Online Access Within and Across Schools

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Online learning currently reaches millions of K-12 learners and its annual growth has been exponential. The industry has projected that this growth will likely continue and has the potential to lead to dramatic changes in the educational landscape. While online learning appears to hold great promise, civil rights legislation, related policies, and their application in online learning as they pertain to students with disabilities has received much less research attention than is necessary for policy planning and decision making. Researchers urgently need to develop shared understandings about how online learning affects students with disabilities as they participate in online learning environments, move through their coursework, and transition back to the brick-and-mortar classrooms (or out of school settings in general). Research that claims to focus on students with disabilities in online learning environments should be designed and carried out with particular attention to educational and social outcomes. The Center on Online Learning and Students with Disabilities (COLSD) conducts research in alignment with these goals.

COLSD, a cooperative agreement among the University of Kansas, the Center for Applied Special Technologies (CAST), and the National Association of State Directors of Special Education (NASDSE), is focused on four main goals:

1. To identify and verify trends and issues related to the participation of students with disabilities in K-12 online learning in a range of forms and contexts, such as full or part time, fully online schools; blended or hybrid instruction consisting of both traditional and online instruction, and single online courses;
2. To identify and describe major potential positive outcomes and barriers to participation in online learning for students with disabilities;
3. To identify and develop promising approaches for increasing the accessibility and positive learning outcomes of online learning for students with disabilities; and
4. To test the feasibility, usability, and potential effectiveness of as many of these approaches as would be practical.

To meet the first two goals, COLSD has conducted a number of activities designed to develop understandings about the general status of students with disabilities in online learning. Exploratory research activities included case studies of two fully online schools; several national surveys of purposefully sampled parents, students, teachers, and district and state

administrators; interviews with members of individualized education program (IEP) teams working with students with disabilities who were completing online coursework; and a systematic review of one state's student participation, retention, and completion data. COLSD is making an additional effort to describe the landscape of online learning for students with disabilities through a series of forums with different stakeholder groups. The first forum was held with state directors of special education (or a designee) to obtain an in-depth view of the issues and concerns with students with disabilities in online learning from the state policy perspective. The second forum was conducted with virtual school district superintendents and other top-level district administrators. These administrators' responses are the topic of this paper.

Participants and forum topics

In the summer of 2014, COLSD staff began planning a series of forums to shed light on the state of online learning and students with disabilities from the perspective of various practitioners and stakeholders. This second forum was held with virtual school superintendents and other virtual school administrators in a face-to-face gathering March 31 and April 1, 2015. Due to their configuration as online schools, some of these institutions enroll students across the country. These administrators were selected for participation on the basis of three factors: (1) Status as a top-level official of a large blended learning program. (2) Status as a supervisor in states that have high levels of participation in online learning, even though school enrollments vary in size. (3) Responsibility for schools that represented demographic diversity. Although the experiences and information from the participants do not represent all administrators of virtual schools in this country, they do provide an informed sample.

The five forum participants represented two public school districts (Mooresville, NC and Detroit, MI), two national charter schools (Carpe Diem Schools and Rocketship Education Network) and one state level program (North Carolina Virtual Public School). The two charter school administrators represented programs in multiple states: Arizona, California, District of Columbia, Indiana, Ohio, Tennessee, Texas, and Wisconsin. Collectively their schools enrolled students from kindergarten through 12th grade and included eight to 40 percent of the enrollees as students with disabilities. A list of participants is also included in this report (Appendix A).

At the time of her participation, the first administrator was the special education director for a school district of 6,100 in North Carolina. Her district had been involved in online/blended instruction since 2008. In the fall of 2015, that district was expected to be a full 1-to-1 with laptops or tablets in every grade (K-12). Roughly 12 percent of the student body in her district had been identified as having at least one disability. Currently she is a special education director for a different school district in North Carolina with 20,000 students that is also 1-to-1 with laptops and tablets in grades 3-12.

The second administrator is the vice president of achievement for the National Education Board of National Charter Schools. Currently, he is in charge of achievement for

6,000 students attending grades K-5 in California, Wisconsin, and Tennessee. His schools have used various blended models since they opened in 2007. Approximately 11 percent of students in his network are identified as having at least one disability.

The third administrator was included because of her recent history of employment with the Education Achievement Authority in Detroit, Michigan, which is a statewide reform charter district. As of 2015, six high schools, and one K-8 school were in her district. She is currently working with Operation Breakthrough in Kansas City, Missouri, one of the largest early learning centers in the region. Percentages of students with disabilities in the schools she works with range from 8 to 40 percent.

The fourth participant is an administrator at the North Carolina Virtual Public School, the nation's second-largest fully online supplemental program. Her program has 35,000 students, approximately 10 percent of which are identified with at least one disability. In addition, her program operates a unique occupational course of study program aimed at transitioning students from school to work and post-high school training, especially directed toward meeting the needs of students with disabilities. This program has 7,400 students and 14 percent are students with disabilities.

The fifth administrator represented Carpe Diem Schools—a multistate charter school network for grades 6 through 12. Schools in his network employ various learning models, but most are some type of blended learning. Percentages of students with disabilities in his schools range from 12 to 25 percent of the approximately 2,500 total students in the network.

COLSD staff reviewed previous literature, revisited findings from previous research activities (e.g., case studies, surveys, and interviews), and considered responses from the first forum of state directors of special education to determine the topics for this second forum. As in the previous forum, the population under consideration consisted of students with disabilities. Therefore, the responses reported are always in the context of meeting the needs of students with disabilities in online learning environments. The 10 topics covered at this forum included:

1. Enrollment, persistence, progress, and achievement
2. Parents' preparation and involvement in their child's online experience and IDEA notifications
3. IDEA principles in the online environment (e.g., free appropriate public education, least restrictive environment, due process protections)
4. IDEA principles in the online environment (e.g., eligibility assessment, IEP development)
5. Access and coordination of related services for students with disabilities
6. Effective and efficient access, sharing, integration, and instructional usage of student response data among the parties involved in online instruction (e.g., instructor, administrator, provider, and vendor), along with privacy issues
7. Effectiveness of teacher preparation in the online learning environment, and promising (or negative) practices that facilitate (or negate) professional development

8. Instructional practices: Integration of optimal evidence-based practices; availability of skill/strategy instruction in online environments; use of the unique properties afforded in online environments
9. Differential access to online learning within and across your schools (e.g., computer or tablet access, connection speed, district restrictions on material access and assistive technologies)
10. Local supervision for online learning in general education and, in particular, for supervision in special education

Participants received a packet of materials prior to the meeting, including the agenda (see Appendix B), and a list of the topics and questions to be considered. The forum began with introductions and a comprehensive discussion of the importance of online learning for students with disabilities from each participant's perspective. Next, each administrator responded to a set of questions about the selected ten topics. The participants determined the order in which they wanted to use to describe their organization's current status, needs, values, and other perspectives pertaining to the topic. The format of the meeting was framed as a conversation in which participants were encouraged to elaborate, explain, and engage in uptake with one another's comments. A representative from COLSD moderated the talk to provide all participants with comparable opportunities to share insights about each topic. For each of the 10 topics, participants responded to five questions:

1. How is your organization currently addressing this topic?
2. Of the (10) topics in our discussion list, how important is this topic?
3. What is working well for you on this topic?
4. What are the top challenges you face and the direction you see your organization taking on this topic?
5. What research question could have a significant impact on your policy or practice?

Access to online learning within and across schools (devices, speed, bandwidth, policy restrictions, assistive technologies)

This document, the ninth in this series of forum proceeding papers, presents participants' responses to the set of five questions on the topic of differential access to online learning within and across schools. Administrators considered access in terms of devices (e.g., computers, tablet, and phones), connection speed, bandwidth, policy restrictions, and access to assistive technology. An analysis of studies around access by Müilenberg and Berge (2005) found that one of the main barriers for online learning was consistent access to reliable Internet devices and service. Although this study was conducted more than 10 years ago, understanding whether administrators perceived that conditions of access had improved in their schools is important.

Initial research activities at COLSD found that states have many different understandings about what constitutes participation in online education for all students, which included the access to devices and technology to learn (Burdette, Greer, & Woods, 2013). Although no direct

studies of Internet access have been conducted by COLSD, Greer, Rice and Carter (2015) collected accounts from teachers in which they reported that students' lack of access to technology presented challenges for students with disabilities in completing work, submitting it, and keeping up a pace necessary to maintain momentum in a course. Technology in the aforementioned study referred to devices such as computers, tablets, and phones, and connectivity necessary to run them. Teachers reported a perception that many families lacked even basic non-internet devices like calculators. According to the teachers, families still seemed to have a mindset around technology in which a handheld calculator rather than an Internet calculation application was preferable for completing work. In addition, Carter and Rice (2015) and Rice and Carter (in press) found that parents were often frustrated, even unable to execute tasks like attaching a document to an email to help children submit work, use learning management systems to submit work and access assignments, and monitor student grades. These responsibilities existed in addition to maintaining communication to helping children stay on pace when personal or family crises arose, since many students stopped working in the wake of unsettling life events even when they had the technical access continue to log on.

How is this topic addressed in your organization?

When asked about differential access to online learning, administrators said that their schools aim to provide their students with 24-7 access to materials. However, the administrators did not necessarily think that students needed access to all materials all hours of the day. Administrators from the blended schools thought like they were better able to maintain access for all students because they can directly provide it while the students are in their presence since they provided devices for learning at school during the regular day. One administrator explained that since these devices were available during time spent at school, students were not supposed to have to do any homework outside the school day unless they are working on projects or miss class.

Access was also considered from the vantage point of student having a device available for usage (e.g., computer or tablet). Some schools allow students to take home their computing devices. Administrators at these schools require monetary deposits from families as assurance against damage. Administrators believed required deposit policies have indeed improved the out-of-school care and treatment of devices and other equipment.

Administrators also reported careful consideration around a technology curriculum designed to prepare students to engage with technology responsibly. They thought that a curricular approach was more appropriate rather than developing a series of prohibitive policies. Administrators from online and blended high schools reported great interest in providing direct learning opportunities for students to learn courteous behavior around technology use and other elements of digital citizenship. Acquiring such dispositions towards technology is supposed to prepare students for future online educational opportunities as well as future employment responsibilities while decreasing the need for certain kinds of surveillance from the online schools. For example, one administrator explained that his schools do not monitor cheating. The consequence for cheating and other academic dishonestly is

natural: failure of the high stakes exam and having to re-take it. In addition, digital citizenship policies are important since teachers and students communicate via Internet and other media. Engaging students and teachers together in conversations about citizenship should support appropriate communication.

In terms of special considerations for students with disabilities one administrator shared his experience that students requiring special education services are also often lacking in interpersonal and other social skills for various reasons; perhaps they have missed out on sociality because of isolation stemming from misguided approaches to disability support or perhaps part of the nature of the disability includes decreased interest in or awareness of social mores. In any event, he finds that students with disabilities were often among the students requiring more careful consideration around issues of appropriate Internet social activity. He indicated that his schools were taking more active roles in ensuring that all students have appropriate support for negotiating the multiple and diverse opportunities for social interaction provided by online educational environments.

Elementary school administrators were also interested in cultivating digital citizenship and they have fewer problems with cheating generally, but they do take great pains to block websites with material that is inappropriate for children. At the elementary level the consensus was that teaching students about socialization on the Internet needed to be done delicately and with parent support. They also noted that teachers have varying requests for blocking/unblocking websites for instruction and that blocking a site for some teachers and not others was impossible.

An administrator from North Carolina indicated that the general assembly of that state had recently allocated a substantial sum to study technological access to Internet and to devices. Right now informal understandings exist that students in this state are gathering in public school parking lots or community locations (e.g., McDonald's restaurants) that offer free Wi-Fi to complete homework assignments. In addition, local churches have also provided Internet access for students to complete homework in their buildings.

How important is this topic from your perspective?

When asked if this topic was critical as measured against the other topics, administrators indicated that the topic is was very critical, in fact, one of the most critical of all the topics covered. The administrators indicated that many issues exist around technological access (e.g., access to devices and access to the Internet).

What direction do you see the school(s) you are in charge of going on this topic?

Most of the participants said that they are still working to find ways to make their course content more accessible to learners with different needs. This access is about retrofitting content online, especially that content that is developed outside the school.

However, providing access is also about making sure families have Wi-Fi and that the families are likely able to log on to courses with their devices (e.g., read the course content).

Several administrators described past efforts to secure free or inexpensive access to Wi-Fi for families, but doing so did not solve the problem since families in the most need of this service also moved frequently and hence, away from school-supported or school-secured connectivity. Since providing Wi-Fi access at home is so difficult, administrators indicated a general direction away from helping individual families obtain at home Internet access. Another frustration was expressed around large Internet providers. When the Internet cable is installed in communities, schools and neighborhoods with great socioeconomic need are not always the places that are within the range of this connectivity. Another difficulty with providing families Internet access is that funding sources, such as grants, have grown increasingly restrictive in regards to permissible expenditures. New restrictions do not allow schools to fund Internet access for families. As an alternative, administrators said their schools were working to identify local places in the community, such as parks and libraries with consistent reliable Internet at which families could be directed to complete work and help monitor student progress. Parks were held up as a particularly helpful location because they do not close like libraries and other buildings.

What's the top challenge faced?

The administrators identified several critical challenges. One is the use of devices that are not compatible with the full range of programs. For example, some computing and tablet devices do not run Java, but many of the programs needed to do online learning are Java heavy. The administrators are trying to build courses that are more mobile adaptive, but numerous problems persist because of the variations in requirements for technology and so many devices.

Another challenge is in making sure that teachers have access to websites that they need for providing the free, online instructional materials (e.g., videos used for teaching). Districts are not able to give one school access to a website but limit access to another school. The teachers and other professionals in the school do not always agree about what sites need to be blocked and what sites do not. In terms of student use of social media, the sense was that students should be able to access social media, but social networking sites remain blocked at many schools.

What are the various stakeholder concerns?

The major concerns of the stakeholders included the fact so much more work remains to do around accessibility training. At present only a few companies are working on making commercial video content accessible. The emphasis has shifted this direction from an earlier focus on print-based resources.

Another concern is around the availability of funding. Administrators noted that funding used to provide access to families vacillates from year to year. The administrators like flexible funding to provide devices and broadband to families but funding restrictions can suddenly

appear, which prevents them from continuing a family directed program and thus continuity or systemic efforts are thwarted. One administrator reported that he is often unable to join a network for cell service on his phone in the communities in which the schools are located. For instance, in some schools in the San Diego area that he visits, he cannot get cell phone service at the school.

Finally, large scale testing requires so much bandwidth and networking capability that schools have to essentially shut down all other technological activities during times of testing. This resource limitation is a great source of frustration since schools that rely on technology for instructional delivery cannot operate at full capacity during testing windows.

What research questions could have a significant impact?

The major research question on this topic involved access to the technology services and devices within and across districts. This concern resulted in several research questions.

1. What are the limitations and affordances of Universal Design for Learning as primary guidelines for access?
2. How does access for students with disabilities differ quantitatively and qualitatively from students without disabilities?
3. How do schools and districts develop and sustain budget structures in which they can provide greater access to technological devices and services?
4. What are the channels through which delivery system changes lead to policy changes?
5. What do policy makers know/understand/believe about technological access?

Implications

Discussion around this topic has several implications. The first is that administrators are working to understand access in terms of Universal Design for Learning (UDL) as a primary means of ensuring that content is presented in formats that enable students with disabilities to learn from it. Although only a little discussion occurred about UDL, administrators suggested more research was necessary around how UDL aligns with other efforts to provide comprehensive, comprehensible access to online educational environments. Research around UDL use in online learning is particularly pressing since accessibility requirements have been added to recent federal disability legislation. However, most of the problems the administrators could identify revolved not around content access, but around reliable Internet connectivity for all students.

Considerable problems exist for students with disabilities in terms of achieving access to content outside and inside school. Although students are coming up with creative ways to use community and commercial resources (parking lots, churches, and fast food restaurants) and schools are working to alert all families to the community's internet resources, these ad hoc ways of accessing the Internet are likely not sustainable for all families in their present

configuration. In a sense they create other challenges such as transportation to a location that offers access and a suitable workspace. Communities that value the online educational opportunities should prioritize centers of education and other public spaces for Internet access. Research and practical work are yet to be done that explores the informal and formal approaches in which communities can work together to provide connectivity for online education, especially for K-12 students, and particularly those learners and families who represent diverse needs and have very limited resources.

In addition, a need might exist for funding sources flexible enough for schools to help families obtain reliable Internet access. In turn, families also need to be more involved in conversations about maximizing the educational potential of these services and preventing damage to devices. In terms of research, a question about collaboration with families around access might yield insights into how to structure support for individual households.

Also new conversations, even debates, are probably in order around how and when to talk to students about Internet safety. Although most of the schools are doing as much as they can when they think the students are ready for it, no guidelines exist, let alone research-based ones that provide a basis for what to teach and when. Issues of global/environmental costs of maintaining and using Internet devices, which are largely absent from technology citizenship as well, might also be added to these conversations.

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Appendix A

Forum Participants

OSEP AND COLSD FORUM
Practices and Challenges in Online Instruction for Students with Disabilities

Sandy Albert
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    Programs
Rowan Salisbury Schools

Eliz Colbert
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Appendix B

Forum Agenda

OSEP and COLSD Forum
**Practices and Challenges in Online Instruction for
Students with Disabilities**

MARCH 31 – APRIL 1, 2015

AGENDA

NASDSE Conference Room
225 Reinekers Lane, Suite 420
Alexandria, VA 22314
703-519-3576

Tuesday, March 31, 2015

12:00 - 12:45	Working Lunch

- Welcome: *OSEP staff and Bill East*
- Participant introductions: *Your district experiences with online instruction*
- Overview: *Explanation of how we hope this discussion proceeds*

12:45 - 1:45   Discussion *Topic #1:* Enrollment, persistence, progress and achievement for students with disabilities

1:45 - 2:00   Break

2:00 – 2:45   Discussion *Topic #2:* Parent preparation and involvement in their child's online experience and IDEA notifications

2:45 - 3:30   Discussion *Topic #3:* IDEA principles in the online environment (e.g., FAPE, least restrictive environment, due process protections)

3:30 - 4:15	Discussion *Topic #4:* IDEA principles in the online environment (e.g., eligibility assessment, IEP development)
4:15 - 4:30	Break
4:30 - 5:15	Discussion *Topic #5:* Access and coordination of related services for students with disabilities
5:15 - 5:30	*Wrap-up, suggestions for improving our process and preview for day two. Dinner plans?*

Wednesday, April 1, 2015

8:15 - 8:30	Review	*Review of yesterday and today's preview*

8:30 - 9:15	Discussion *Topic #6:* Effective and efficient access, sharing, integration, and instructional usage of student response data among the parties involved in online instruction (e.g., instructors, administrator, provider, and vendor) and addressing privacy concerns
9:15-10:30	Discussion *Topic #7:* Effectiveness of teacher preparation in the online learning environment; and promising (or negative) practices that facilitate (or negate) professional development
11:15-11:30	Break
10:30-11:15	Discussion *Topic #8:* Instructional practices: Integration of optimal evidence-based practices; availability of skill/strategy instruction in online environments; use of the unique properties afforded in online environments

11:30 – 12:15   Discussion *Topic #9:* Differential access to online learning within and across your schools (e.g., computer or tablet access, connection speed, district restrictions to material access & assistive technologies)

12:15 – 1:00   Working Lunch – Discussion *Topic 10:*   Local supervision for online learning in general education and in particular for supervision in special education

1:00 – 1:15   Discussion of your views on the Center's future activities

1:30 - 1:45   Wrap up: *Our next steps with this information: draft a summary; share the summary with you for accuracy and completeness; draft a report on the topics and share with you for edits regarding accuracy and completeness; and complete revisions and disseminate.*

Your closing comments

Reimbursement issues and our closing comments

Thank you and safe travels