

# Enrollment, Persistence, Progress, and Achievement

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Online learning currently reaches millions of K-12 learners and its annual growth has been exponential. 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 affect 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 12<sup>th</sup> 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?

### Enrollment, persistence, progress, and achievement

This document is the first in the series of forum proceeding papers. It presents participants' responses to five questions on the topic of enrollment, persistence, progress, and achievement for students with disabilities in online programs. This topic was identified from COLSD's research as well as other published and anecdotal information. For example, COLSD's initial research activities found that students with disabilities were generally satisfied with their online coursework (Burdette & Greer, 2014). Even so, initial research has demonstrated that students with disabilities have lower achievement rates in fully online courses (Deshler, Rice, & Greer, 2014). In addition, some evidence suggests that students with disabilities are counseled out of online classes or programs (Rice & Carter, in press) and that while teachers struggle to provide assistance, difficulties persist in developing and maintaining teacher-student relationships (Carter & Rice, 2015).

## How is this topic being addressed in your organization?

The participants did not feel that students with disabilities were any different in their needs than the general student population on this topic of enrollment, progress, persistence and achievement. The participants noted that from their experience no readily apparent patterns were evident in any of these areas across online learning settings. Although participant policies and procedures were quite varied, the participants' responses did share a few commonalities. For example, most states do not have a statewide system for collecting and analyzing data about the enrollment, persistence, progress, and achievement of students with disabilities. Some participants shared that they have been using several different progress monitoring software programs, and others have stated that while they collect these data on students with disabilities, they aren't able to disaggregate it by disability classification. Some participants indicated that they found it difficult to determine who at their school were students with disabilities via their collected data. One finding was clear for all of the organizations represented: they are working toward a more seamless and useful method of data collection and analysis.

While most states do not have data collection systems for assessing enrollment, persistence, progress, and achievement of students with disabilities, these participants indicated that they were able to compare the enrollment, progress, and achievement of students with disabilities versus typical online learners in many circumstances. Their responses were overwhelmingly positive, with participants agreeing that students with disabilities are outperforming their counterparts without disabilities in growth and increased four-year graduation rates but very little difference in persistence and growth or improvement in skill. These outcomes have been helped by the supports extended into online learning environments for individuals who would also have additional supports in a brick in mortar school. The participants indicated that online environments do not inherently meet students' needs but those needs could be met with additional supports. Multiple representatives also communicated that they are not seeing enrollment challenges for students with disabilities in their online learning environments, meaning that they feel students with disabilities are just as likely to enroll as those without. Participants regard this trend as a positive one. In fact, several noted that students with disabilities are more likely than ever to enroll in online courses (up to 25% of recent enrollees in one school).

## How important is this topic to your school? Should it be more/less important?

Participants had vastly divergent answers regarding the importance of this topic of enrollment, persistence, progress, and achievement in online instruction for students with disabilities. The level of both priority and challenge was varied among participants. Some participants stated specifically that learning or progress and achievement were two of the most important of all of the topics on the forum agenda. Other participants identified areas such as the development and delivery of disability service plans and instruction as more crucial topics of conversation. Two representatives reported that although enrollment has not been challenging, progress and achievement of students with disabilities are issues currently garnering lots of attention. They believed that learners' progress and achievement is linked to

the use of the universal design for learning (UDL) framework, which provides guidance for making instruction more accessible. Their thought is that learners' benefit from the opportunity to see instruction represented in multiple ways as well as choices about how to express their learning. Therefore, the participants are focused on improving the quality of instruction and implementation of the UDL framework.

### What's going well for you on this topic?

Similar to other topics, participants had a variety of successes to report in regards to what is going well in the realm of enrollment, persistence, progress, and achievement of students with disabilities in online learning settings. Some participants cited feeling very positive about the use of blended learning environments. They believe that the blended environment allows students with disabilities to participate more fully in inclusive classrooms because students' instructional materials and technological devices move with them between inclusive and special education specific environments. Participants have also witnessed improvements in online teachers' and administrators' ability to intervene early with students encountering learning and achievement difficulties. Improving screening and diagnostic procedures to identify difficulties and disabilities in early elementary schools has been a major part of these efforts. Teachers and other staff who are providing supports in the online environments have been making a difference with students who were previously failing by giving them the needed individual attention. With the necessary supports, learner engagement is equally high for students with and without disabilities.

### What direction are you moving on this topic in the school(s) where you work and, what are the top challenges faced?

Participants indicated one of the most frequent challenges faced regarding online enrollment, persistence, progress, and achievement is providing professional development, for both pre-service and in-service teachers in online learning environments. Universities aren't preparing teachers to use technology and virtual systems to the degree those services are needed in the field. This challenge is increased with the high rate of technological change. Schools do not have the funds to educate teachers on technology to the full extent of the proficiency necessary to guide student learning. In addition, specific professional development is needed for discrete areas of special education, which is largely unavailable, especially professional development that includes accessible technology. Participants indicated that certificate programs would be a huge benefit to incoming and existing educators, but very few programs of this nature are currently available.

Additionally, several representatives expressed concerns about matching their online learning environments with students' needs. Although the participants were positive about the outcomes for many students with disabilities, later they indicated that many of the schools have challenges with developing and implementing intervention models for students at risk of academic or behavioral difficulties or those students who have already been identified as having a disability. They agreed that a specific model based on available technology and

content would streamline interventions and progress monitoring processes for students with disabilities and those students who are at risk of academic and behavioral difficulties. This effort would require intentionality on behalf of the district, its virtual educators, and administrators to continue improving the existing model of online learning to be the least restrictive environment and accessible to all students who could benefit from the properties of online learning. They further noted that improving existing models of online educational environments also requires the input and effort of parents whose children are enrolled in online education. A perceived lack of home support only serves to increase tension between schools and parents, not increase engagement and support.

Some participants addressed challenges that aren't unique, but are a unique focus of their online schools, relating to enrollment, persistence, progress, and achievement. One concern raised was the cost of some virtual learning programs, which is not a concern specific to serving students with disabilities, but is a concern for serving all students enrolled in online programs. Another issue raised was the availability of online courses. Another participant said that because educators are often employed part-time for the virtual school, courses and course sizes are limited and often fill-up before all students wanting to take the course have enrolled.

Student retention is also a shared concern being addressed in different ways, as oftentimes students don't attend the virtual school in which they are enrolled for a long enough period of time to see potential benefits. One participant reported that their online schools have begun giving a 'grit survey' to aid identifying students who are likely to face increased difficulty in an online learning environment due to a lack of self-direction and motivation. Grit surveys are most often self-report or teacher-report tools used in education. Such measures include survey questions about a student's academic mindset, ability to engage in effortful self-control, and what strategies and tactics they are aware of that can be helpful in challenging situations (U.S. Department of Education, Office of Educational Technology, 2013).

### What research questions could have a significant impact?

Two major themes emerged when participants were asked what research questions they thought could have a significant impact on enrollment, persistence, progress, and achievement of students with disabilities in online learning. The general sense was that although districts are experiencing the positive aspects of incorporating more and differing technology into various learning environments, several challenges are impacting the topic at hand. For example, several districts in Michigan use roughly 40 different digital programs in their blended and fully online learning environments. However, only a few of those programs are specifically for students with disabilities. One of the areas of research needed, according to participants was in regards to what technology and materials are most needed and useful for students with disabilities. Another research question that needs to be addressed is how can educators best use existing and new technology to personalize online programming for students with disabilities? Such research could increase progress and achievement for this population who often isn't being served to the degree necessary by merely being enrolled in online learning programs. Additionally, are students using technology in blended and fully-



online learning environments to the best of their ability? Without a high level of monitoring, students often use technology devices as toys, rather than tools. How can educators and administrators ensure the online instruction is used to support progress and achievement?

Participants also shared the concern of the significant challenges to such research being the lack of uniformity or consistency in the collection and evaluation of student data regarding their enrollment, persistence, progress and achievement. One participant indicated that individual districts share anecdotal information, but have few ways of making meaningful comparisons, especially regarding student persistence, progress and achievement. Participants want to learn or devise a systematic way to gather such data and demonstrate students' learning. In addition, does a meaningful difference exist in persistence and growth between rotational and flex models of online learning? Rotational models require students to rotate among different learning modalities (including online) on a fixed schedule or by an instructor's direction, whereas in flex models of online learning the primary modality of instruction is online and students follow an individualized schedule for switching between different learning modalities. Gathering outcomes from programs using these different models would likely provide very useful information about the strengths and weaknesses of each model.

A few other concerns were presented when participants were asked about the research questions they have. These included concerns about the value of co-teaching and having multiple educators responsible for promoting a student's learning and growth as well as whether or not students with disabilities would benefit from the schools implementing a performance or value-added model of evaluation. Another concern common among many levels of the education system is the inherent tension between free appropriate public education (FAPE) and online learning. The tension is felt from parents who believe that online learning is "the solution" to their child's learning problems. Thus, the parents push educators to provide online instruction without regard to how well the child might perform in an exclusively online instructional setting. Educators and administrators feel caught in the middle because of their concerns about whether the fully online program is appropriate to the student, especially after the student has had very limited success.

## Implications

Several contrasts exist in the participants' comments and other information. For example, one of the significant outcomes from the discussion was that the participants believed that students with disabilities were progressing at rates comparable to their peers without disabilities. This belief is in contrast to the Center's initial research that demonstrated that students with disabilities have lower achievement rates in fully online courses (Deshler, Rice, & Greer, 2014). Participants also noted that persistence and completion rates were comparable. These beliefs need closer evaluation in part because the participants' initial responses also indicated that data is not efficiently assembled that delineates who has a disability, what the disability is, and how that student is responding to various instructional strategies. Given their initial assertions that data about disability and data about achievement are not necessarily



located in the same databases, these observations about student enrollment, persistence, and achievement seems difficult to support.

Discussions on this forum topic suggest many potential challenges for policy and practice. The participants noted that in some data sets, the student coding did not permit differentiating students with and without disabilities or the type of students' disabilities. Thus, more targeted, robust, and rigorous evaluations of the efficacy of online instruction are limited. At this point, we don't know the characteristics of the learners that achieve the best outcomes with which instructional practices. The assumption is that learner traits and instructional delivery do interact to affect the outcomes.

Online instruction is viewed as a rapidly changing landscape for education and these changes touch on most components of students' education. Consequently, districts are calling for answers regarding best practices for use of technology in both blended and fully-online environments for students with disabilities. This two-fold issue is shared by multiple participants: (a) technology developed specifically for students with disabilities is lacking and (b) so many software programs and devices are used and technology changes so quickly that increased and focused professional development is needed for teachers to be able to use such tools to their full capacity.

Participants also noted that the collection, analysis, dissemination of data regarding student enrollment, persistence, progress, and achievement, especially for students with disabilities is an important area of growth for nearly all districts. Comparisons of student populations, different blended and fully-online learning environments, and array of instructional models (e.g., co-teaching, flex, or rotational) are important next steps in gathering data that can be used to increase students with disabilities chances for progress and achievement.

The discussions lead to several questions for further investigations:

1. How can educators best use existing and new technology to personalize online programming for students with disabilities and subsequently increase enrollment, persistence, progress, and achievement?
2. What are the best practices for measuring student progress and achievement for students with disabilities in online learning environments?
3. How can educators and administrators ensure students are using technology appropriately to support progress and achievement?

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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**

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|---------------|---|
| 12:00 - 12:45 | Working Lunch <ul style="list-style-type: none"><li>• Welcome: <i>OSEP staff and Bill East</i></li><li>• Participant introductions: <i>Your district experiences with online instruction</i></li><li>• Overview: <i>Explanation of how we hope this discussion proceeds</i></li></ul> |
| 12:45 - 1:45  | Discussion <i>Topic #1: Enrollment, persistence, progress and achievement for students with disabilities</i>  |
| 1:45 - 2:00   | Break   |
| 2:00 - 2:45   | Discussion <i>Topic #2: Parent preparation and involvement in their child's online experience and IDEA notifications</i>  |
| 2:45 - 3:30   | Discussion <i>Topic #3: IDEA principles in the online environment (e.g., FAPE, least restrictive environment, due process protections)</i>  |
| 3:30 - 4:15   | Discussion <i>Topic #4: IDEA principles in the online environment (e.g., eligibility assessment, IEP development)</i>   |
| 4:15 - 4:30   | Break   |
| 4:30 - 5:15   | Discussion <i>Topic #5: Access and coordination of related services for students with disabilities</i>  |
| 5:15 - 5:30   | <i>Wrap-up, suggestions for improving our process and preview for day two. Dinner plans?</i>  |



### Wednesday, April 1, 2015

8:15 - 8:30	Review	<i>Review of yesterday and today's preview</i>
8:30 - 9:15	Discussion	<i>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</i>
9:15-10:30	Discussion	<i>Topic #7: Effectiveness of teacher preparation in the online learning environment; and promising (or negative) practices that facilitate (or negate) professional development</i>
11:15-11:30	Break	
10:30-11:15	Discussion	<i>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</i>
11:30 - 12:15	Discussion	<i>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 &amp; assistive technologies)</i>
12:15 - 1:00	Working Lunch - Discussion	<i>Topic 10: Local supervision for online learning in general education and in particular for supervision in special education</i>
1:00 - 1:15	Discussion	<i>of your views on the Center's future activities</i>
1:30 - 1:45	Wrap up:	<i>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</i>