MENDOCINO COUNTY'S DISTANCE LEARNING: PROBLEMS AND PRODUCTIVE ASPECTS

July 26, 2021

SUMMARY

This report reflects findings of the Grand Jury (GJ) as of March 3, 2021, as health and school policies for Distance Learning (DL) continue to evolve.

DL had adverse impacts on effectively educating Mendocino County's public-school students. Reports of child maltreatment to Health and Human Services - Child Protective Services (HHSA-CPS) declined during DL as teachers and other mandated reporters lacked sufficient observation and interaction with students.

Many students are not understanding core subjects and many have completely ignored elective subjects. Failure rates of students more than doubled, though some districts and schools will not issue failing grades (which would penalize students during DL). DL was not practical for approximately 28% of the student population due to the absence of sufficient or affordable internet service in remote areas of Mendocino County. Households, especially those with more than one student on DL, encountered problems regarding learning from home, lack of privacy, distractions and inadequate internet bandwidth.

Directives of the Mendocino County Health Officer (MCHO) were disruptive due to the lack of time allowed for schools to prepare for DL, especially in Spring 2020 and for the sudden change in orders immediately prior to start of the Fall 2020 semester.

Some positive aspects of DL are the many technologies deployed for conducting DL. Some were useful in the geographically diverse Mendocino County. Technologies and tools deployed for DL could be used after the COVID-19 pandemic to provide remote instruction for courses not offered at a local school or for students unable to attend class in person due to health or personal issues. Teleconferencing was utilized during this DL period for conducting meetings of teachers and staff to avoid time consuming travel and for conducting parent-teacher conferences, saving parents' travel time and costs such as child care.

GLOSSARY

- CTF California Teleconnect Fund (a state program that provides discounts on advanced communication services, such as broadband Internet, and voice services to qualified nonprofits)
- DL Distance Learning (aka, "Remote Learning". DL may include situations where students are remote from their teachers even though the teacher may be in a classroom for instruction)
- E-Rate E-Rate Program (Schools and Libraries Program, also known as the E-rate program, makes telecommunications and information services more affordable for schools in the United States)
- Parents includes parents, guardians, foster parents, etc. of students.

BACKGROUND

DL is the instructional model required of public schools by the MCHO starting in March 2020 and continuing through December 2020. This model was mandated as an approach to minimize the spread of COVID-19 following recommendations of the Centers for Disease Control, the California Department of Public Health and the State of California Safe Schools for All Hub¹.

MCOE proposed four models for conducting Distance Learning²:

- Synchronous DL which consists of live, sustained learning with the teacher and students,
- Asynchronous DL which consists of pre-recorded online learning with daily live interaction with a teacher and students,
- Independent Study whereby the teacher develops the curriculum and the parent supports instruction,
- Homeschooling whereby a parent submits an affidavit with the State and directs all aspects of the student's education.

The GJ report is focused on the Synchronous and Asynchronous models of DL at public schools. Independent Study and Homeschooling and privately run schools are <u>not</u> within the scope of the GJ's research and report.

The GJ focused on the following questions related to DL:

- How effective was DL for educating students?
- What were the impacts of DL on reports of child maltreatment?
- What were the obstacles for implementing DL, such as inadequate or unavailable internet or Broadband?
- What technologies and tools could be beneficial to schools and teachers after COVID-19 is no longer a threat?
- What household conditions impaired using DL for its students?

METHODOLOGY

Between October 8, 2020 and January 14, 2021, the GJ conducted interviews with:

- Senior administrative staff of the MCOE,
- District Superintendents and School Principals of selected sample districts and schools ranging from small to large, from urban to rural and charter to non-charter,
- HHSA-CPS Administration.

For tools or techniques described during the interviews, the GJ researched the primary functions of the various products or services including the following examples:

- Google Classroom https://support.google.com/edu/classroom/answer/6020279?hl=en
- PearDeck https://www.peardeck.com/googleslides
- Aeries Student Information System https://aeries.com/
- Powerschool https://www.powerschool.com/
- Schoology https://www.schoology.com/

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¹ CA Safe Schools for All https://schools.covid19.ca.gov/

² MCOE Distance Learning Options August 31, 2020

- Khan Academy https://www.khanacademy.org/
- Kami https://www.kamiapp.com/
- Big Ideas Learning https://www.bigideaslearning.com/
- IXL https://www.ixl.com/
- Apex Learning https://www.apexlearning.com/

The GJ attended a roundtable discussion (*Equitable Practices During the Remote Learning Environment*) hosted by the Latinx Alliance Steering Committee on November 19, 2020. This meeting included discussions of issues voiced by superintendents, principals, counselors, instructors, parents and students. The GJ listened to local community news and discussions on KZYX-Mendocino County Public Broadcasting, reviewed news postings on websites of "Mendo Fever" and "Mendocino Voice" and newspaper articles as cited in the Bibliography.

Deficiency of broadband internet service for students in Mendocino County was confirmed by data compiled by the Center for Rural Innovation in its report and data compilations presented as COVID-19 and Broadband Availability in School Districts

(https://maps.ruralopportunitymap.us/broadband-access-map), as of January 24, 2021 and Healthy Mendocino, data compiled from U.S. Census data for 2018 http://www.healthymendocino.org/indicators/index/view?indicatorId=9231&localeId=260 Maps depicting broadband deficiencies are presented in Appendix C.

DISCUSSION

The Impact of Distance Learning on Grades and Attendance

"Grades are a disaster" was a quote by several of the principals the GJ interviewed. Academic failure rates have more than doubled with one school reporting failure rates pre-DL were 25% and now with DL are 50%.

A shared concern of principals interviewed is that students are not achieving basic understanding of essential skills during DL. Schools are planning to provide remedial instruction for core curricula such as math and language arts once DL is no longer in effect using 2021 summer school and afterschool in-person programs.

Some of the problems encountered using DL include:

- Multigenerational households with several students under one roof,
- internet service not available or with insufficient bandwidth,
- electrical or internet outages,
- parents who must work and are absent from the household and are unavailable to monitor and motivate students to learn on their own.
- older siblings having to assume the role of teacher/parent-motivator,
- parental or other household interruptions.

The State of California directed that no failing grades would be issued for the last half of the 2019/20 school year and the Smarter Balanced Assessment System testing was cancelled for the year ending in 2020. Standardized testing (Smarter Balanced) for the end of the 2020/21 school

year as waivers of testing are being considered as of the preparation of this report³. The consequence is a lack of hard data to demonstrate the impact of DL on student comprehension of subjects, comparing pre-COVID-19 results with those of DL. Therefore, the GJ had to rely on subjective assessments by school principals.

School attendance as reported by several interviewees decreased during DL due to deficient motivation or parental involvement in having children attend classes online. Middle and high school students report they were overwhelmed by coursework, as each subject's teacher did not coordinate the volume of required homework with teachers of other subjects.

As a positive upside, some students excelled during DL as they were:

- self-motivated to learn.
- able to advance at their own pace,
- free to excel on their own.

These were the exceptions, but DL did provide the environment that such self-motivated students advanced at faster than average paces. This is an aspect of DL, particularly Asynchronous DL with professionally developed lessons and materials that proved beneficial.

Child Maltreatment

Teachers are among the mandated reporters for suspected cases of child maltreatment and must annually attend "mandated reporter" training. Often the clues to child maltreatment are subtle changes in behavior as observed in the classroom or playground. Additionally, students may trust their teachers and confide privately when they are maltreated. When students are not in contact with teachers and other school workers, suspected cases of maltreatment may remain unreported.

Cited in a March 2, 2021 article in the Ukiah Daily Journal "School personnel are frequently one of the top mandated reporter categories to notice and make suspected child abuse reports. This is due to school personnel having regular contact with children and they are often able to notice unusual changes in children or identify signs or behaviors in children that are not developmentally appropriate for the child's age. We rely on school personnel to bring to our attention suspected child abuse and neglect so we can assess child safety and provide services and supports to them and their families when needed," commented the Deputy Director of Mendocino County HHSA Family & Children's Services.⁴

Although specialized training for identifying potential child maltreatment was developed for DL it was not universally provided in all school districts. A three-hour in-depth Zoom presentation for mandated reporters was presented to school staff benefiting in reduced travel time and cost for the presenters and attendees. Even when such specialized training was provided, teachers could not always observe the subtle clues of maltreatment.

³ California school officials push for standardized testing waiver amid Covid-19 spike | EdSource

⁴ "Redwood Community Services - Ukiah teachers filling the need for fostering" article in Ukiah Daily Journal (CA) March 2, 2021

Several schools reported expanding child maltreatment training to include specialized courses in identifying and reporting suicide, depression and sex trafficking. One school reported it provided training for parents in how to identify cyberbullying.

These clues were not always visible due to the limitation of the view from the student's camera during instruction or when the student did not share their video. Online group instruction also diminished opportunities for a student to privately or confidentially discuss problems with their teacher.

Some districts reported that teachers made the extra effort to have some private online time with a student whose observable behavior had changed. Some also reported that teachers were more proactive in making reports of even marginally suspected maltreatment.

Interviews of school staff revealed that calls to law enforcement officers increased for reports of child maltreatment, situations of increased depression and suicidal actions of school-age children. An unfortunate consequence is that HHSA-CPS reported that the number of reported cases of suspected child maltreatment decreased during this period of distance learning starting in the late Spring of 2020 and continuing into the Fall semester.

HHSA-CPS provided the GJ summaries of reported child maltreatment cases for the periods of January 2018 through December 2020. There was a sharp drop-off of reported cases of child maltreatment starting in March 2020 and continuing through to December 2020 (the last period available). The reported cases declined by 20.4% during DL representing an average decline of 41 cases per month. This is especially concerning by reason of the increased financial, emotional and mental stresses endured by families during the mandated stay-at-home orders. Refer to Appendix A for details.

The unintended consequences of socially distanced online instruction were the <u>unreported</u> cases of suspected child maltreatment as well as student depression. Due to the greatly diminished opportunities for interactions with peers during distance learning, some students endured loneliness.

Obstacles When Implementing Distance Learning

DL for remote instruction requires four essential technology or household components:

- A personal computer with audio and video for each student and teacher,
- video conferencing hosting (Zoom, Google Classroom, etc.),
- a sufficient internet connection for students and teachers either through broadband or a cell-based hot spot. This is especially important for households with more than one student in DL,
- privacy for students during instruction.

Other recommended and optional technologies and many of the tools used for DL are summarized in Appendix B.

Some schools were under the impression that DL could be eliminated in the Fall Semester of 2020 and were preparing for in person classroom attendance. Then the State and MCHO

mandated DL in August. Because of this short notice, preparations were adversely impacted for DL.

At the beginning of the Fall 2020 semester, Mendocino County had a backorder for Chromebooks and hot spots due to the overwhelming National demand for such products. These tools were slowly obtained during September with the backlog fulfilled by October 2020. The consequence is that not all students had access to a personal computer at the start of the Fall semester. This was not an issue for schools that customarily provided Chromebooks or similar devices to students.

Several schools reported that its teachers did not attend the MCOE DL workshop as it was untimely for the school year and methods had already been developed and implemented. Some teachers were also overwhelmed with normal teaching duties and lacked enthusiasm to attend courses immediately at the end of the school day unless required by their local School District.

Hot spot devices furnished by school districts could not be used in several locations of the County lacking adequate, available or affordable internet speeds via cell service.

Mendocino County suffers from a serious and persistent "digital divide⁵" with densely populated areas generally having sufficient internet access while the less populated areas of the County lack sufficient or affordable internet access. This is illustrated by the maps presented in Appendix C:

- Broadband Access for School Districts in Mendocino County shows most of Mendocino County's schoolchildren have partial to extremely poor broadband access,
- Households with Internet Subscriptions reveals that many family units do not subscribe to internet services even if available due to affordability or personal choice,
- Comparison of Mendocino County by Census Tract with Other Regions of California illustrates that Mendocino County's households fare below 'best' for households having internet subscriptions with most of the County's area ranked in the "worst" quartile as compared to other California counties.

Approximately 28% of school age children in Mendocino County lack access to broadband⁶. An unknown number are from family units that are financially unable to pay for such service.

MCOE and the County's school districts faced the challenge of the "digital divide," sometimes using very innovative approaches:

- Paying for cell phone service, enabling low-income families to utilize school-provided hot spot devices where cell service was available,
- arranging with broadband providers to establish Wi-Fi towers for areas of underserved communities,
- providing Wi-Fi hot spots in school parking lots, libraries and rooms allowing social distance of students for learning.

⁵ "digital divide" is the uneven distribution of information and communication technologies in society due to infrastructure deficiencies or socioeconomic issues.

⁶ Source: Broadband Availability in School Districts (https://maps.ruralopportunitymap.us/broadband-access-map), as of January 24, 2021

DL was facilitated by those schools that provided instruction to parents on how to connect and operate the DL technologies. The Round Valley Tribe paid for installing three cell towers to provide internet access and Willits Online provided internet relays in the Covelo community according to an interviewed school principal. One school reported obtaining grant funding from California's E-rate program to provide discounted broadband services for students.

Internet access is one of the more serious challenges facing Mendocino County and adversely impacted DL. However, even when internet service was available, students and teachers often encountered connection latency delays, insufficient bandwidth and a few power outages which disrupted remote Synchronous DL.

Looking to the Future

MCOE and School Districts are now better positioned to deal with future problems where DL could be required. Lessons learned must not be forgotten or neglected, only built upon to achieve excellence.

Teleconferencing and DL using Zoom or similar tools enable:

- Teachers and administrators to collaborate with remote peers or attend professional development training, avoiding travel time,
- teachers to virtually meet with parents improving scheduling efficiency and providing convenience to both parties,
- students to virtually attend remotely provided courses that may not be offered by their local schools or districts,
- students preparing for college to obtain accredited training via courses,
- students desiring specialized vocational courses to attend,
- students to attend classes due to health or personal issues.

MCOE should develop the administrative guidance for facilitating DL attendance reporting and financial coordination among schools for when students attend classes remotely as in the above situations.

Teachers have learned to effectively use computer-based lesson planning tools to distribute materials and lessons to students. At least one school distributed materials to students using Google Forms for requests, then placing materials into a locker and electronically notifying the student of the availability. Students could then retrieve materials on their own schedule.

Many of the technologies and tools used for DL as summarized in Appendix B could benefit student education. MCOE should lead the exploration and adoption of these tools in collaboration with all of Mendocino County's school districts, charter, private and alternative education schools.

Meeting the challenge of Mendocino County's "digital divide" could level the learning playing field for its students to better compete with peers in more "connected" parts of the world.

In conclusion, there is no "one size fits all" approach that could be used by all School Districts. The ultimate decision for how to conduct educational instruction must rest with educators and parents in each school district.

FINDINGS

- F1. Students who failed to master core academic subjects or benefit from electives will require remedial classes to bring them up to their class level because of the year lost from the effects of DL.
- F2. Maltreatment of children has been underreported during COVID. Data supplied by HHSA-CPS revealed a sharp decrease in reported cases of abuse due to educators having reduced visibility of the subtle signs of abuse or neglect, restrictions on home visits and interaction with students.
- F3. During DL travel time and transportation costs were reduced for meetings among colleagues from distant school districts improving cross communication and sharing of ideas and approaches. Additionally, parents could more readily attend conferences with teachers using teleconferencing.
- F4. Some students accessed inappropriate content due to deficient filters monitoring internet searches and websites on computers used by students at home.
- F5. DL enables students who might otherwise be unable to attend school the ability to continue studies with their teacher and classmates.
- F6. Asynchronous DL enables students who are self-motivated and can study independently to advance at their own pace. For example, using tools like Khan Academy to provide professional instruction of subjects.
- F7. California's E-rate and CTF grant programs provide discounted broadband services for students which otherwise might not have been available.

RECOMMENDATIONS

The GJ Recommends that:

- R1. MCOE guide all schools in the County to develop and implement action plans to assess and remediate failed academic subjects. (F1)
- R2. MCOE develop or obtain interactive online training available 24/7 to mandated reporters of child maltreatment and expand training to include depression, cyberbullying, suicidal warning signs and sex trafficking. (F2, F3)
- R3. MCOE allow mandated reporters to train on their own schedules which would provide flexibility of scheduling and cost savings. Interactive training would track attendance and comprehension as verified by online testing and provide certification upon successful completion. (F2, F3)
- R4. MCOE prepare recommendations for schools to implement internet search filters to identify and block searches of inappropriate content. This may include guidance for parents in how to filter online searches by students during remote learning. (F4)

- R5. MCOE encourage all Districts to continue use of video conferencing among peer educators to collaborate and develop best practices and provide needed funding. (F3)
- R6. MCOE encourage all school districts provide technologies to permit remote instruction of students due to illness or other conditions. (F3, F5)
- R7. MCOE develop a catalogue with funding and accreditation mechanisms of third party or internally developed learning materials for specialized or core subjects. This would facilitate students who can study and advance at their own pace. (F6)
- R8. MCOE work with all school districts to explore if they are eligible for E-Rate or CTF grants to provide broadband and telecommunications services to their underserved students. (F7)

REQUIRED RESPONSES

Pursuant to Penal Code sections 933 and 933.05, the GJ requires responses as follows: From the following governing body within 90 days:

• MCOE Board of Education (All Findings and Recommendations)

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code § 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.

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Healthy Mendocino, data compiled from U.S. Census data for 2018 http://www.healthymendocino.org/indicators/index/view?indicatorId=9231&localeId=260 based on data from https://www.census.gov/programs-surveys/acs/

APPENDIX A

Reported cases of child maltreatment for pre-DL and DL periods (DL highlighted in yellow)

All Chi	ld Abuse/I	Neglect Referra	als Receive	d by	Month and Ye	ar,
Mendocino County Family & Children's Services 1/1/2018- 12/31/2020						
2018		2019			2020	
January	261	January	210		January	229
February	227	February	234		February	195
March	195	March	203		March	159
April	214	April	218		April	113
May	215	May	254		May	117
June	181	June	158		June	169
July	130	July	151		July	159
August	168	August	151		August	145
September	221	September	230		September	203
October	275	October	230		October	193
November	167	November	198		November	178
December	153	December	172		December	144
Total	2407		2409			2004

Data source: CWS/CMS Business Objects, 3/28/2021

APPENDIX B

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Technologies and Tools Utilized During Distance Learning

Technology:	Tools Used / Available:	Purposes / Benefits:
Essential:		
Personal computers with camera, speakers, and microphone (or headset)	Chromebooks Personal Computers	 Enables students to attend teleconferences and access websites for educational materials Headphones reduce distractions for students who lack private study surroundings
Internet connections with site filtering	 Dedicated broadband (cable, satellite, microwave) Hotspot Wi-Fi (requires cell service) Filtering content sources (GoGuardian, NortonLifeLock, Qustodio, bark, BullGuard, etc.) 	 Provides required connectivity for teleconferencing or for connection to learning sources such as websites Requires content filtering to either prevent access to or alert parent or school of inappropriate searches or website content
Teleconferencing software / website (requires a personal computer with camera, microphone and internet connection)	 Zoom Google Classroom Microsoft Teams 	 Allows teacher and students to view and discuss with each other from remote locations (home, classroom, etc.) Teachers and administrators can meet without the need for travel Parent-teacher conferences can be efficiently scheduled with the convenience that parents do not need travel time to attend Facilitates communication and sharing of ideas among schools in geographically distant areas of the County
Recommended:		
Assignment Collaboration	Google ClassroomSchoologyEdmodo	 Tools for creating, distributing, and grading assignments Boost collaboration and foster communication when teaching remotely Distributing announcements

Optional:		
Classroom-based tools	 Large format interactive whiteboard-like displays (e.g., ViewSonic, RS+ Boards, JamBoard, etc.) Motion tracking web cameras (Pivo, OBSBOT, etc.) 	 Improves the ability for the teacher to view the entire class of students attending sessions remotely Facilitates sharing of online teaching materials with students and interactive lesson presentations (similar to how a whiteboard is used) Tracking webcams allow the teacher to move in the classroom among various instructional displays and the camera follows the teacher's movements For students attending class remotely, it improves the feeling of "being in the classroom"
Presentation Development Tools	PearDeckKami	Facilitates creating instructional content and engaging content with students
Online / digital Instructional Aids	 Khan Academy Big Ideas Learning IXL (Math, Language Arts, Science, Social Studies, Lesson Planning) Apex Learning (Credit Recovery, Summer School, etc.) 	 Professionally developed teaching aids designed to engage students and facilitate independent learning and providing tools for adaptive learning paths Digital, online instruction and independent study for students who want advanced courses like Chemistry, Physics or for college prep or for credit recovery ("summer school")
Augmented or Virtual Reality Courses	 Lincoln Electric Virtual Welding Simulator ACS Virtual Chemistry ShareCare YOU 	Provides instruction for obtaining basic skills that may require equipment or instruction that is not available at school sites. Subjects include:

Administrative:		
Student Information System	AeriesPowerschool	 Tracking attendance, grades, reengagement of chronic absentees Powerschool has a more modern design than Aires with tools for engaging parents

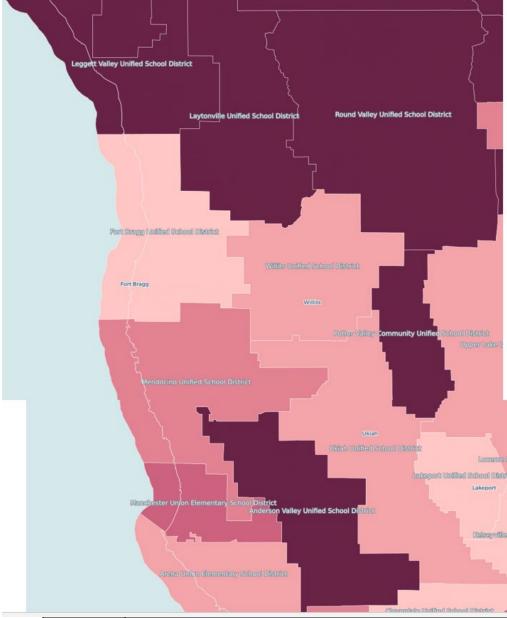
Sources: Compiled from Interviews of the GJ Education Committee based on comments by MCOE representatives, District Superintendents and School Principals of Mendocino County

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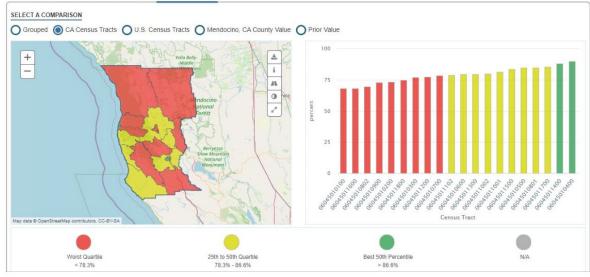
APPENDIX C

Broadband Access for School Districts in Mendocino County

Source: Broadband Availability in School Districts (https://maps.ruralopportunitymap.us/broadband-access-map), as of January 24, 2021



COLO	R:	ACCESS CLASSIFICATION:
		Good Access (example, Ft. Bragg)
		Partial Access (example, Point Arena, Ukiah)
		Poor Access (example, Mendocino)
		Extremely Poor access (example, Anderson Valley)



Comparison of Mendocino County by Census Tract with Other Regions of California

Source: Healthy Mendocino, data compiled from U.S. Census data for 2018 http://www.healthymendocino.org/indicators/index/view?indicatorId=9231&localeId=260

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