GOING THE DISTANCE TO BRIDGE THE DIGITAL DIVIDE

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

May 8, 2020
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 1,000-member 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 **1:1 Chromebooks** to all students 7 years 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 [www.csba.org/coronavirus](http://www.csba.org/coronavirus) for registration information, links to past presentations and slide decks.
THANK YOU FOR JOINING US TODAY.