

JEVS TechServ Scholars: Bridging the STEM Divide through Service

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JEVS TechServ Scholars kicked off their year of service at a swearing-in ceremony in the Fall of 2017.

Photo Credit: Linette Kielinski

The **JEVS AmeriCorps TechServ Scholars** program launched in August 2017 with a cohort of 20 remarkable young adults. The program emerged as JEVS practitioners grappled with the following daunting and essential question: How can we effectively engage disconnected young adults (Opportunity Youth) in high-

poverty regions, connect them with career pathways in STEM (Science, Technology, Engineering and Math), and also address core community education and talent development needs?

This multi-part question came from our efforts to connect youth to living wage career pathways in Philadelphia and Southern New Jersey. We continually faced the staggering social trends plaguing our region: nationally, record-breaking poverty rates; high youth unemployment; and challenged education systems, giving rise to “STEM Deserts” -- areas where residents have lower access to STEM programs and resources. At the same time, we see a growth in STEM occupations in our cities, deemed high growth and high potential by area experts (“Driving Tech Talent,” 2017).

Five Essential Elements

As we sought answers to this question, we kept coming back to **five essential elements** that needed to drive our solution. These five elements, derived from research and best practices in the youth development field, led to the creation of JEVs AmeriCorps TechServ Scholars, a community pipeline solution for diverse talent within Philadelphia and Camden. These five elements are the following:

- 1. Meaningful Engagement (community service):**
Young adults -- particularly the millennial generation

-- often seek a connection to meaningful causes. They want to create positive changes within their communities. This is an awesome and powerful attribute of this generation that we wanted to harness. Additionally, it is key to engage youth from the communities we want to serve -- mainly high poverty neighborhoods in Philadelphia and Camden. This desire to improve the life of others and give back is vital to connecting intrinsic values to the community ("Final Report: Community Solutions for Opportunity Youth," 2017).

2. **Learn and Earn Opportunities:** Many of the youth JEVS serves are parenting, caring for family members, and must have income while learning and serving their community. Therefore, we had to create a solution that combined skill attainment, credential building, and the ability to earn a stipend ("Building a Grad Nation," 2017).
3. **Exposure:** Many lower income youth came to our programs with low-expectations of their potential and/or a lack of knowledge about possible career options, including STEM careers that pay higher wages and are growing in number. We wanted to build a program that was a true on-ramp to a STEM careers not usually accessed by the population we served. We needed to open doors fast and allow youth to explore what drives them.
4. **Safe Opportunities to Explore and Learn:** The highly competitive employment field means that

employers expect employees to come to them fine-tuned and ready to run. Such an expectation is often unrealistic and puts low-income youth at a disadvantage since they have not had the opportunities to safely explore career options, as well as practice them in settings that provide timely and constructive feedback.

5. **Social Capital:** Our career paths are mostly governed by the social capital that comes along with your family and community connections. What this means is that low-income youth growing up in isolated communities are far behind once they enter entry-level careers.

JEVS AmeriCorps TechServ Scholars

JEVS AmeriCorps TechServ incorporates each one of these five elements, creating a solution for both the young adult participants and the communities they serve.

Opportunity Youth are recruited from the communities we serve, and are given the opportunity to be social agents (*Meaningful Engagement*). Through TechServ, our 20 AmeriCorps scholars are serving as "STEM Ambassadors," providing STEM activities and instruction within their own communities across Philadelphia and Camden. Through the AmeriCorps model, we are able to link national service, youth leadership, and workforce development. TechServ scholars learn while serving, and also receive living allowances, awards for postsecondary

education, and medical benefits (*Learn and Earn*). Scholars are provided with ongoing formal STEM skills training, as well as structured, supervised, and mentored support for the entirety of their one-year within the program (*Exposure*). TechServ gives members contextual and experiential learning opportunities that better suit the needs of students who may not have been successful in traditional classrooms. Corps members serve full time, applying and improving their own technical skills as they address community needs in the form of STEM workshops and technical support in Philadelphia public schools, Philadelphia's Park and Recreation Centers, and Camden community-based centers (*Safe Opportunities to Explore and Learn*). Corps members also receive STEM training and mentoring from STEM professional volunteers (*Social Capital*).

It is important to note the value of the AmeriCorps model. By leveraging an existing federal investment, youth who may not otherwise have an opportunity to serve due to financial restrictions, are able to do so. The resource AmeriCorps offers is not unrecognized by our scholars. They know that the country has invested in them and values their time and expertise in serving their community. This vote of confidence is critical as our scholars make important decisions about their futures and how they will be productive members.

Building a Pipeline -- A Gateway Approach

JEVS is committed to maximizing an individual's academic and vocational potential through the creation of multiple on-ramps and exits from quality programming such as TechServ. We call this commitment our Gateway Strategy because we see gateway jobs, such as entry-level positions in STEM occupations, as keys out of poverty. JEVS has focused our Gateway program development in four sectors: healthcare, IT, hospitality and the building trades. These sectors were chosen based on their potential for growth in our region and for their multiple entry points for the clients we serve.

At the same time, we recognize that in addition to working on the talent development end, we also must create a conducive employer market for a diverse workforce. That is, how do we encourage employers to take the same holistic approach and recognize that investment in continuous learning leads to dedicated and talented employees? How can we build a workforce system that includes the five essential elements we see working so well for our young adults?

One model in workforce -- the apprenticeship model -- does incorporate these essential elements and supports while also being employer-driven. In fact, the apprenticeship model has been shown to increase retention among employees and improved overall business production ("The Benefits and Costs of Apprenticeships," 2016). Thus, at JEVS we are committed to connecting all of our Gateway programming to

apprenticeship programs. In partnership with other local apprenticeship intermediaries -- such as District 1199C Training & Upgrading Fund -- and with supports from Philadelphia Works, the New Jersey and Pennsylvania Departments of Labor, and the U.S. Department of Labor -- we are building a regional infrastructure that will allow us to expand the number of employers who utilize this age-old model of on-boarding and supporting entry-level employees. By the end of February 2018, JEVS expects to formally register an IT Generalist apprenticeship with the Pennsylvania Department of Labor and Industry. This JEVS-sponsored apprenticeship will allow employers to easily sign on to the apprenticeship model without cumbersome paperwork and still reap the benefits of the apprenticeship model.

Thus, by the time our TechServ Scholars complete their year of service, we will be prepared to onboard those that desire it into viable STEM careers. However, after this year of service, we also expect to see many of our scholars choosing to continue their service as educators through another year of service or by entering into the teaching profession. Some may wonder if we have reached our goal if a young person goes into a service career as opposed to a STEM career. JEVS would argue that we have met our goals with such an outcome. The supports we have built and the engagement we have cultivated will create a new generation of leaders and teacher-learners, as well as a diverse STEM workforce. Our TechServ scholars will

lead the charge towards a more equitable and community-engaged workforce. They will engage more youth to serve and join the ranks of dedicated educators and community organizers who will continue the cycle of service versus the cycle of poverty. TechServ exemplifies the future of community workforce pipelines and Gateway programs, a true home-grown innovation.

Works Cited

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