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POLICY

The Community Youth Broadband Technician Program

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EXECUTIVE SUMMARY

The US Department of Education (ED) should use surplus funding from the Education Stabilization Fund (ESF) to establish a program that would allow states, state education agencies (SEAs), and local education agencies (LEAs) to request funding for a new Community Youth Broadband Technician (CYBT) program. CYBT programs would allow high schoolers aged 16 and up to engage in technical skills development and solve for the "last mile" hurdle of universal broadband service by helping households in their community get connected online via broadband services. The youth technicians would also help families become more aware of broadband subsidies that might be available to them. The program will ultimately help close the digital divide and allow more students to engage with educational technology (ed tech) programs.

PROBLEM

While the US has made significant gains with providing broadband access for school buildings and libraries, we've failed at ensuring that US K–12 students have adequate broadband services at home.[1] The pandemic has highlighted the broadband access disparity across the country. As of July 2021, 12 million students lacked any form of internet access, making it almost impossible for them to attend remote schooling consistently.[2]

K–12 students face numerous issues accessing broadband in their homes, including lack of awareness of services, difficulty onboarding, and struggling with installation. At present, programs aimed at delivering affordable-to-free broadband services to qualifying families suffer from two main problems: families not knowing what broadband discounts are available to them and a lack of tech support.

For instance, consider the takeup of the Emergency Broadband Benefit (EBB) program, a broadband subsidy program led by the Federal Communications Commission (FCC) to provide low-income households with internet and electronic device subsidies during the COVID-19 pandemic. By July 2021, it was estimated that only 1 in 12 eligible households participated in the program.[3] Low takeup rates were seen even in larger cities like New York, despite the fact that only 40% of New York households report having either a hardware device like a tablet or laptop, or actual internet service at home.[4] EBB outreach efforts, which included local governments spreading the word through local blogs, fell short of driving sufficient awareness for the program.

Students face another challenge once they're connected with one of the discount broadband programs: technical support. A lack of tech support can be a threat for broadband service adoption for students who are not currently engaged. The simple tasks of activating a router or resetting a connection could cause long-term compromises in service.

RECOMMENDATION

The US Department of Education (ED) should use $10 billion of funding annually from the CARES Act Education Stabilization Fund (ESF) and recently-passed Infrastructure Investment and Jobs Act to create a nationwide position in high schools across the country — the Community Youth Broadband Technician (CYBT). The CYBT would help conquer "last mile" issues with in-home broadband service by providing support for students who need help troubleshooting or installing broadband services at home. This program would ideally be developed in concert with the FCC, who should

expand E-Rate service rates to the residences of E-Rate client students. ED should allow states, SEAs, and LEAs to request a need-based number of CYBTs to be funded out of the ESF.

In summary, the CYBTs would be responsible for all the typical duties of a servicing broadband technician, in addition to serving as a resource hub for all available broadband subsidies. Technicians would be responsible for installation, configuration, and testing of broadband equipment such as modems, routers, and switches for broadband access for the newly-connected students. They would establish connectivity between equipment and end-user devices (such as laptops, tablets, and Smart TVs) at customer premises and would rectify cable, connectivity, and equipment faults. These technicians would also be trained to let families know about the expanded E-Rate program and broadband programs that would be available to them.

Youth technicians would help close the digital divide because they can help solve the awareness and tech support issues that plague other proposed solutions to improving broadband access. Since these youth technicians are in school with their fellow students, they have proximity to students who would be newly connected to broadband. This feature of being "proximate to the problem" would enable CYBTs to raise awareness, assist with onboarding, and provide support in areas such as billing. An added benefit is that training CYBTs will help prepare a pipeline of students for STEM careers and critical broadband infrastructure jobs.

FUNDING

Funding for this program could come out of the Department of Education's Education Stabilization Fund (ESF), a multibillion-dollar investment into education systems that was passed by Congress during the COVID-19 pandemic.

The original aim of the ESF was:

"*to address specific educational needs of students, their parents, and teachers in public and non-public elementary and secondary schools in accordance with section 18001(a)(3) of the CARES Act.*"[5]

The CYBT program fits squarely into this goal. The ESF also received additional funding as part of the American Rescue Plan Act (ARP Act) passed in March 2021.

In the aggregate, over $270 billion has been sourced to the ESF, but only $170 billion has been awarded thus far.[6] A portion of this $100 billion surplus could be used for states, SEAs, and LEAs to obtain funding for the CYBT program and to help ensure that all students receive adequate ed tech services and continuity in their education.

ED should consider funding 600,000 CYBTs, which would cover the US student population of approximately 60 million people. The CYBTs would need to be trained and managed by the internet service providers (ISPs) and the telecommunications companies. The program is estimated to cost $10 billion in total annually, with just under $3 billion for training and management expenses for the ISPs.

This program might consider starting with a pilot program constructed for one school district and testing the feasibility of this program with one school. More information on the pilot program can be found in the CYBT Operational Plan.

For more information on implementing and launching the Community Youth Broadband Technician program, please see the Operational Plan here.

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1 "Our Story," EducationSuperHighway, accessed December 2021, https://www.educationsuperhighway.org/our-story/.

2 Emily Tate, "Millions of Students with Home Internet Access Still Can't Get Online," *EdSurge*, July 23, 2021, https://www.edsurge.com/news/2021-07-23-millions-of-students-with-home-internet-access-still-can-t-get-online.

3 John Horrigon, "The Emergency Broadband Benefit Has Thus Far Enrolled Just 1 in 12 Eligible Households, but Places with Low Broadband Adoption Rates Show Better Results," *Benton Institute for Broadband & Society Blog*, July 15, 2021, https://www.benton.org/blog/emergency-broadband-benefit-has-thus-far-enrolled-just-1-12-eligible-households-places-low.

4 Reema Amin, "All NYC School Families Can Get $600 a Year for Internet – But Few Know It," *The City*, October 20, 2021, https://www.thecity.nyc/2021/10/20/22737423/nyc-public-school-families-can-get-money-for-internet-service.

5 US Department of Education, Office of Elementary & Secondary Education, *Education Stabilization Fund Discretionary Grants*, accessed March 14, 2022, https://oese.ed.gov/offices/education-stabilization-fund/states-highest-coronavirus-burden/.

6 "ESF Transparency Portal," US Department of Education Education Stabilization Fund, accessed December 2021, https://covid-relief-data.ed.gov/.

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