GOING THE DISTANCE TO BRIDGE THE DIGITAL DIVIDE

Strategies for implementation and instruction when distance learning is the new normal



TODAY'S PRESENTERS

- George Neely, Lodi Unified School District, Board Member
- Sunne McPeak, California Emerging Technology Fund, President and CEO
- Karen Rosenkilde-Bayne, Woodland Joint Unified School District, Board Member
- Troy Flint, CSBA, Chief Information Officer
- David DeLuz, CSBA, Director of Strategic Initiatives & Development



ACCESS TO BROADBAND AND INTERNET-CAPABLE DEVICES AMONG STUDENTS

As indicated by survey results from CSBA



BACKGROUND

- 4/2/2020- CSBA completed a survey measuring the level of access California public school students have to broadband internet and internet-capable devices in the home.
- Survey was distributed to CSBA's nearly 1,000member school districts, county offices of education and regional occupation programs that collectively educate 99.6% of all California students



BACKGROUND

- 270 local educational agencies (LEAs) responded to the survey, which sought to determine:
 - How common it is for students to have broadband internet in the home
 - How common it is for families to have multiple internet-capable devices in the home
 - The percentage of students who have smart phones
 - The ability of LEAs to provide students with internet-capable devices
 - The LEAs with the least access to broadband and internet capable devices

- The percentage of staff who have both broadband access and computers in the home
- The quality of cell service in communities where students live
- The dominant cable and satellite providers in areas served by schools
- What forms of support LEAs are seeking in order to increase technology access



RESPONSES (PART 1)

- One-third of respondents (33%) indicated that "less than half" or "a small minority/none" of students have broadband home internet access or similar. Two-thirds of participants (66%) reported that most or all of their students have broadband access in the home.
- Exactly half of all respondents (50%) indicated that "less than half" or "a small minority/none" of their students have access to multiple internet-capable devices at home



RESPONSES (PART 2)

- A slight minority of respondents (45%) indicated that "less than half" or a "small minority/none" of their student body has smart phones
- ➤ Just under one-fifth (19%) of respondents described cell phone service in their community as "poor or nonexistent" although less than 1 percent selected the "nonexistent option."



RESPONSES (PART 3)

- More than one-third of school districts and county offices of education (39%) report that "less than half" or a "small minority/none" of their students have laptops courtesy of a school or a school partner.
- The great majority of respondents (86%) indicated that "all/vast majority" or "most" of their staff have access to broadband and laptops in the home with just 13% stating otherwise.



ASSESSMENT

- The need for additional funding, infrastructure, hardware and professional development support to facilitate effective distance learning is enormous.
- Given the depth of the need, it is difficult to reach a quantitative determination of which LEAs should be prioritized.



DIGITAL DIVIDE IMPACT: WOODLAND JOINT USD

PK-12 & Adult Education District 10,000+ students



NO INTERNET = NO SCHOOL

- When people think about the digital divide:
 - Most assume its simple: Fund laptops & hotspots and all will have access
- Unfortunately, this issue is far more complex
 - Especially in rural areas
 - Lack of access is not necessarily the result of lack of family income
- Possibility for fall 2020:
 - Part or all distance learning
- With the onset of COVID-19, the digital divide has become one of the most glaring forms of inequity in our state.



WJUSD'S CURRENT SITUATION

Laptops:

- Decided to implement 1:1Chromebooks to all students 7years ago
- Now: all students K-12 have a district-issued Chromebook
 - K-3: used in-class only (until COVID-19)
 - 4th grade & up: can take home nightly
 - 7th grade: issued one
 Chromebook until HS
 graduation, keep year-round

Connectivity:

- **Hotspots**
 - 65% students qualify for Free& Reduced-price Meals(FRM)
- > The Gap
 - Income too high for FRM (hotspots) & too low to afford internet
- WJUSD's Immediate Fix: WiFi to the street edge of school parking lots



CURRENT AND FUTURE ISSUES

- Lack of internet infrastructure in rural areas
- Consistent & reliable electricity
- Device repairs
- Teacher training for distance learning



SOLUTION

- State or federal government must fix these issues
 - It must do more than simply allocate funds
 - Rural areas = no internet b/c there is no profit for companies to lay fiber
 - There aren't enough customers/population for profit
 - Very expensive b/c of terrain
 - Government must ensure rural areas receive access to the internet
 - Incentives?
 - Subsidizing?
 - Some other option?



INEQUALITIES CREATED BY DIGITAL DIVIDE

- Have been left to the internet companies and local communities to manage
- Districts could decide how, or even if, to address those inequities
- Now, the inequities of the digital divide are at the center of our lives
- We must put people, and the education of our children, over company profits
- No Internet = No School



DIGITAL DIVIDE IMPACT: LODI USD



LODI UNIFIED STATISTICS

- > 28,000 Students
- > 1,500 Teachers
- > 4,000 Employees
- > 52 Sites
- > 355 Square Miles
- Network with 32,000 + users

- > 4 Comprehensive HS
- 2 Continuation HS
- ➤ 1 Middle College HS
- > 2 CTE Academies
- > 1 Independence HS
- > 6 Middle Schools
- > 3 K-8 Schools
- > 32 K-6 Schools



LODI UNIFIED FINANCIALS

- Revenues ~ \$375 million
- Reserves ~ \$64 million
- > 72% Unduplicated
- > 70% Free and Reduced



LUSD CONNECTIVITY ISSUES

- Large disparity in Internet access
- Language barriers
- Unfamiliarity with distant learning concepts
- Poverty
- Number of children in a household



LUSD CONNECTIVITY ACTIONS

- One size does not fit all
 - Identify and Solve
 - Hotspots
 - Working with providers
 - Increased range for school WiFi
 - Smaller downloads
 - Jump drives



LUSD CONNECTIVITY ACTIONS

- Make it work
 - > This is not a build it and they will come
 - Educate Administrators
 - Educate Teachers
 - Educate Students
 - Educate Parents
- Don't wait
 - Implement now and adjust as you go



CALIFORNIA EMERGING TECHNOLOGY FUND (CETF) AND THE DIGITAL DIVIDE



CETF'S SCHOOL2HOME INITIATIVE

- CETF is a statewide nonprofit
 - CETF's mission is to close the digital divide
 - CETF believes assisting schools and equity are vital to their mission
- CETF launched their School2Home initiative
 - Implemented in 30 schools in 12 districts, reaching 969 teachers and more than 19,879 students and their parents
 - Worked with school districts of varying sizes statewide
 - Tailored to local community and local issues
- Responses from 2,228 students to the 2015 annual School2Home Student Survey showed the following improvements since 2011-12:
 - 85% increased computer and Internet access at home to support learning, up from 73%;
 - > 84% use the technology for writing assignments, up from 60%; 90% access the internet for research related to schoolwork, up from 68%.



CA INFRASTRUCTURE CHALLENGE

- No one ever anticipated or designed a system that could support simultaneously:
 - > 6.2M K-12 students and 300,000 teachers
 - 4M students and instructors for higher education
 - Millions of adults working from home
- The infrastructure challenge needs to be addressed in terms of:
 - Unserved rural and remote households and communities
 - Underserved communities, which are predominantly in low-income neighborhoods and communities where the market mechanisms have not attracted capital investments for network upgrades to provide sufficient bandwidth.
- CETF approaches closing the digital divide and achieving digital equity by driving progress with performance-based goals and objectives coupled with aggressive strategies



HOW CETF IS APPROACHING THE CHALLENGE

- CETF is providing input to state and federal education policy based on the success of School2Home
 - Encouraging CPUC to use the existing \$303M in the CASF infrastructure grant account to prioritize larger-scale deployment projects to reach last-mile unserved households
 - CETF has been prompting ISPs to work with the broadband regional consortia to identify all anchor institutions along the pathway of deployment to last-mile unserved larger-scale
 - Urging the legislature to extend collections for another 5 years beyond current statute
 - CETF has been promoting the distribution of information about the interim free and affordable offers by the ISPs given that only 30% of households eligible for affordable offers know about them.



CONVERSATIONS WITH CABLE AND TELECOMMUNICATIONS COMPANIES



CSBA COVID-19 RESOURCES



www.csba.org/coronavirus



COVID-19 WEBINAR SERIES

- Special Education in Extraordinary Times
 May 13, 2020 at 1:00 p.m.
 Serving students with disabilities during a pandemic
- Supporting Student Well-Being from Afar May 20, 2020 at 1:00 p.m. Caring for students' mental and physical health during school closures

Please visit <u>www.csba.org/coronavirus</u> for registration information, links to past presentations and slide decks.



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