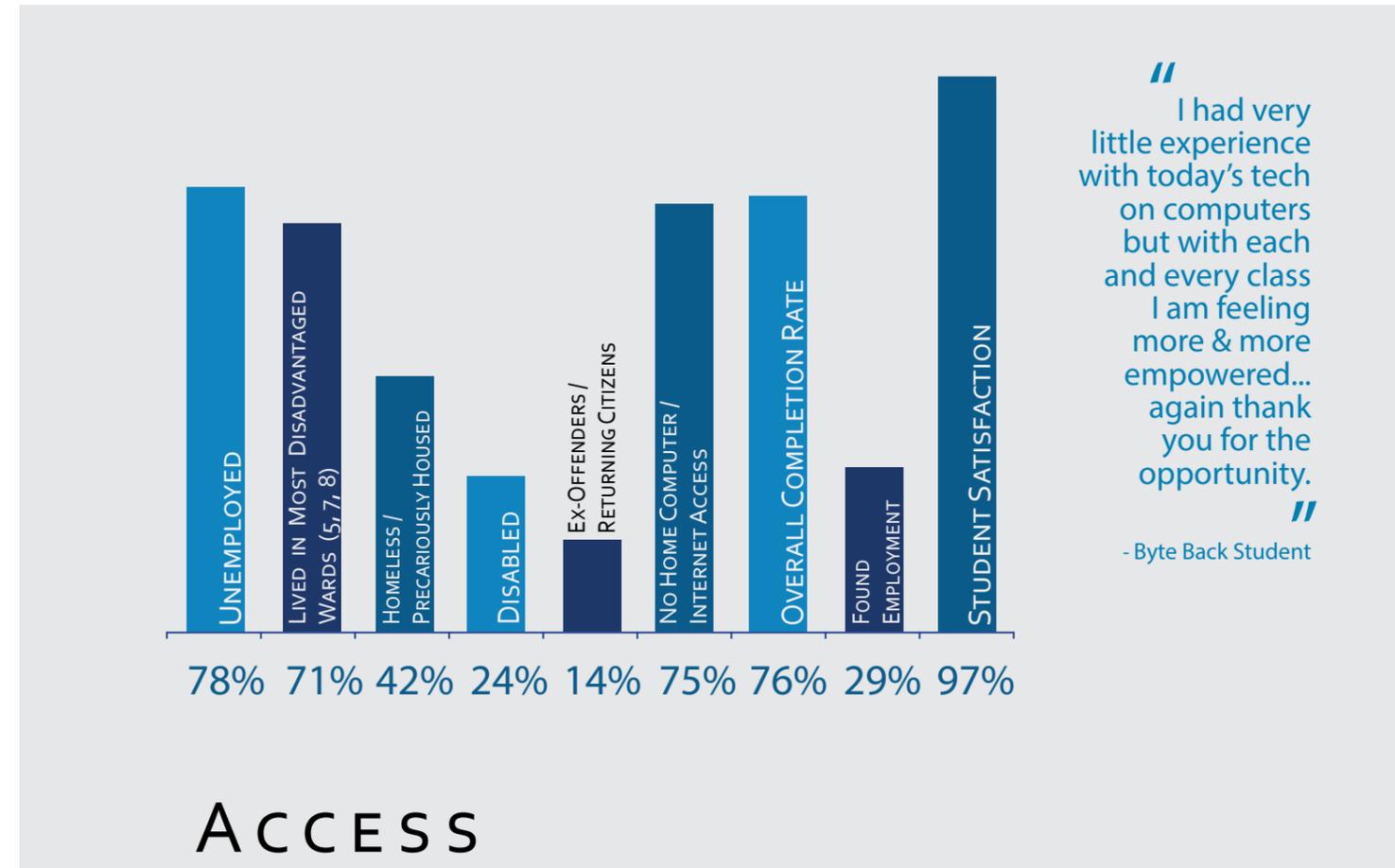
# STUDENT PROFILE



| Demographics - Race    |      |
|------------------------|------|
| African American       | 85%  |
| Latino                 | 11%  |
| White                  | 2%   |
| Asian/Pacific Islander | 0.7% |
| Native American        | 0.6% |
| Mixed Race             | 0.6% |
| Other                  | 0.4% |

The majority of Byte Back's DC-BETA-funded students were female (64%), and African American (85%) and 78% were employed at the start of class. In addition, Byte Back served students who identified as Latino (11%), White (2%), Asian/ Pacific Islander (0.7%), Native American (0.6%), Mixed Race (0.6%), and Other (0.4%). A substantial number of students identified as Disabled (24%), Ex-Offender/Returning Citizen (14%), and Veteran (5%). The majority (71%) lived in the most disadvantaged wards of the city: Ward Five (17%), Ward Seven (32%), and Ward Eight (22%). Wards One, Four, and Six were each home to 8% of the students, with the remainder in Wards Two (4%) and Three (1%). Forty-two percent (42%) were homeless or precariously housed, living on the street or in emergency shelter, group home, halfway house, transitional housing, foster care, or staying temporarily with friends or family. While 31% had attended at least some college, 46% only went as far as a high school degree or equivalency, 16% had not finished high school, and 5% were still enrolled in high school.

|                                |                        |                                     |              |                    |
|--------------------------------|------------------------|-------------------------------------|--------------|--------------------|
| 37%                            | 26%                    | 21%                                 | 12%          | 3%                 |
| Highschool Diploma / GED / EDP | Some College / AA / AS | No Highschool Diploma or Equivilant | BA or Higher | Other / Vocational |



“ I had very little experience with today's tech on computers but with each and every class I am feeling more & more empowered... again thank you for the opportunity.”

- Byte Back Student

## ACCESS

Students were asked on their application about their experience with and access to computers and the Internet. While some students had never before used a computer (21%) or the Internet (27%), access to these resources was a much larger issue. Fully 75% of students reported having no computer access at home. Students indicated that they had access through the library (18%), at work (3%), at the home of a family member (1.3%) or friend (0.1%), at Byte Back (0.5%), through their cell phone (0.5%), or did not specify where (18%).

Thirty-four percent (34%) had no access to a computer at all. Accessing the Internet was even more problematic. Eighty-nine percent (89%) were without high speed Internet in the home. Eight percent (8%) had dial-up at home and 7% had access through their cell phone. Others could only access the Internet through the library (14%), at work (3%), at the home of a family member (1%), at the home of a friend (0.1%), or at Byte Back (0.3%) and 19% said they could get access, but were not specific about where. Fully 36% had no way to access the Internet at all.

# ADDRESSING BARRIERS

“ Before coming to Byte Back, I did not even know how to turn on my computer. Now I’m free to grow and blossom!

”  
- Byte Back Student

## 1. Outreach and Enrollment

The most critical barriers are those preventing students from learning about, registering for, and taking classes. Although technology is central to Byte Back’s mission, Byte Back must often use low-tech methods of outreach to recruit students. Students in the DC - BETA program heard about classes in the following ways:

|                                     |                              |
|-------------------------------------|------------------------------|
| 43% Word of mouth                   | 5% DC Public Library         |
| 14% Referral from another nonprofit | 2% Online search             |
| 14% Saw a flyer                     | 0.5% Walk-ins                |
| 13% Government agency               | 0.5% Television announcement |

## 2. Class Times

While in the past, Byte Back relied entirely on part-time volunteers to teach classes in the evenings and on weekends, the organization secured a team of full-time AmeriCorps members to teach daytime classes to accommodate the needs of unemployed and retired students as well as those students who might feel unsafe attending class at night.

## 3. Relevance to Job Seekers

Byte Back redesigned its computer literacy curricula to directly address the needs of students seeking employment by teaching beginning students how to search and apply for jobs as part of their coursework. Byte Back also created Job Seeker Boot Camps within which students work individually with volunteer professionals on developing resumes, cover letters, and interview skills.

## 4. Transportation

Since most students were unemployed, the cost of transportation to and from class could be prohibitive, so Byte Back brought classes to 23 neighborhood libraries and community-based organizations in the most disadvantaged wards of the city.

## 5. Accessibility

Byte Back taught classes in English, Spanish, and American Sign Language (ASL). Almost all classroom locations were wheelchair accessible and assistive technology was made available (such as braille keyboards, large print keyboards, Aukey magnifiers, jaws software, and pocket talkers) to students with disabilities. Byte Back also provided special classes for ex-offenders/returning citizens at two different locations. Byte Back offered summer computer classes for youth, conducting extensive outreach to recruit youth in the foster care system, as they have an urgent need to obtain gainful employment as soon as they age out of foster care at eighteen.

## 6. Fear of Technology

Since many students had little to no experience with computers and the Internet, many feared technology, from worries about breaking the computer to wariness of Internet fraud and scams. Byte Back made an effort to diversify locations of classes to allow familiarity for students by choosing host sites like public libraries and community-based organizations. Byte Back addressed students’ fear directly in class and offered strategies and solutions to avoid Internet scams. Over the course of each class, students were taught how to find information on the Internet. Often when a student asked a question in class, the instructor’s response would be, “Let’s look it up and find out!”

By the end of class, 86.1% of students said they plan to take another Byte Back course. Byte Back had 2,344 enrollments from 1,657 unique students; 687 of the enrollments were students taking multiple classes within the grant period.



| Increasing Confidence & Engagement              |             |
|---|-------------|
| Increased Computer Usage                        | 263 %       |
| Increased Confidence                            | 82.2 %      |
| Increased Desire to Pursue Additional Education | 63.7 %      |
| Combined increase in earnings overall:          | 3.4 Million |

“ It really makes me feel like I have the ability to work again, it’s like going through a deep dark tunnel and now I can see the light.

”  
- Byte Back Graduate

# SCOPE AND IMPACT

“ I hope to keep learning more about the inner workings of a computer, especially building and programming them. ”  
- Byte Back Student

## Breadth of Availability

The DC-BETA funding made it possible for Byte Back to provide 221 computer courses of varying skill levels to 1,657 low-income residents of the District. By collaborating with the DC Public Library and other community groups, Byte Back offered courses at neighborhood sites throughout the District, making them accessible to the largest number of residents possible. The variety of courses included the following:

**PC for Beginners:** a two-part basic computer literacy course designed for students with no previous experience with computers or the Internet.

**Microsoft Office Track:** a course which trains students in the use of Microsoft Word, Excel, PowerPoint, and Outlook. Job readiness training is included with the course.

**Office Track Youth:** a course which trains youth ages 16-21, enrolled in the Summer Youth Employment Program, in the use of Microsoft Word, Excel, PowerPoint and Outlook, as well as job readiness skills.

**Summer Youth Technology Training:** a four-day training for young adults (17-21) to expand their computer skills and provide a feel for various technology careers. It includes training in Microsoft Office and an introduction to Web Design, Database Administration, Computer Repair, and Graphic Design.

**PC Hardware and Networking Fundamentals:** a course teaching students about PC troubleshooting and safety issues, component installation, as well as bios, memory, and hard disk partitioning. It also covers networking fundamentals which prepares students for employment in computer repair, networking operations, and help desk administration.

**Financial Literacy Training:** a money management course provided by Capital Area Asset Builders through contract with Byte Back.

**Internet and Computing Core Certification (IC3):** a course designed to prepare students for employment as an Administrative Assistant. It covers word processing, spreadsheet and presentation, computing fundamentals, operating in an active directory domain environment as well as an internet, network and email. Job readiness training, an internship, and certification exam preparation are included.

**A+ Certification:** a course teaching installation, configuring and troubleshooting of the following: PC hardware (including laptops and mobile devices, and custom configurations), Printers, Networking components, operating systems including Windows XP, Vista and Windows 7 Enterprise, Operational procedures including safety, environment, customer communications, and Security. Practice and preparation for the certification exam is included.

## Neighborhood-Based Classes

Byte Back provided a total of 221 courses at 23 locations over the grant period: 11 neighborhood branches of the D.C. Public Library (Anacostia, Benning, Capitol View, Francis Gregory, Lamond-Riggs, Mount Pleasant, Northeast, Northwest One, Watha Daniels Shaw, Bellevue, and Woodridge), two at government agencies (Office on Returning Citizen's Affairs at Shadd and the ORCA offices), and 10 community-based agencies (Byte Back, Capital Heights/Shaw Family Support Collaborative, Faircliff West, Hubbard Place, Jubilee Housing, Language ETC, Perry Community Services, Southeast Ministry, Family Place, and Washington Middle School for Girls). Partnerships with these community-based agencies greatly expanded the scope of the project without incurring additional costs and maximized the benefit to students at these locations.

## COURSES TAUGHT BY POPULATION

| # of Classes | Course                           | Capacity | Enrolled | % of Capacity | Complete | % Complete |
|--------------|----------------------------------|----------|----------|---------------|----------|------------|
| 24           | Classes specifically for youth   | 360      | 183      | 51%           | 144      | 79%        |
| 48           | Classes specifically for seniors | 720      | 596      | 83%           | 483      | 81%        |
| 149          | Classes with no age designation  | 2151     | 1399     | 65%           | 1022     | 73%        |

## COURSES TAUGHT BY LANGUAGE

| # of Classes | Course                    | Capacity | Enrolled | % of Capacity | Complete | % Complete |
|--------------|---------------------------|----------|----------|---------------|----------|------------|
| 176          | Classes taught in English | 2582     | 1820     | 70%           | 1368     | 75%        |
| 37           | Classes taught in Spanish | 529      | 1326     | 62%           | 258      | 79%        |
| 8            | American Sign Language    | 120      | 32       | 27%           | 23       | 72%        |

## TOTALS

|     |             |      |      |     |      |     |
|-----|-------------|------|------|-----|------|-----|
| 221 | All Classes | 3231 | 2178 | 67% | 1649 | 76% |
|-----|-------------|------|------|-----|------|-----|

Nine students who took DC-BETA-funded classes went on to take a total of 13 IT certification courses funded by non-BTOP sources and valued at a total of \$85,465. These courses were aimed at starting new careers in Information Technology or Business & Professional Services. So far, these nine students have earned a total of 11 certifications (IC3, A+, MCSA, MCITP and MOS). These figures do not include the 8 students in BTOP-funded certification classes.”

LEVERAGED  
**\$85,465**  
IN CERTIFICATION  
CLASSES:

# STRATEGIES FOR SUCCESS

# COURSE OFFERINGS

// The instructors at Byte Back are accommodating and have the students' best interests at heart. It's hard to be an instructor over a diverse group of people, and I can say with great pleasure that Byte Back's instructors and staff really go the distance with the students.

//  
- Byte Back Student

## Consistent High Quality Instruction

For this project, almost every instructor was a full-time AmeriCorps member. Byte Back recruited and trained a large team of highly motivated individuals to teach at locations all over the city and to write and refine curricula. Instruction by full-time AmeriCorps volunteers culminated in improvements to the program design and curricula based upon AmeriCorps' wide range of classroom experiences. Had the organization hired employees, the cost incurred would have severely limited the scope of services Byte Back could provide. Students raved about their instructors in their end-of-course surveys.

## Increasing Student Confidence and Engagement as Learners

A large number of District residents were unsuccessful in the public school system for a wide variety of reasons, such as undiagnosed and unaddressed learning disabilities, chaos in the home or school, and/or inadequate instruction. As a result, many students came to Byte Back with no faith in their own ability to learn. Byte Back addressed this barrier by utilizing an empowerment model of instruction that uses a project-based and contextual learning style. Byte Back provides sufficient class time for students to absorb materials and feel confident as learners and technology users. Byte Back instructors are supportive and encourage students to support and assist one another. Teamwork is a key aspect of learning at Byte Back. Classes are interactive and hands-on. Courses are designed so that students may experience success early and often in the process.

596 Senior-Citizens

183 Youth

326 Spanish-speakers

32 ASL students

## Specialized Instruction

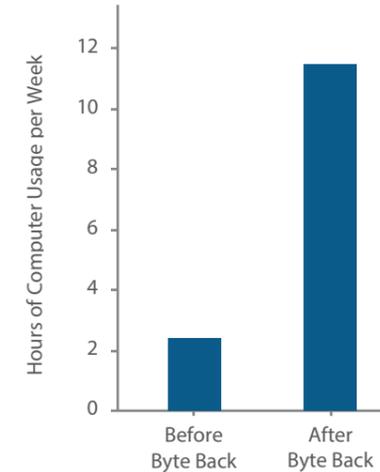
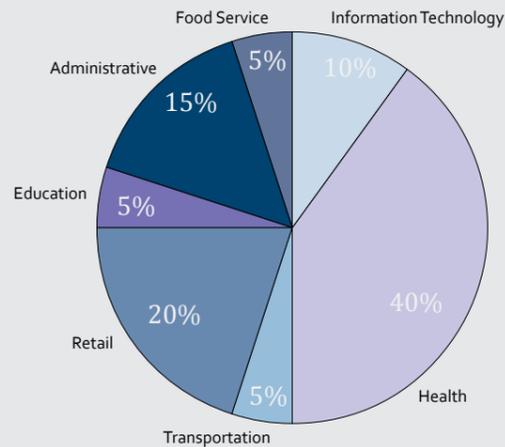
Over the course of the grant period, Byte Back targeted outreach and service delivery to four key populations: senior citizens, youth (especially youth in foster care), Spanish speakers, and the disabled community. Byte Back created customized curricula for each group to accommodate linguistic requirements, learning styles, and interests. While youth and senior citizens could enroll in any course offered, a total of 183 youth enrolled in 24 courses specifically designed for youth and 596 seniors enrolled in 48 courses specifically designed for them. In addition, there were 326 enrollments in 37 courses taught in Spanish and 32 enrollments in 8 courses taught in American Sign Language.

| # of Classes | Course Name                           | Capacity | Enrolled | Complete | # of Capacity | # of Complete |
|--------------|---------------------------------------|----------|----------|----------|---------------|---------------|
| 1            | A+ Certification                      | 8        | 5        | 63%      | 5             | 100%          |
| 1            | IC3 Certification in ASL              | 15       | 3        | 20%      | 1             | 33%           |
| 1            | Money Management 101                  | 25       | 13       | 52%      | 11            | 85%           |
| 31           | Office Track in English               | 457      | 326      | 71%      | 199           | 61%           |
| 2            | Office Track in ASL                   | 30       | 9        | 30%      | 7             | 78%           |
| 5            | Office Track in Spanish               | 68       | 43       | 63%      | 26            | 60%           |
| 12           | Office Track Youth                    | 180      | 72       | 40%      | 68            | 94%           |
| 38           | PC for Beginners in English           | 570      | 447      | 78%      | 341           | 76%           |
| 21           | PC for Beginners 1 in English         | 277      | 177      | 64%      | 132           | 75%           |
| 14           | PC for Beginners 2 in English         | 198      | 94       | 47%      | 67            | 71%           |
| 4            | PC for Beginners in ASL               | 60       | 12       | 20%      | 10            | 83%           |
| 1            | PC for Beginners Seniors in ASL       | 15       | 8        | 53%      | 5             | 63%           |
| 17           | PC for Beginners Seniors              | 255      | 245      | 96%      | 180           | 73%           |
| 14           | PC for Beginners 1 Seniors            | 210      | 183      | 87%      | 162           | 89%           |
| 14           | PC for Beginners 2 Seniors            | 210      | 139      | 66%      | 119           | 86%           |
| 18           | PC for Beginners in Spanish           | 257      | 171      | 67%      | 137           | 80%           |
| 6            | PC for Beginners 1 in Spanish         | 84       | 48       | 57%      | 41            | 85%           |
| 6            | PC for Beginners 2 in Spanish         | 90       | 43       | 48%      | 37            | 86%           |
| 1            | PC for Beginners 1 Seniors in Spanish | 15       | 11       | 73%      | 9             | 82%           |
| 1            | PC for Beginners 2 Seniors in Spanish | 15       | 10       | 67%      | 8             | 80%           |
| 1            | PC Hardware & Networking              | 12       | 8        | 67%      | 8             | 100%          |
| 12           | Summer Youth Tech. Sampler            | 180      | 111      | 62%      | 76            | 68%           |
| 221          | TOTAL: ALL CLASSES                    | 3231     | 2178     | 67%      | 1649          | 76%           |

# EXPLORING THE DATA

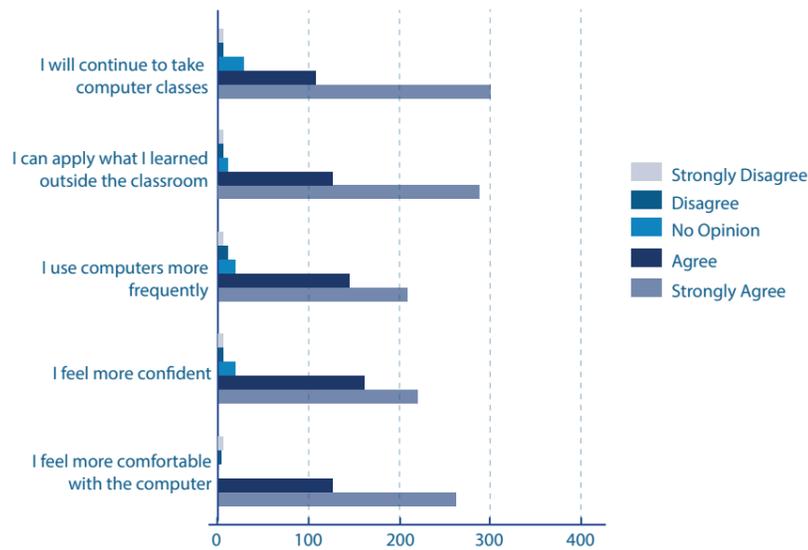
## Diversified Employment

Although the primary goal of the DC-BETA program was to provide computer literacy training to increase Internet adoption, the goal for many students was employment. According to the student outcome survey, at the start of Byte Back classes, 22% of respondents were employed and 78% were not employed. New jobs secured by students were spread across a wide variety of industries.



IMPACT  
ON  
COMPUTER  
USAGE

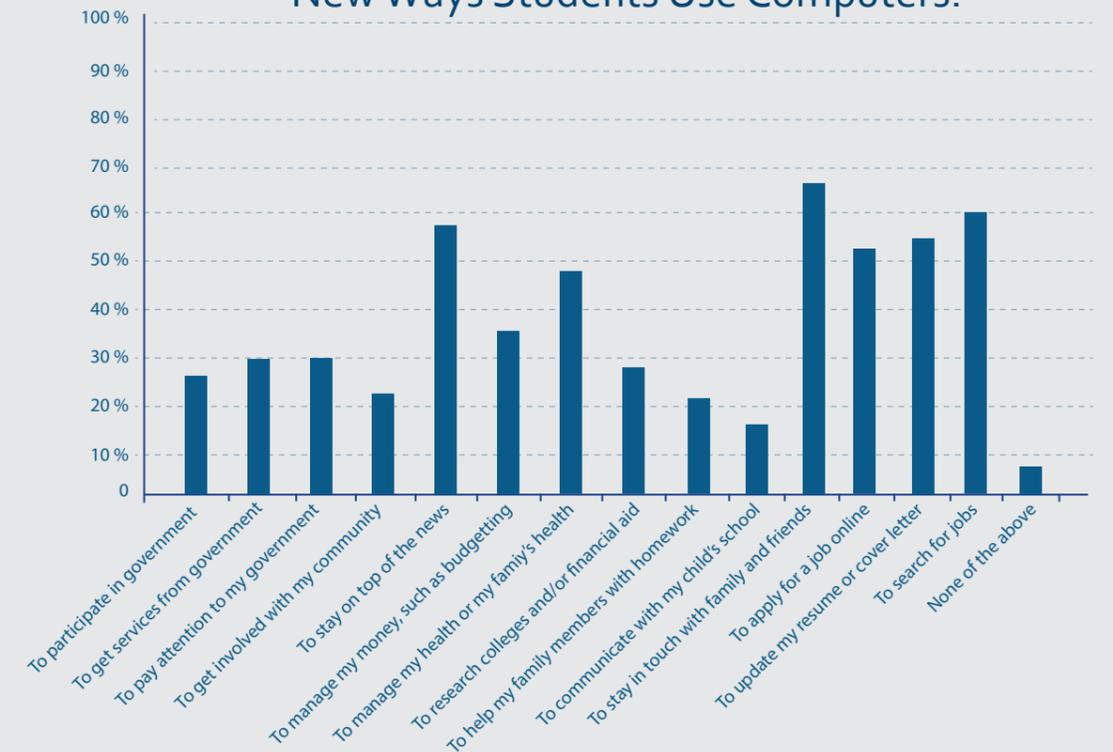
## Student Satisfaction



“ Byte Back is a terrific service. I have tried to learn these skills in other places, but Byte Back is the most organized and competent source of this training that I have experienced to date.

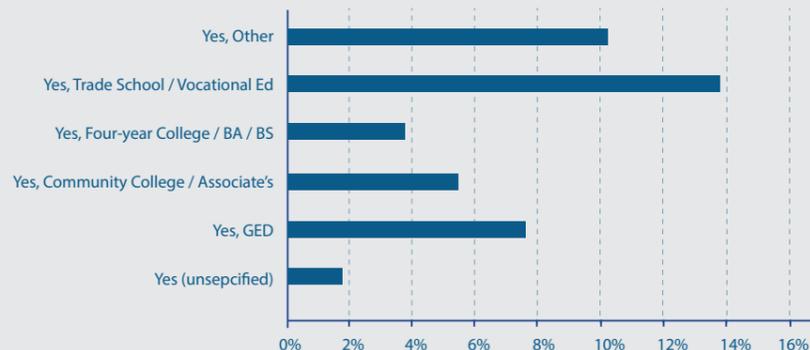
- Byte Back Student

## New Ways Students Use Computers:



According to Byte Back's student outcome survey, 68.7% of students reported an overall increase in self-confidence as a result of their class, 82.2% reported increased confidence in using new technology, and 63.7% said the class "increased my desire to pursue more education." In fact, 43% had already acted on that desire by pursuing a GED, college degree, certification or other educational goal.

## Further Educational Attainment



According to Byte Back's student outcome survey, on average, respondents increased their computer usage by 263% as a result of their training. The degree of increase depended on how many hours they used the computer prior to their Byte Back class. For example, students who reported not using the computer at all before starting their class reported using it an average of 15 hours per week afterwards.

Not only did graduates increase the amount of time spent using technology, but they also expanded the ways they use it as well. Above is a chart showing the new tasks students reported performing on the computer as a result of their Byte Back class.

# EMPLOYMENT OUTCOMES

“ The IC3 class especially helped me to prepare for an office job – everything from learning to resolve conflicts in the workplace to the more technical aspects

– Byte Back Graduate

## Overcoming Barriers to Employment

PC for Beginners classes taught students how to search for employment and how to fill out online job applications. Students in Office Track learned how to create a resume and cover letter. Byte Back provided job clubs in English, Spanish and American Sign Language, job seeker boot camps and weekly sessions with volunteer professionals to work individually with students on their resume, cover letter and interviewing skills. Byte Back’s employment team worked closely with certification students to place them in technology jobs.

## Leveraging Complementary Services from Partnerships

Through a wide range of partnerships and collaborations, students taking classes under the DC-BETA grant received a wide variety of additional services and resources. Byte Back provided direct referrals to organizations providing services that are complementary to the organization’s work, such as additional job readiness training, adult basic education, GED preparation, and job placement services. Byte Back also referred students to human service agencies to assist them with housing, childcare, and case management.

## Outcomes

According to our student outcome survey, 34% of unemployed students found employment after their training. They earned an average of \$13.10 per hour, working an average of 32 hours per week for an average duration of nearly 8 months for a total of \$14,407 by the time of the survey. This amounts to an estimated total increase in student earnings of \$3,388,338. [See earnings calculations below.]

*Earnings Calculations:* ByteBack administered a student outcome survey every six months, inquiring as to the long-term outcomes of students who completed 6-12 months previously. Over the course of the grant, we emailed the survey to every single student with a working email address and also called each student to conduct the survey by phone. In total we received completed surveys from 323 unduplicated respondents. We extrapolated the results of this survey to apply to the entire 1,657 enrolled students. Of the unduplicated respondents, 21.3% (approximately 353 students) were previously employed, while 78.7% (= 1304) were not employed. Of these that were not employed, 20.1% (= 262) got a new job, while 79.9% (= 1042) did not get a new job. Of those who did not get a new job, 54% (= 542) were not ready or available for work (due to factors such as retirement, illness, injury, disability, or caring for others) and 48% (= 500) were ready but unable to find employment. The total earnings is the amount earned per student (\$14,406.99) times the extrapolated number of students (= 262) who found employment which amounts to approximately \$3,388,337.80.

## Work Left to Do

Those respondents who said they were available for work but unable to find employment, had been unemployed for an average of 4.8 years. It is likely that they needed more expansive support services than Byte Back was equipped to provide with the DC-BETA funding. This group identified a variety of circumstances leading to their unemployment.

  
1,657 Students

  
762 students were unemployed (estimated)

  
262 found employment (estimated)

earning an average of \$419 per week



– Brian Pitts, Byte Back Graduate

## EMPLOYMENT OUTCOMES FOR A+ CERTIFICATION STUDENTS

The BTOP grant funded one A+ certification course with five students. All five completed the course and four were employed when this report went to print. Below is a list of their new positions:

|   |              |
|---|--------------|
| Migration Technician, Dept. of Labor      | \$20/hour    |
| Circulation Technician, DC Public Library | \$14.47/hour |
| Migration Technician, Dept. of Labor      | \$20/hour    |
| Logistics Coordinator                     | \$15/hour    |

## EARNINGS

Extrapolating survey responses to the entire student body, students experienced a combined increase in earnings of approximately

**\$3.4 million**

by the time the surveys were administered, and additional earnings since that time.

# SUCCESS STORIES

Certification classes present some of our students with a rigorous challenge and the potential for amazing results.

**Fabiane Butler** began with Office Track at Francis Gregory Library and went on to become IC3 certified at Byte Back. She used her new MS Office skills to write and design the cover for her first book, *From Sugar to Sh\*\**: A Humor in Homelessness, which she self-published. It is available for Kindle at Amazon.com. "The skills I learned at Byte Back are invaluable to what I want to do," she said.

**Sean Coleman** enrolled in PC Hardware and A+ certification and became fully A+ certified. He secured a position as a Migration Tech for the U.S. Department of Labor and traveled around the country, sometimes flying first class, upgrading systems from Windows XP to Windows 7.

**Ronald Hudson** began in Office Track at Bellevue Library. He went on to take PC Hardware and A+ at Byte Back and became A+ certified and began taking our Network+ class. He secured a job working with NGEN as Jr IT Specialist at the Pentagon and has top-secret clearance and soon after, passed the exam to become Network+ certified.

**Selina Cook** was working as a part-time hairdresser in 2011 when she enrolled in Office Track class at Capital View library. There she made new friends and they decided to enroll in IC3 together. They studied as a team, became certified, and enrolled in MCITP and A+ becoming certified in these as well. She got a job as a LAN (Local Area Network) Technician for Triune Solutions and is a Tier II IT Specialist with NGEN (Next Generation Enterprise Network) working at the Pentagon. She obtained her Network+ certification and her next goal is Security+ certification.

**Brian Pitts** began his studies at Oberlin College but was unable to complete due to health problems. After two years of unemployment, he enrolled in Office Track, followed by Money Management, PC Hardware and IC3 and became certified. "I was able to say to prospective employers, 'I haven't been sitting at home, I've been working to improve my skills, and I have the computer skills [you] need.'" He secured a job at the D.C. Public Library as a circulation tech where he may receive tuition assistance toward completing his bachelor's degree.

**Chantal Damey** took Office Track at Benning Library and went on to become IC3 certified. She now works Sunrise Assisted Living.



“  
Byte Back teaches what's current, what people need right now, and the teachers made it so that it wasn't over my head.  
”  
-Diane Dallas,  
Byte Back Graduate

## Leveraging Additional Computer Courses

Many students who took one or more DC-BETA funded classes went on to take additional Byte Back classes supported by other funding sources. For example, eight students who began in BTOP-funded classes enrolled in Enterprise DC program funded by the D.C. Department of Employment Services. Enterprise DC was a partnership of three nonprofits to serve residents interested in starting their own small businesses. In this program, the Washington Area Community Investment Fund taught students how to create a business plan and apply for a small business loan; the Greater Washington Hispanic Chamber of Commerce connected students with mentors who are successful small business owners; and Byte Back taught students the technology skills needed to start a small business in the 21st century, including QuickBooks, Access, graphic design, web design, e-commerce, and social media marketing. DC-BETA-funded students launched a company providing affordable wedding services, a line of accessories, a business offering customized songwriting services, and a line of knitted fashion.

## SATISFACTION RATE:

In the 21st century, customer satisfaction is key. Byte Back staff believe that free classes should still provide high quality education and experience. Most Byte Back students have been short-changed in almost every aspect of life. Byte Back's staff, board, and volunteers see it as their duty to provide students with the best customer service possible. As a result, the student satisfaction rate for DC-BETA funded classes was 97.1% (89.8% said they were very satisfied and 7.3% said they were somewhat satisfied). In addition, 97.8% said they would recommend the course they took to others and 86.1% said they plan to take another Byte Back course.

# BY THE NUMBERS

## SYSTEMS AND PROCEDURES TO PROTECT PROGRAM INTEGRITY

### Data Collection and Data-Driven Program Improvements:

Byte Back collects data in the following areas:

- Demographics
- Success and completion rates
- Student evaluation of classes
- Student evaluation of their instructors
- Certification exam passage
- Changes in students' lives attributable to Byte Back

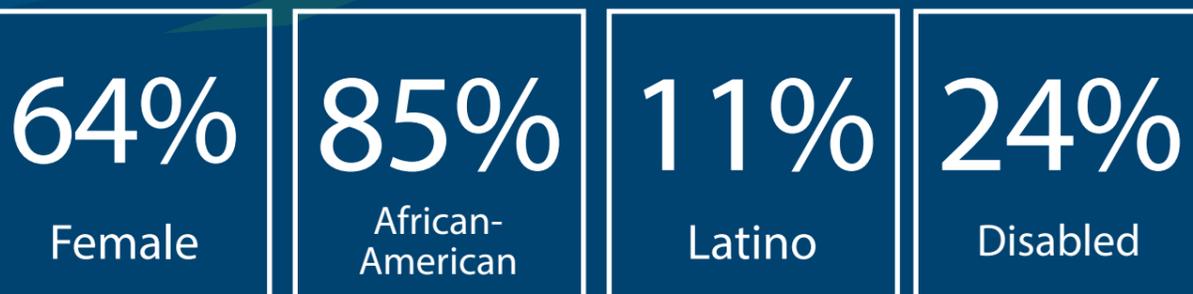
Byte Back looks at this data in various ways. For example, if a particular class has a low completion rate, Byte Back staff examine the class and student evaluations with an eye to addressing problems in that class.

It may be that there is an issue with the

instructor or with the pace of the class. In such instances, Byte Back staff and volunteers attempt to remedy problems through modeling or feedback. If that is not possible or effective, the instructor is replaced.

Byte Back used data and the experiences of their AmeriCorps volunteers to identify that PC for Beginners was not providing sufficient time for students to absorb the material. Byte Back then expanded that time by splitting that course into two parts PC for Beginners 1 and 2.

Between the data collected and the information Byte Back obtains from leaders in technology industries, they update and adapt the curricula regularly to ensure that the organization provides IT training that is both current and effective in assisting graduates to obtain employment.



221  
Courses

- Quality Control: Byte Back hired full-time AmeriCorps members, rather than relying on part-time volunteers, so that they would receive more training in Byte Back's curricula, model, and methodology; to improve communication between Byte Back staff and students; and to develop a higher level of consistency and professionalism.

23  
Locations

- Adequacy of Satellite Locations: All classroom sites were inspected by Byte Back's director of programs or designee prior to the start of classes to ensure that the facility was safe and secure and that the technology was sufficient to meet the needs of students.

- Partnerships: Byte Back negotiated and executed a memorandum of understanding with each nonprofit partner site clarifying expectations and agreements, especially as they pertained to AmeriCorps members.

2,178  
Enrollments

- Due Diligence: Byte Back published a student catalog each year, in print and on Byte Back's website. It listed and described course offerings as well as student policies and procedures. Each student filled out a detailed application and signed a contract outlining what is expected of the student and what the student can expect from Byte Back. Each student provided emergency contact information and was asked to sign a waiver for media.

- Background Checks: All AmeriCorps instructors were required to have background checks, including the FBI, the sex offender registry, and the D.C. police department.

- Data and Trust: The D.C. Public Library (DCPL) created an online, password-protected QuickBase database so that DCPL staff could see student registration, attendance, and completion records in real time. This database also served as a backup of data kept in Byte Back systems.

- Insurance: Byte Back carried insurance policies including liability insurance that included both part-time volunteers and full-time AmeriCorps members. As a licensed post-secondary education institution, Byte Back had a surety bond throughout the grant period.

76%  
Completion

- Deliverables: Byte Back scheduled classes and examined data on a regular basis to ensure that milestones and goals were met.

- Customer Service and Satisfaction: Student concerns and complaints were addressed swiftly.

- Disruption: When necessary, disruptive students were removed from the classroom and class roster to minimize the interruption of others' learning.

# FIRST TIME TECHNOLOGY

## Provision of Refurbished Computers and Free Internet

Byte Back believes that it is not enough to teach students how to use a computer. Therefore, Byte Back also provides a means by which students can immediately practice their new skills in the comfort of their home, putting their training to good use. Upon completion of PC for Beginners or Office Track, students received a voucher for a free refurbished computer. Initially these computers were purchased from a partner, First Time Computers (FTC), until its doors closed in the fall of 2012. Beginning in April 2013, Byte Back launched a new program, First Time Technology, to replace FTC. Graduates received a flat screen monitor and desktop computer, loaded with Microsoft Windows 7 operating system, Microsoft Office Suite 2010, and antivirus software. They also received instruction and demonstrations in how to set up their computer at home and a document explaining how to properly care for it. Each computer included a one-month warranty, after which customers can return for repairs at below-market rates.

One major barrier for low-income computer users is the cost of Internet access. At the start of the grant period there were neighborhoods in the District in which the broadband adoption rate was below 50%, and as mentioned previously, only 11% of BTOP-funded students had high speed Internet at home at the start of classes. Therefore, as a part of the DC-BETA program, Byte Back partnered (through the DC Public Library) with Cricket Communications to provide a free modem and a year of free Internet access. When this service was no longer available, Byte Back supplied students with information about EveryoneOn.org which lists reduced price Internet services from Comcast Internet Essentials and Freedom Pop.



# IN SUMMARY



Byte Back expresses its gratitude to the U.S. Department of Commerce, the National Telecommunications and Information Administration (NTIA) for the BTOP grant and to the D.C. Office of the Chief Technology Officer and the D.C. Public Library for allowing Byte Back to partner in the implementation of the DC-BETA program. Byte Back was honored to participate in the American Recovery and Reinvestment Act, and took its mission very seriously.

The BTOP award of DC-BETA funding to Byte Back benefitted the organization and the DC community enormously. At the time of the award, the demand for computer training was skyrocketing. Individuals who had lost jobs that did not involve a computer suddenly needed computer skills simply to reapply for the same occupation. Others lost jobs in occupations where new jobs were in short supply or non-existent, and decided to seek training for a new career in a growing industry such as information technology. The BTOP grant provided the resources to sufficiently staff Byte Back operations to meet the needs of the community. It also provided the resources and time that Byte Back needed to improve program design and curricula, measure outcomes, and learn from data. It allowed Byte Back an opportunity to demonstrate impact, so that the organization might leverage other financial resources such as local and/or federal government grants and national foundation grants.

The benefits of the BTOP grant to the community go far beyond the number of individuals who received computer training. Students use their newfound computer skills to help out at church, manage their health and their family's

health, engage in their children's learning, seek out and access additional educational opportunities, and to obtain gainful employment. As graduates obtain positions that pay a living wage, they have increased resources to spend in their communities. Employed Byte Back graduates add to the Districts tax base. Employed students model success for other low-income community members who've lost hope of finding a job that they find value in both personally and financially.

The increase in computer literacy and access because of the BTOP grant served to decrease the isolation of many senior citizens and disabled individuals, as graduates learned to use email and social media to maintain contact with friends and family. Computer and Internet usage allow graduates to more easily engage their community and government, and make for government cost savings associated with paperless service delivery. Finally, through the distribution of refurbished computers, the BTOP grant benefitted the environment by diverting computers and the toxic materials that can leak from them out of local landfills, instead placing them in the homes of low-income families, where they are needed.

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