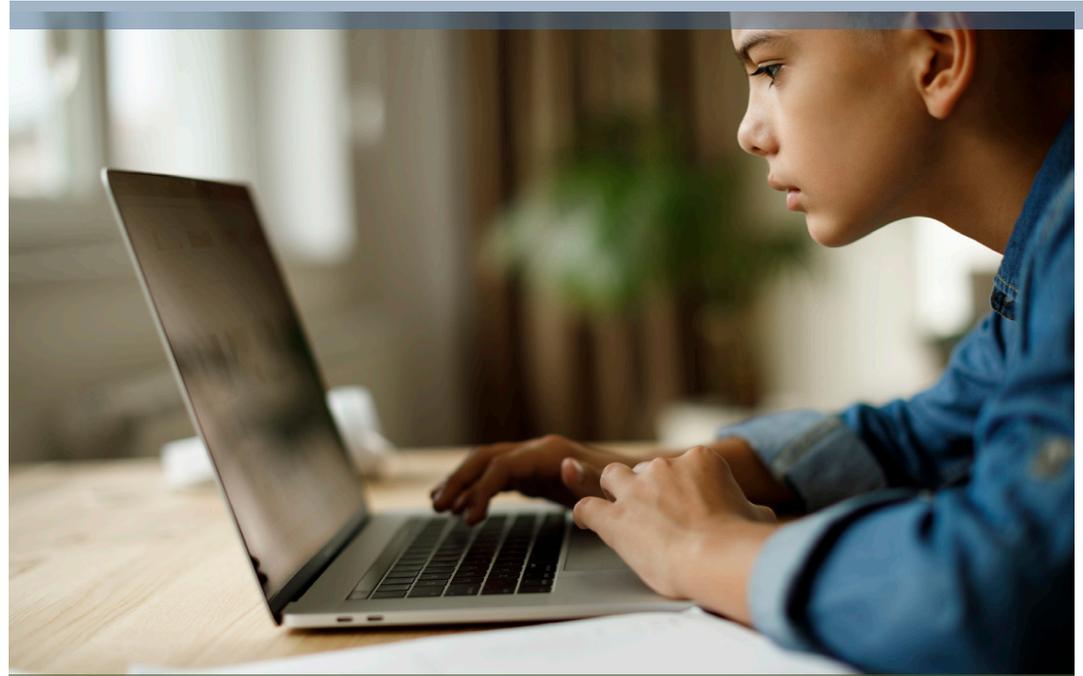


Meeting the Unique Technology & Distance Learning Needs of Kern County Students

With the abrupt closure of schools in Kern County due to the COVID-19 pandemic, remote learning has become a new normal for Kern County students, teachers and parents. School districts initially sent paper learning packets home with students, which allowed schools time to develop plan for online curriculum and assess the technology needs of families.

Over the past several weeks, the Kern County Superintendent of Schools has helped school districts survey their student populations, which confirmed that thousands of students do not have access to devices or internet connectivity needed to complete work at home through an online learning platform.

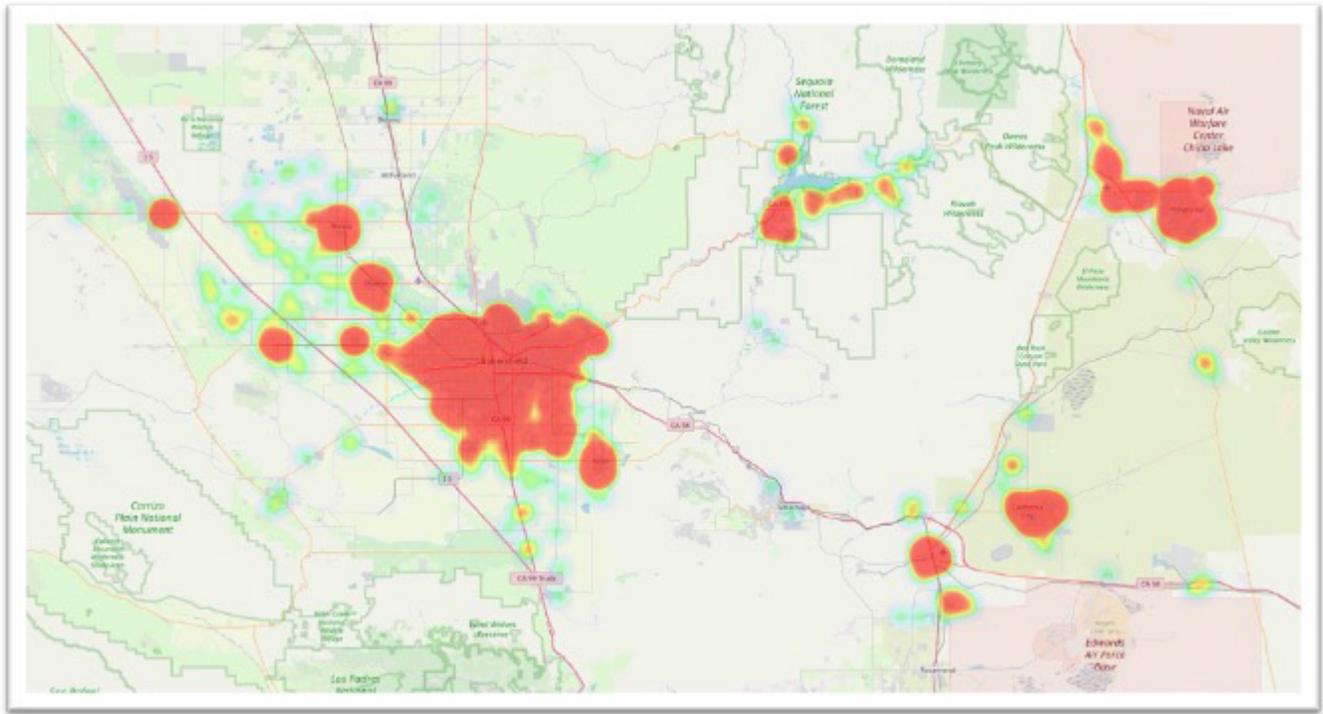
KCSOS, in partnership with school districts, has implemented various strategies to help bridge this gap in technology and has rolled out a robust option for online learning through Canvas. These efforts are outlined within this document.



KERN COUNTY...BY THE NUMBERS

- Kern County is geographically the 3rd largest county in California at 8,132 square miles
- Kern County's population is roughly 900,000
- 47 public school districts serve more than 190,000 students
- 73 % of countywide students are socioeconomically disadvantaged (SED)
- More than 30 % of countywide students live in poverty
- An estimated 40,000 countywide students may not have access to the internet and/or a computer at home

Besides Kern County being large in area, the county has a multitude of geographies ranging from the wide-open Central Valley, the Sierra Nevada Mountains to the east, the Los Padres National Forest to the south, the foothills to the west and the Mojave Desert to the far east. While all of these make for wonderful places to visit and enjoy, **they are not ideal locations for socioeconomically disadvantaged (SED) student to acquire high speed internet.** Moreover, these same rural areas of our county that lack internet infrastructure, are also locations with a dense concentration of SED students.



This map indicates the concentrations of SED families throughout the county.

NEEDS ASSESSMENT

From the onset of the COVID-19 pandemic — under the leadership of Kern County Superintendent of Schools Dr. Mary C. Barlow — it was abundantly clear that we could not allow students to lose months of instruction due to the physical closure of schools. Furthermore, we would not allow any inequities of device availability and lack of internet connectivity to be reasons for which students from economically disadvantaged families did not get the same opportunities for instruction. We knew that connectivity wouldn't matter if we didn't have a device to put in the hands of every child who needed one. We also knew that a device alone would be useless without connectivity.

We surveyed our districts as to their device counts and current student enrollment. We also asked districts to survey their parents/students to identify which students did not have access to devices and internet connectivity. Our initial survey results indicated, that as a county, there was a gap of approximately 20,000 devices. KCSOS quickly sourced enough devices to ensure that every student who needed one, would have one. After hours and hours on phone calls with every vendor from small to large, we were able to order 20,594 Chromebooks, which are now being deployed to school districts so they may get them into students' hands.

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Chromebooks were chosen for several reasons:

- Many students are already familiar with the devices
- Many teachers are already familiar with platform
- They are less costly than full computers

Providing connectivity to homes has been a bigger challenge. For this reason, KCSOS and school districts are deploying various strategies to meet the need. Foremost, KCSOS sourced as many mobile hotspots and other means of connectivity as possible. However, it quickly became apparent that there was no way we would be able to source enough mobile hotspot devices for every family without connectivity. Not only was every other educational agency looking for hotspots, every private sector company with a now mobile workforce was also trying to purchase them. **Ultimately, we were able to order 5,700 hot spot devices.** A deployment plan for the hot spots is in place wherein available student data will be leveraged so that hot spots may be deployed to households with multiple students first.

Following are other ways in which we are moving forward to accommodate connectivity:

- A common guest Wi-Fi network has been established at more than 140 school sites countywide so that students may connect their devices to the internet from the school bus loop or parking lot.
- KCSOS and school districts are in the process of installing mobile Wi-Fi devices on school buses so that these "mobile hot spots" are available to travel into neighborhoods where there is the greatest need.
- KCSOS's radio team and engineers have been working with rural sites to install radio repeaters into parking lots at particularly rural and needy communities. We have deployed new radio devices into Tupman, Blake School in Woody and the Poso Creek area.
- Communication with families that both Charter/Spectrum and AT&T are offering no-cost, or low-cost, in-home internet connections for low income families.



KCSOS staff taking delivery of a large shipment of Chromebooks, which have been deployed to Kern County Students.

ONLINE SCHOOL

As distance learning efforts ramp up with Kern educators looking to cope with a new normal amid school closures, KCSOS has partnered with Canvas, the world's fastest growing online learning platform. Canvas is being made available to any Kern County school district that wishes to utilize the platform at no-cost through June 30, 2020.

Since mid March, KCSOS's Instructional Services team has been hard at work creating an "online school" environment and customizing "virtual classrooms" using Canvas, complete with standards-based curriculum in English Language Arts and Math for grades TK – 12. English Language Development, Science, History, and Social-Emotional Learning lessons are also in the works.

Canvas allows grade-level content to be pushed out to students and includes video lessons, learning activities, daily assignments, online quizzes, and much more. Teachers also have the ability to present lessons using Canvas' video conferencing tool so that students and classmates can interact in real time.

"We do not have the luxury of time at the moment, so our team has been working around the clock to create a turn-key solution for teachers that can quickly be utilized to mitigate any negative impact on our students' educational progress," said Lisa Gilbert, Deputy Superintendent of Instructional Services at KCSOS.

Greenfield Union School District has served as the pilot district and will be ready to open their virtual classrooms to students the week of April 13, after their scheduled Spring Break. Twenty Kern County school districts have also signed on as early adopters and will be onboarded and trained through Zoom meetings during the next two weeks.

"By using Canvas, our teachers have weeks of lessons laid out for them, they are able to communicate with their students and families, along with their grade/department teams within the platform. It is a win-win for everyone."

Sarah Dawson, Assistant Superintendent of Curriculum
Greenfield Union School District



Kern County
Superintendent
of Schools
...advocates for children