Practices and Challenges in Online Instruction for Students with Disabilities:
State Education Agency Forum Proceedings Series (Report No. 8)

Differential Access to Online Learning Within and Across Districts

Tracy O. Franklin, Paula Burdette, Theron (Bill) East, and Daryl F. Mellard
June 2015

Introduction

Currently, online learning reaches millions of K-12 learners and its annual growth has been exponential over the past number of years. This growth has and will likely continue to lead to dramatic changes in the educational landscape. While online learning appears to hold great promise, a paucity of research addresses the pedagogical implications for students with disabilities (SWDs). Researchers urgently need to conduct investigations that describe what is happening in the field and demonstrate how online learning should be designed and delivered to impact these students' educational outcomes. The Center on Online Learning and Students with Disabilities (COLSD) has been conducting research in this area.

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 SWDs in K-12 online learning in a range of forms and contexts such as fully online schools, blended or hybrid instruction consisting of traditional and online instruction, and online courses;
2. To identify and describe major potential positive outcomes and negative consequences of participation in online learning for SWDs;
3. To identify and develop promising approaches for increasing the accessibility and potential effectiveness of online learning for SWDs; and
4. To test the feasibility, usability, and potential effectiveness of one or more of these approaches.

To meet the first two goals, the Center has conducted a number of activities. Exploratory research activities include case studies of two fully online schools; national surveys of purposeful samples of parents, students, teachers, and district and state administrators; interviews with members of individualized education program (IEP) teams; and a review of one state's student participation, retention, and completion data. Additionally, to describe the landscape of online learning for students with disabilities, the Center is conducting a series of forums with different stakeholder groups. The first forum was held with state department of education staff to provide an in-depth view from the state perspective. Other forums under

consideration include forums with school district administrators, online learning vendors, and parents.

Participants and forum topics

In the summer of 2014, COLSD staff began planning for the series of forums to shed light on the state of online learning and SWDs from the practitioners' perspective. The first forum was held with state department of education staff in a face-to-face gathering November 17th and 18th, 2014. Participants were staff members from six state departments of education and one local district administrator. A list of participants is included as an appendix to this report. The states represented at this forum were Arizona, Florida, Georgia, Massachusetts, Ohio, and Virginia. These states were selected based on three factors: (1) Each state has a relatively detailed state policy on online learning. (2) Each state has state-level activity in special education and online learning. (3) Each state is geographically diverse. While staff from other states had asked to attend the forum, the forum process and resource constraints required that a limited number of individuals participate in order to gather in-depth information. Although the experiences and information from the participating states do not represent the nation as a whole, they do provide an informed sample. Other than Massachusetts and Florida, each state's director of special education attended. Massachusetts and Florida's representatives were educational specialists with knowledge in both special education and virtual education.

COLSD staff reviewed previous literature reviews and other research activities (e.g., case studies, surveys, and interviews) to determine the topics for this first forum. Staff gave suggestions for collapsing some topics and extrapolating concepts from others. The final eight topics covered at the forum included the following:

- Enrollment, persistence, progress, and achievement;
- Parents' preparation and involvement in their child's online experience, including promising practices to support parents' roles;
- IDEA principles in the online environment (e.g., FAPE, least restrictive environment, parental notification, due process protections);
- Access to student data, including privacy concerns, sharing, integration, and instructional usage among the parties involved in online instruction (e.g., instructional setting, instructor, administrator, provider, and vendor);
- Teacher preparation -- both preservice and inservice -- for the online learning environment;
- Integration of optimal evidence-based instructional practices; availability of skill/strategy instruction in online environments;
- Utilization of the online environment's unique properties and affordances (i.e., those features that would not be possible or practical in the offline environment) in the areas of collaboration, personalization of instruction, and multiple means of demonstrating skill mastery; and
- Differential access to online learning across the state (e.g., computer or tablet access, connection speed, district restrictions to material access and assistive technologies).

Participants received a packet of materials prior to the meeting, including the agenda (see Appendix B), a list of the topics and questions to be considered, a draft of a Center publication entitled, "The Landscape of Online Learning," and the publication "Using Technology to Support At-Risk Students' Learning" by Darling-Hammond, Zielezinski, and Goldman. This latter publication can be found at https://edpolicy.stanford.edu/sites/default/files/scope-pub-using-technology-report.pdf. The forum began with introductions and a comprehensive discussion of the importance of online learning and students with disabilities from each state staff member's perspective. Next, each state representative responded to a set of questions about the selected eight topics. In a round-robin fashion so each participant had an opportunity to describe his/her state's need, status, importance, and other perspectives pertaining to the topic.

For each of the eight topics, participants responded to six questions:
- How is the topic addressed in your state?
- How important is this topic?
- What direction is your state moving on this topic?
- What are the top challenges around this topic in your state?
- What is going well regarding this topic?
- What research question could have significant impact on this area?

As a closing exercise, participants described their top leadership challenges in regard to online learning for students with disabilities.

Differential access to online learning within and across districts

This eighth and final manuscript in a series describing the findings of this forum discusses differential access to online learning within and across districts including computer or tablet access, connection speed, district restrictions to content, and assistive technology. The Center's initial activities found that issues arising in this area include wide variation in students' internet access away from school (Curie-Rubin, 2014), challenges arising from students' use of smartphones and social media (Smith, Greer & Stahl, 2014) and assuring that learning management systems and the curriculum content they deliver are accessible to students with disabilities from the outset (Hashley & Stahl, 2014).

How is this topic addressed in your organization?

Participants had many answers regarding the ways in which differences in access to online learning within and across districts is addressed. Each SEA appeared to have its own challenges and approaches. As districts and SEAs partner with different institutions, they are met with different funding challenges and opportunities and are differentially located on the continuum of incorporating online learning into their curriculum and policies. With this variability they have developed specific approaches to their specific needs. For example, Virginia's representative iterated that for his state, connectivity and accessibility are the top

priority at the moment, stating "it's all about getting online at this point." The same participant has noticed that general education and educational technology units are the driving force of this movement, and although special education has been invited to the conversation, the impact of that input is small. Georgia is in a similar position with a plan to implement state-wide broadband access but is currently in the process of garnering funds to do so. The driving force for Georgia is the need to administer all assessments online, unless paper testing is part of a student's IEP. The state has developed the Georgia Milestones Assessment through which online assessment is being adopted over the course of several years.

Other states are focused on hardware and devices. In Florida, full-time students in districts' virtual instruction programs who don't have technology in the home and are eligible for free-reduced price lunch receive technology and Internet to participate in the program from the district. The SEA recognizes the significant variability in students' needs and abilities in accessing technology. As such, Florida has also been concentrating on embedding assistive technology (AT) in online and digital resources when designing programs to avoid the need to retrofit programs and resources for students with disabilities in the future. They are also implementing the National Center on Accessible Instructional Materials' PALM initiative guidelines (purchasing accessible learning material) to encourage publishers to create accessible learning materials that are broadly usable by a wide range of students. Florida is bringing curriculum, instruction and AT individuals together to discuss and purchase the most appropriate materials for students.

How important is this topic from your perspective?

Participant responses regarding the importance of differential access to online learning were uniform: the topic is very important. The most salient reason shared was that availability of access to online learning is an equity issue, and the schools and districts struggling most to achieve and maintain reliable access are those settings with limited funding and rural locations. In addition, since some view the online learning environment as being the least restrictive for many students with disabilities, special education programs are going to lag in their provision of adequate instruction and resources, if they don't have reliable access. Best practices for special education instruction is bound to continue to incorporate more AT as research is done with the use of online learning environments for students with disabilities. According to the state representatives, online learning accessibility has the opportunity to bridge or widen the equity gaps for all students depending on how resources for online learning are allocated.

What direction do you see your state going on this topic?

Connectivity and access remains a major issue for many districts and is being addressed in different ways throughout the country. One state is considering partnering with hospitals, which are guaranteed connectivity, with the expectation that if providers have internet access at a nearby hospital, they can also connect to the school. In Virginia the governor is leading the charge for creating better opportunities for communities with no broadband access by tethering such areas' broadband access into discounted district internet rates. Similarly, Georgia has a plan in place to bring broadband access to the entire state and is currently

gathering funding from the legislature to carry out the approved plan. Finally, a fourth state from the forum has begun ensuring technology access for districts to be able to send student level data to the Massachusetts Department of Elementary and Secondary Education electronically, rather than by hard copy, as some rural districts are doing currently. The Student Interoperability Framework (SIF) is currently being installed in Massachusetts districts. If a district does not currently have the ability to send data electronically to the Department, the Department will provide needed technology to the district to enable them to send the data through SIF. In addition, Massachusetts is currently looking into developing an online IEP compatible with SIF as a venue to communicate data elements.

What are the top challenges faced and various stakeholder concerns?

The state representatives present communicated many challenges and stakeholder concerns regarding consistent, equitable access to online learning within and across districts, and the concerns varied widely. The three main themes of concerns were funding, special education inclusion, and challenges specific to students who live in rural or impoverished areas. The funding challenge was discussed as having several facets. Multiple state representatives indicated stakeholder concerns about the SEA and LEAs' financial ability to fund students' access to an online environment. In an era of shrinking resources, providing access is not always viewed as a critical element to educational outcomes. Another financial concern is the cost for retrofitting technology developed several years ago. Compliance with section 508 of the Rehabilitation act requires that barriers to information via technology must be removed for individuals with disabilities, but if the financial burden for upgrading is too much, even retrofitting doesn't happen, and students have to wait for new devices, software, and programming. In addition, most legislation doesn't speak to the lifespan of technology, which is commonly assumed as only 3 years, and new instructional materials might not work with older devices after software companies update their product.

Compounding the financial concerns relevant to online learning access is that special education often doesn't get included in the purchasing conversation for new technology and then devices purchased aren't compatible with the necessary AT or are otherwise inappropriate for the learners' special needs. Because AT isn't compatible with all hardware, this issue is a major hurdle for districts/states that are implementing bring your own device (BYOD) programs. One solution to this challenge would be the incorporation of AT in Universal Design for Learning (UDL). Most entities look at device properties as separate which result in device – based systems. When this perspective is the case, the choice of the device can significantly influence the UDL. Some devices are easier to use and accommodate more users. For example, keyboards are not created equal. Some keyboards are more accommodating to individuals' motor or vision abilities. Students living in high poverty and rural areas are another special population of concern to stakeholders. Rural districts are having difficulty with using new technology, particularly Massachusetts' student interoperability framework. If students are online at home in high poverty or rural areas and the electricity goes off frequently, they then have no internet access. Is this issue school based or community based? Does Internet become a necessity for the entire community? In addition some concerns are specific to students in other environments, for example incarcerated students or learners in Job Corps settings have

very limited internet access. Those learners in residential educational or treatment settings often can't access all of the needed materials.

What's going well?

Despite the difficulty of integrating new devices and software into everyday learning and assuring internet access on both small and large scales, a number of plans and practices for increasing access are taking place throughout the country. The theme across SEAs and LEAs who are seeing progress related to equitable access within and across districts is the understanding of the centrality of access and connectivity to student learning. In Florida, students with disabilities with an IEP receive a free device if they receive free or reduced lunches. Florida virtual school is makings sure many technology adaptations are embedded in virtual resources from the beginning and are educating teachers on how to use new technology in blended classrooms. Arizona's representative reported that their AT department is great at keeping up with changes in devices and also with updates in online tools. Their schools are also partnering with Northern Arizona University on a new approach for a lending library for online tools. Massachusetts is also accessing an AT lending library called *MassMatch*. These libraries allow students with a disability the chance to utilize a greater span of tools to help them demonstrate mastery. Virginia and Ohio are finding success in other areas of increasing accessibility to online learning. Virginia has instituted a 'bring your own device' policy, and this approach has been helpful in bridging the digital divide among districts. The program is voluntary, but allows students increased opportunities to access online learning and to master the skills needed to use it. In addition, schools in Ohio are becoming community hubs for internet access by providing entire communities with open internet access.

What research questions could have a significant impact?

As with many other topics in the forum, many of the research questions regarding connectivity and accessibility stem from the idea of identifying or developing a set of best practices for practitioners. These areas included questions about how a district can assess whether they are up to speed with access to technology. If the districts aren't current with their technology, are steps agreed upon for reaching that benchmark? Additionally, role specification was of concern. Whose job is it to provide measurement and monitoring of this updating process? Questions were also raised regarding the relevance of student personal devices and whether or not they are now obsolete.

However, this topic also had more logistical questions when compared to the other seven topics. Questions that fall under this category include: how can AT and virtual technology be integrated synergistically; do most districts have an assigned AT person; and are districts attending the annual industries conference? Finally, one of the most important questions asked doesn't fit in these categories: Are equity gaps shrinking or getting bigger and are they really being addressed? How do districts and SEAs ensure they are contributing to bridging the gap with technology, rather than increasing it, since technology has the power to do both?

Implications

This topic is one of great importance since connectivity is a challenge for ensuring equitable access and learner outcomes. One of the most important sentiments expressed in the forum was the great variation in accessibility and connectivity exists across the country. The participants reflected that this variation included the access to up-to-date devices, access to the latest versions of the applications, as well as access to the Internet, which is much more complicated since multiple community partners are involved (e.g., the Internet provider, the local district, the school setting, and the home). Several participants noted that connectivity is very limited or even non-existent in some settings. Accessibility could be limited due to initial start up costs, maintenance costs, availability of Internet access in the setting, or administrative restrictions. The participants indicated that just having the computing devices was almost the simplest challenge they could remedy. Due to the dynamics of the environment, the devices and the applications need to have continued upgrades, which can have unintended consequences such as incompatibilities and need for additional professional development for staff or tutorials for the users. So the expenses are on-going not only for daily access but for ensuring compatibility as innovations and upgrades are made.

From the discussions, several questions emerged:

1. How does a school evaluate whether or not they are adequately providing access to online learning opportunities and doing so equitably among students?
2. How can educators, administrators, and state directors work together to ensure UDL is a consideration in the development and purchasing of technology products?
3. Currently, ensuring equitable access for all schools and students is of top priority, and much progress is being made in this arena, but important questions remain. For example, what does equitable access look like and how can it be ensured in environments with significant geographic, population density, and resource variations?

Franklin, T. O., Burdette, P., East, T., & Mellard, D.F. (2015).
Differential Access to Online Learning Within and Across Districts: State Education Agency Forum Proceedings Series. (Report No. 8). Lawrence, KS: Center on Online Instruction and Students with Disabilities, University of Kansas.

References

C Currie-Rubin, R. (2014). Understanding the roles of families in virtual learning. *TEACHING Exceptional Children.* Advance online publication. doi:10.1177/0040059914530101

Johnston, S., Greer, D., & Smith, S. (2014). Peer learning in virtual schools. *Journal of Distance Education, 28*(1), 1-31.

Hashey, A., & Stahl, S. (2014). Making online learning accessible for students with disabilities. *Teaching Exceptional Children.* Advance online publication. doi: 10.1177/0040059914528329

Appendix A

Forum Participants

OSEP AND COLSD FORUM
Practices and Challenges in On-line Instruction for Students with Disabilities

Paula Burdette, Site Director
National Association of State Directors of
Special Education, Inc.

**Angela Denning, Deputy Associate
Superintendent**
Exceptional Student Services
Arizona Department of Education

**Don Deshler, COLSD Principal
Investigator and Professor**
Center for Research on Learning
University of Kansas

**Theron (Bill) East, Jr., COLSD Principal
Investigator and Executive Director**
National Association of State Directors of
Special Education, Inc.

John Eisenberg, Assistant Superintendent
Office of Special Education and Student
Service
Virginia Department of Education

Susan Fischer, **Educational Specialist**
Special Education Planning & Policy
Development
Massachusetts Department of Education

Sarah Gamble, Director
Exceptional Student Services
Primavera Online Schools
Chandler, AZ

Deborah Gay, Director
Office of Standards, Instruction, and
Assessment
Division of Special Education Services
Georgia Department of Education

Leanne Grillot, Program Specialist
Curriculum/Instructional Support Services
Florida Department of Education

Daryl Mellard, COLSD Project Director
Center for Research on Learning
University of Kansas

Celia Rosenquist, Project Director
National Initiatives Team
Office of Special Education Programs
U.S. Department of Education

Sue Zake, Director
Office of Exceptional Children
Ohio Department of Education

Appendix B

Forum Agenda

OSEP and COLSD Forum
**Practices and Challenges in On-line Instruction for
Students with Disabilities**

NOVEMBER **18-19, 2014**
AGENDA

Tuesday, November 18, 2014

8:30 – 8:45	Welcome	*OSEP staff and Bill East*
8:45 – 9:10	Introductions:	Your SEA experiences with online instruction (Questions suggested in the second cover letter)
9:10 – 9:15	Overview	*Explanation of how we hope this discussion proceeds*
9:15 – 10:30	Discussion	*Topic #1:* Enrollment, persistence, progress and achievement; Disaggregated by disability category
10:30 – 10:45	Break	Check in with the office; Refresh your brain
10:45 – 11:45	Discussion	*Topic #2:* Parent preparation and involvement in their child's online experience; Promising practices to support parents' roles
12:00 – 1:00	Lunch	Task: Evaluation and planning (Handout)
1:00 – 2:15	Discussion	*Topic #3:* IDEA principles in the online environment (e.g., FAPE, least restrictive environment, parental notification, due process protections)
2:15 – 2:30	Break	
2:30 – 3:30	Discussion	*Topic #4:* Effective and efficient student response data access, sharing, integration, and instructional usage among the parties involved in online instruction (e.g., instructional setting,

		instructor, administrator, provider, and vendor) and addressing privacy concerns
3:30 – 4:30	Discussion	*Topic #5:* Effectiveness of teacher preparation in the online learning environment; Promising or negative practices that facilitate (negate) professional development
4:30 – 4:45		*Wrap-up, suggestions for improving our process and preview for day 2*

Wednesday, November 19, 2014

8:15 to 8:30	Review	*Review of yesterday and preview of the today's activities*
8:30 – 9:15	Discussion	*Topic #6:* Integration of optimal evidence-based instructional practices; availability of skill/strategy instruction in online environments
9:15 – 9:30	Break	
9:30 – 10:30	Discussion	*Topic #7*: Utilization of the online environment's unique properties and affordances especially those features that would not be possible or practical in the offline environment: collaboration, personalizing instruction, multiple means of demonstrating skill mastery
10:30 – 11:45	Discussion	*Topic #8:* Differential access to online learning within and across your districts (e.g., computer or tablet access, connection speed, district restrictions to material access & assistive technologies)
11:45 – 1:00	Lunch	Leadership challenges: What are 2-3 questions that you need answered about online learning and students with disabilities to help you provide state leadership?

1:00 – 2:00	Discussion	Your views on: (1) The Center's future activities, (2) Value of this forum and (3) Stakeholders for future forums
2:00 – 2:15	Wrap Up	*Reimbursement issues and closing comments; Thank you and safe travels*