

**Testimony of
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Subcommittee on Rural Development, Agriculture, Trade, and Entrepreneurship
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Good afternoon Chairwoman Finkenauer and Congressman Joyce. My name is Anthony Angelini, and I am grateful for the invitation to speak about connecting our communities, our students, and their families in order to close the digital divide for a better future.

As an English and Social Studies teacher for the past eleven years at New Oxford Middle School in the Conewago Valley School District, it is a particular honor to offer testimony. In those two subjects, we emphasize the power of language to interact with the world and the need for each of us to strengthen our communities through civic action. I value the opportunity to model both for my students today.

Conewago Valley School District is centered in and around the town of New Oxford, Pennsylvania. Our community does not have a YMCA or Community Center. Our public library is only open until 5:00 pm three nights a week. There is no Panera or Starbucks. Forty-four percent of our students qualify for free and reduced lunch.

For a significant portion of our young people, the district offers the best and perhaps only reliable access to high-speed internet. Even there, the Federal Communication Commission's (FCC's) E-Rate Program, which provides discounts to schools like ours for ongoing internet costs, has been instrumental in strengthening access. In fact, five years ago Conewago Valley had only a 50 megabytes per second pipeline for 4,000 students. One of our IT staff members asked me to imagine inviting my closest 2,000 friends, and their iPads, over to watch Netflix. Our network was attempting the same feat. In a typical week, internet service failed at least twice. Teachers began to abandon lessons that integrated technology. In the moment, it felt like time was moving backward.

With the E-rate Program, careful budgeting, and support from federal and state grants, the district currently has a 400 megabytes per second connection. Now in line with the FCC's old target of 100 kilobytes per second per student, we can support streaming video, online collaboration, and other elements of digital learning. However, we still fall short of the FCC's current target of one gigabyte per 1,000 students, deemed necessary to support digital learning.

In our community, a lack of equitable access to digital resources is a harsh reality. We have students that, once they leave school, do not have internet access at home. I have heard this described as the "homework gap." Without internet access at home, those students face significant academic consequences. Drawing from my own classroom experience, I will highlight the following three examples: closing this gap to ensure all students have access to learning, to engage families with school, and to ready our district to adapt to changes in state policy.

I am a member of Conewago Valley's Road to Relevance team, often referred to as R2R. R2R is a ten-year plan to ensure that all of our 4,000 students are prepared to thrive today and excel tomorrow in an ever-changing, global society. As a part of R2R, we commit to putting digital learning devices in the hands of students. Starting this year, every student in grades nine through 12 was assigned an iPad. In 2020-2021, 1:1 will expand to the middle school and my classroom. R2R emphasizes innovative curriculum, professional development, and a focus on equitable access to technology. To amplify teaching and learning, we rely more and more on learning platforms, such as Schoology, which are digital classrooms that stretch beyond the school walls.

One strategy in widespread use across education is the flipped classroom model. Students are assigned video lessons to explore independently. Class time is then used for application, collaboration, and higher-level thinking. Alternatively, I often use such instructional videos to provide support for struggling students after a lesson has concluded. Just last week, students were writing formal position papers. I recorded mini-lessons on citations in MLA style, the conventions of quotations, and strong claim statements. None are easy skills, and most seventh-graders need more than one view to revise their drafts. For many students, these resources give them access to class content at their fingertips. For other students without reliable access to broadband internet, the very same resources are out of reach.

At least once a week, I have students come to my room as soon as they get off the bus in the morning, during their lunch periods, or after the school day has ended to complete the digital assignments they cannot do at home. For 12 and 13-year-olds, however, transportation is a barrier. Our school is considering revising our schedule to include a resource period, in large part to offer time with devices and internet access to our students in need. Such a change comes

with costs. Every minute allocated to a resource period would have to be taken from other classes, such as language arts, math, science, or social studies.

Issues of access impact our students' families and their ability to collaborate with schools as well. Next month, the middle school will host parent conferences. It is an invaluable opportunity to strengthen relationships with parents and address the needs of our students. We offer two nights of after-school conferences and one day from noon until 8:00 pm. Families compete fiercely for the evening sessions that take place after 5:00 pm.

As with so much of our lives, scheduling is now done online through Skyward, our digital gradebook. Though parents are thrilled to be able to track student scores through an app on their phones, the mobile version has its limits. Viewing a grade is straightforward, scheduling a conference is not.

It is the parents with access to broadband internet and computers who can best navigate scheduling with the program. Common Sense Media reports (Education Week, 15 February 2019) that families making over \$100,000 were two and a half times more likely to have a laptop and broadband access than families making under \$35,000. Within the first hours of the schedule window, my email is filled with notifications that another prime spot has been claimed by the parents of a student already supported by extensive social and cultural capital. The families and students who most need a strong bridge to school are left behind.

Reliable access to digital resources is a systemic issue that shape policy decisions as well as student and family issues. Pennsylvania's Act 64 of 2019 allows public schools to seek permission from the Pennsylvania Department of Education to use a flexible instructional day. The law defines "flexible instructional days" as days during which instruction is provided to students outside of school when buildings are prevented from opening due to hazardous weather, damage to a school building or another temporary circumstance. Passed with the best intentions to offer flexibility and advance students' education in difficult circumstances, the law has the potential to widen the digital divide.

The underlying assumption of Act 64 is that students will be able to access digital platforms, online resources, and collaborative tools from home. Since the most common cause of a flexible instructional day is expected to be snow, it is not reasonable to expect students without connectivity to travel to a WiFi hub. Further, many of my students are not yet ready to be home alone while parents work. Instead, they often stay with caregivers - especially grandparents - who may be less likely to have reliable access, particularly when they might be responsible for several children.

As an educator, I must confront the difference between even an 80% participation rate and universal engagement. Future lessons are derailed if six out of 30 students have not completed prerequisite tasks. Such unequal footing is enough to stop even the best lesson in its tracks.

In anticipation of connectivity concerns, many districts have prepared flexible snow day lessons in advance. For example, they might prepare bags that can be distributed to students before a storm. Yet these types of lessons are often disconnected from the curriculum and involve tasks that are far less engaging, far less interactive, and far more likely to be below-grade-level than equivalent blended learning models. Communities that must rely on this strategy will be setting their students a day behind peers who live in districts with more reliable access.

The lack of reliable access has a direct impact on students, their families, and public policy relevant to schools. I saw the impact in lessons last week, I will experience it during parent conferences next month, and I will need to account for it as our district implements new regulations and legislation in the coming years.

Helping me examine these issues with a wider lens, I serve on the Pennsylvania State Education Association's Council on Instruction and Professional Development. I am also part of the Milken Educator Network and a former officer of the Pennsylvania Teachers' Advisory Committee. These positions have exposed me to the innovative educational advances taking place across the Commonwealth and the country. The future belongs to the educated, and never before has education depended so much on equitable, robust access to digital resources.

This hearing is aptly named. We want all of our students to be able to reap the benefits of our digital age. Digital resources offer powerful opportunities for students and have the potential to open wide the doors to future success. Certainly, I want each young person who walks through my classroom doors to be connected to a better future. Policymakers, such as yourselves, can play a critical role in leveling the field and eliminating the barriers to that future as you consider building on the bipartisan efforts in Congress that have provided resources to our communities.