

Teacher Preparation and Promising Practices in Online Learning

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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. The responses obtained from these administrators 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?

Effectiveness of teacher preparation and professional development in the online learning environment

This document, the seventh in this series of forum proceeding papers, presents participants' responses to the five issue related questions on the topic of effective preparation and professional development of teachers in the online learning environment. We were especially interested in practices that were promising/restrictive or that facilitated/negated teacher development.

Initial research activities at COLSD found that online teachers experience considerable challenges as they work to meet the needs of students in special education and indeed all the children in their charge. Much of a teacher's time is spent monitoring student performance or directing instructional activities. Further, teachers working in the online settings have to be available to students and their families during most hours of the day and into the night (Carter & Rice, 2015; Greer, Rice, & Carter, 2015; Rice & Carter, 2015). Research about teacher

preparation in terms of students with disabilities has been minimal (Greer, Rice, & Dykman, 2014). However, COLSD has learned that the teachers themselves place paramount importance on feeling that they have strong positive relationships with the students, even though their contact with them is different than in a traditional setting (Rice & Carter, 2015; Rice & Carter, in press). Finally, administrators focus on recruiting and hiring teachers who are compliant to policies and are willing to work these extended hours (Rice & Carter, 2015).

How is this topic addressed in your organization?

When asked about teacher preparation and professional development, administrators indicated a high level of respect for teachers at their schools. Particularly they noted that they were impressed with teachers' interest in using data and in forging positive relationships with students. However, administrators also desired more teachers who are willing to learn how to effectively manage large quantities of data.

In terms of professional development, the administrators offered a range of responses. Most administrators indicated that in-house professional learning coaches conduct most or even all, professional development because, as one administrator stated, schools of education have not been responsive to preparing and supporting teachers in online learning environments. Most administrators indicated that in their schools, districts, and networks, teachers are required to attend professional development. New teachers are also required to attend orientations and other initial preparatory activities (e.g., teaching in an online environment, using the learner management system, conducting online assessments, and learning specific applications) that may last up to a week. These conferences are generally face-to-face, rather than online, although the administrators were interested in conducting more professional development online.

An administrator in a blended program discussed the professional development for teachers designed as blended instruction. Blended professional development was helpful because the approach delivered information efficiently and also modeled the practices the teachers were expected to use with students. Several administrators in blended schools also reported the presence of instructional technology coaches in their schools. The coaches were viewed as important to continuing the learning opportunities for new staff and maintaining the organizational focus and culture.

By contrast, the administrator of the large and growing program stated that 65 percent of her teachers work full time in traditional schools and part time in the state virtual charter school. The other 35 percent of the teachers are also certified, but they are graduate students, working from foreign countries for a variety of reasons, or they are teachers who just work for the virtual school. Due to funding issues she cannot require these teachers to attend professional development and to do so, given the diversity of her workforce, would be difficult. However, she indicated that recent legislation in her state was putting provisions into place that would allow her program to support teachers in a variety of ways, one of which is professional development. In the meantime, this administrator expressed an interest in learning to use

formats like Twitter to facilitate professional development. For induction, the part-time program requires nine weeks of professional development in which newly hired teachers participate in an online class to learn the school policies, discuss basic issues of how to provide instruction online, and become proficient in working with the learning management system. After this nine-week course, newly hired teachers spend another nine weeks in a job shadow configuration with an experienced online teacher. These new teachers also have a lighter student load during the first semester.

Considerable agreement was noted that teaching online and in blended settings requires teachers to learn a new mission and ideology around education. This new mission is focused on students engaging in independent, active learning and in assuming more responsibility for their success. Several participants noted that the three environments (traditional face-to-face, a blended setting, and a fully online setting) required different instructional, technology, and interaction skills. They also noted that working across these environments was not easy and thus, recruiting and selecting staff was particularly important. Teacher turnover was often attributed to newly hired teachers' inability to learn the mission and how to implement the goals. Understanding this mission drives teachers to attend meetings and other professional development opportunities which may or may not be required and that may or may not be paid. The teachers are credited with taking up these additional responsibilities in order to build relationships with students, to learn about technological tools available in schools, to implement them in ways that yield viable data, and ultimately lead the retention of students from year to year.

How important is this topic from your perspective?

When asked if this topic was as critical as measured against the other topics, the administrators indicated teacher preparation and ongoing support (e.g., coaching and professional development) was very critical. In fact, they agreed this topic was one of the most critical of all topics covered in the forum. Administrators considered teacher preparation and support very important because they believed that teachers are the most important component of successful online learning once devices are in students' hands and working properly.

In terms of special education teacher retention, most administrators reported a high teacher turnover, to which lack of proper preparation was listed as the major factor. One administrator indicated that his schools boasted a lower incidence of teacher turnover among special education teachers than other teachers in his schools (six percent special education turnover versus 12-25 percent in general education). He was not able to account for this high level of teacher retention. One administrator thought that his company's inclusion model for working with students with disabilities was supportive of teachers.

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

Most of the participants said they are very interested in building professional development programs based on helping teachers use data that they can manage effectively.

They have not found that teachers have time and interest in using many available data points and they agree that much of the data generated is of little use for a teacher's daily work with students. Therefore, the administrators are not encouraging teachers to be innovative in data use. Rather the teachers are prepared to use data use models and practices that are taught to them by administrators or coaches in their online schools.

What's the top challenge faced?

Administrators identified several critical challenges. For one participant the major challenge is that little to no communication or collaboration with higher education occurs. From this participant's view, higher education has not been responsive in creating preservice programs and research agendas around their needs as educators of K12 students in the online environment. In short, teacher preparation programs are not suited to helping teachers understand the complexities (e.g., addressing certification requirements for teachers, differences in interaction patterns, and making connections with students) of online/blended environments or providing sufficient opportunities for instructing in blended and fully online environment.

Another issue with teacher staffing stems from the limited experience levels of teachers who are willing to teach in online schools. For example, many teachers have experience in Teach for America (TFA) or other alternative routes. While administrators were adamant that they recruit teachers with a broad range of experience, they have difficulty finding experienced teachers who are willing to adapt to the new mission of their schools to facilitate students' independent and active learning. Even experienced teachers who come from traditional teacher preparation programs are new to online teaching and (as mentioned above) few have been student teachers in online settings. The administrators speculated that the low participation in student teaching online is partly because little collaboration exists with schools of education, and partly because many online teachers in a given school are so new that they do not qualify to be student teacher mentors according to guidelines set by various entities including schools of education and states' offices of education. These guidelines usually require three or more years of teaching experience.

Teacher turnover is another substantial problem that administrators face since turnover is regarded to be so disruptive to students and their achievement. One administrator reported 12-20 percent turnover. Among teachers who come from Teach for America, attrition rates are even higher. However, this administrator believed that many of these Teach for America teachers are not leaving online education entirely, but are going on to other positions in online learning, such as administration.

What are the various stakeholder concerns?

Major concerns of the stakeholders included the fact that vendors who used to provide professional development are no longer doing so. The consensus in the group was that concerns persisted regarding time investments necessary from teachers and staff developers to

hold large and small group professional development. Teachers have large teaching loads. Adding additional professional development, mentoring and/or coaching constitutes another substantial constraint on teachers' time. Even if sufficient time could somehow be secured, administrators are not sure how to fairly compensate teachers for their time and whether this compensation should be monetary, decreased student loads, relief from other duties, or in some other form.

Conducting professional development aligned to personalization goals—a hallmark of online learning—is also new terrain for these administrators. They are unsure about what professional development that leverages the advantages of highly technological learning environments looks like.

What research questions could have a significant impact?

Major research questions around professional preparation and development for teachers involved determining differences in teacher work, teacher knowledge, and teacher dispositions in online versus traditional learning environments. Administrators proposed a few fairly straightforward questions:

1. What are personal and professional characteristics (age, education, degree type, program type) of effective online teachers, particularly teachers who work with students with disabilities?
2. What are important aspects of teacher knowledge for teaching students with disabilities online (e.g., content, technology, pedagogy, law)?
3. What teacher dispositions support a desire to teach students with disabilities online and predict teacher retention in online environments?

Implications

Discussion around this topic has several implications. The first is that the administrators are certain that the aspect of online education that makes the technology and content pieces fit together are online teachers that have been specially prepared to teach in this environment. They understand that this work is very difficult and has some technical elements, but is also craft labor; everyone is going to teach a bit differently, and multiple ways exist to do it poorly, but also multiple ways to teach well. Therefore, having online relationship building skills and understandings about affordances and limitations for interactions in online learning is critical in preparing online teachers. However, much work around teacher-student relationships in online learning environments is newly emerging. In that context a difficulty facing administrators is to say exactly how teachers in online learning environments should be prepared and supported adequately for this complex work, especially when understandings about disability must overlay general knowledge, skills, and dispositions of successful online teachers. In addition, these administrators have much expertise around technology and management aspects of their jobs, but their career trajectories for the most part have not included extensive time and experience as teachers in fully online or blended learning environments. Thus, they are likely to be more

skilled in some of their administrative responsibilities rather than providing instructional leadership.

The first hurdle that the administrators mentioned for ensuring high quality instruction was the importance of hiring teachers who understand the complexities of online teaching. This hurdle applies to all teachers. Being clear and specifying the nature of additional intricacies for students with disabilities in the online learning environments will be vital to helping online schools select and maintain teachers who are well disposed to providing high quality instruction for students in special education classes. Teachers working with students with disabilities need sufficient knowledge of the procedural requirements in federal and state statutes to ensure that compliance is met (e.g., IEP development, disability determination, comprehensive evaluations, parental involvement, and free appropriate public education in the least restrictive environment), just like their counterparts in brick-and-mortar schools. However, they also need to know more about how those compliancy requirements are complicated in online environments; some requirements may be easier (e.g. data tracking) while some may be more difficult (e.g. ensuring access to peers). Additional knowledge includes an understanding of assessment and instructional methods that are appropriate to students with disabilities and this knowledge is likely tempered by understandings about self-efficacy, self-regulation, and motivation in online coursework. This knowledge must be quite extensive given that students represent cross disability categories and developmental ages.

Administrators gave a great deal of importance to teachers learning the mission and ideology behind virtual schools (and presumably charter schools and state run schools as well). Learning this background knowledge and the knowledge for appropriately instructing students with disabilities is further complicated by interaction patterns in the online environment. The online environment creates further tensions as teachers try to master building and maintaining student and parent relationships without face-to-face contact.

Further, administrators sensed that they were asking the teachers to work in ways that were different in terms of time and space and yet, the method of compensation has not changed. A research question might be asking about how virtual educators can be compensated for their work in ways that feel optimally fair to all parties. Similarly, a related interesting question is also thinking about how online learning environments do (or do not) meet incoming teachers' expectations and how teachers deal with those met/unmet expectations over the course of their induction.

Another set of implications emerged around the importance of the topic versus the lack of questions administrators had regarding online teaching. We were surprised, for instance, that given their stated concern about the lack of collaboration with universities that a question didn't surface about initiating and/or developing university partnerships; instead these administrators rely on coaches within their own organizations. If many capable coaches are available in online educational environments, sharing the cost of those professionals in both university and online school settings may be a fruitful investment. Further, exploring how these coaches come into their positions, what preparation they have for these responsibilities, and

how they consider the needs of students with disabilities alongside the general education students and/or students with other diverse needs would be questions to explore as a basis for improving supervision and professional development systems.

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Appendix A
Forum Participants

OSEP AND COLSD FORUM

Practices and Challenges in Online Instruction for Students with Disabilities

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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 <ul style="list-style-type: none">• Welcome: <i>OSEP staff and Bill East</i>• Participant introductions: <i>Your district experiences with online instruction</i>• Overview: <i>Explanation of how we hope this discussion proceeds</i> |
| 12:45 - 1:45 | Discussion <i>Topic #1</i> : Enrollment, persistence, progress and achievement for students with disabilities |
| 1:45 - 2:00 | Break |
| 2:00 – 2:45 | Discussion <i>Topic #2</i> : Parent preparation and involvement in their child’s online experience and IDEA notifications |
| 2:45 - 3:30 | Discussion <i>Topic #3</i> : IDEA principles in the online environment (e.g., FAPE, least restrictive environment, due process protections) |
| 3:30 - 4:15 | Discussion <i>Topic #4</i> : 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