

May 11, 2016 –House Committee on Education Hearing – Broadband Services, Innovative Efforts To Integrate Technology, Enhance High-Tech Digital Learning Opportunities

The House Committee on Education will meet at the Capitol Extension **Room E2.036** on **Wednesday, May 11** beginning at 9:30 on other topics. **The committee will reconvene at 12:30 p.m. to hear invited and public testimony regarding the following interim charge:**

Examine the accessibility to broadband services for schools, libraries, and institutions of higher education. Study the feasibility and affordability of providing scalable broadband to schools and other public institutions. Research federal and state funding opportunities to support increased access to broadband. Review innovative efforts by school districts to integrate technology in the classroom. Explore ways to enhance high-tech digital learning opportunities in the classroom to improve student achievement and fulfill future workforce demands.

Public testimony may be limited to five (5) minutes.

Good afternoon,

My name is Frankie Jackson. I am the Chief Technology Officer at Cypress Fairbanks ISD. I have been serving in this capacity in Texas education for 23 years. I am also Certified Education Technology Leader (CETL).

- We are the 3rd largest school district in the state and 22nd largest in the nation representing 114,000 students.
- We continue to grow, ranking 5th on the chart of fastest growing districts.
- We represent students that speak 100 languages and dialects, with diverse economic backgrounds; 50% of our students qualify for free and reduced lunch.
- We earned the highest possible rating of Met Standard for the 3rd consecutive year, making us the largest district in Texas to have all schools receive the Met Standard designation.
- The Texas State Comptroller has recognized the district for financial transparency and TEA has given CYFISD “Superior Achievement” ratings.

From a technology perspective:

- Our network spans 188 square miles connecting over 100 schools and support centers. We manage 5200 miles of fiber, approximately 3000 miles of cable, and transfer over 52 MILLION network transactions per day during the school year.
- We have one of the biggest centralized fiber networks in the state, uniquely designed in 6 large interconnected networks with dual redundant connections across a wide area network, serviced by two Internet service providers, including an in-district connection as well as an out-of-district connection at a colocation facility.

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- In May of 2014, we passed a \$1.2 billion dollar bond with \$217 million dollars allocated for a technology infrastructure overhaul and a refresh of all instructional technology in the classrooms.
- We are in the middle of building a 100gig backbone network with the mission of providing students and staff “anytime, anywhere” learning.
- We are the largest district in the nation building a network using the national K-12 standard based on the Consortium of School Networking (CoSN) called SEND – Smart Education Network by Design.
- Our technology bond includes the largest push for Bring Your Own Technology, providing a network capacity between 1-3 wireless devices per student with simultaneous connections.

Your challenge in this hearing is to examine 4 areas of concern. I will briefly speak to each of the topics sited in the hearing notice.

- 1) Examine the accessibility to broadband services for schools. I represent the view of CYFAIR and 14% of all students in the state. Most districts if not all in the metro areas have fiber networks. We have invested in building fiber over a 15 year period. I recommend to continue investing and expanding our fiber networks. I encourage the state to invest in the 10% matching for e-rate dollars so that districts can continue to grow their fiber networks.
- 2) Study the feasibility and affordability of providing saleable broadband to schools. CYFAIR does not have a need for the state to provide scalable broadband access. We have very accessible and cost effective access with the ability to scale when needed. We are paying .60 cents per mb of Internet and have 20 gig of Internet available today with options to scale.
- 3) Review innovative efforts to integrate technology in the classroom.
 - a. In CFISD, we are working to provide students opportunities to learn anytime, anywhere in a variety of formats. We want to personalize the learning to each child's needs and interests using technology as the tool to achieve this goal. Examples would be flipping the classroom so students could preview the lesson at home and then use class time to do the "homework" with the teacher available to help guide and answer questions.
 - b. In the Blended model, we are working to help students take ownership of their learning and technology to enhance the learning experience on a more individualized level.

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- c. Our technology plan includes integration at every grade level in our scope and sequence of instruction to tightly integrate technology – horizontally and vertically.

We have examples and results of our efforts that we can share.

- 4) Explore ways to enhance high-tech digital learning opportunities in the classroom to improve student achievement and fulfill future workforce demands.
 - a. We currently provide students with real-world experiences using the technology that is used in the workforce. Some refer to this as authentic learning or makerspaces. Some examples: In Auto technology classes, students use high tech equipment to analyze and assess car issues. Computer science classes learn not only programming, but app building as well as game programming. Even our Education in Training classes (future teachers) learn how to use technology to teach their students. In the core classes, students use various tech tools, such as Google, to collaborate, solve problems and create solutions.

Our challenge is this:

We have made a commitment to provide the greatest technological resources available to students while at school. We are installing high-speed wireless access points on the outside of schools, so students have access after hours within proximity of the school. However when students leave school, there is a digital divide leaving many students at home without access. Internet access is necessary for full and meaningful participation in society. Research indicates 43% of households cannot afford the appropriate speed or access for connectivity at home.

This creates inequity on both sides of the divide:

1. The teacher cannot **raise instructional expectations** for students without access (because they don't have access at home)
2. The teacher must **lower instructional expectations** for students with access (because it wouldn't be fair to students that don't have access at home)

Both sides of the inequitable divide suffers.

In closing, CFISD is available to support you as you work towards improving Texas education. You can use CFISD as a vehicle for studying and researching the feasibility and affordability of providing scalable broadband access both at school and at home.

Help us put pressure on broadband carriers to provide low cost home access. We have no greater charge.

Thank you for your time.