Vendor Access and Use of School and Student Data

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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 and policies—and their application—in online learning, as they pertain to students with disabilities, have been the subject of much less research than is necessary for appropriate 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; 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 to obtain an in-depth view, from different perspectives, of the issues and concerns with students with disabilities in online learning. The first forum was held with state directors (or a designee) of special education to obtain the state policy perspective. The second forum was conducted with virtual school district superintendents and other top-level district administrators to obtain the practitioners' perspective. Findings from these forums indicated that views from industry vendors were important, therefore, the third forum was conducted with vendors who provide platforms or resources for use in online settings, or support fully online or blended environments with courses and instructors. The responses gained from the vendors are the topic of this paper.

Forum Participants

This third forum was held with online instructional vendor providers in a face-to-face gathering August 11-12, 2015. Descriptions of the vendors and participant responsibilities appear below. A list of participants (Appendix A) and the forum agenda (Appendix B) are also included in this report. The participating vendors were chosen because they: (1) have status as an organization with a national presence; (2) have been involved in K-12 teaching and learning support strategies, research, and product development in online learning environments for at least 10 years; (3) represent different segments of online learning (e.g., supplemental instruction, fully online programs, and learner management systems) and; (4) provide a variety of supports and products to states, districts, and schools (public and charter) engaged in fully online and blended learning settings. Although the experiences and information garnered from the participants do not represent all vendors in the industry, they do provide an informed sample.

The first vendor, Agilix Labs, founded in 2000, included two administrator participants, the Vice President (VP) of Innovation and VP for Strategic Partnerships. Agilix provides support for personalized online learning through Buzz, a customizable platform, and offers BrainHoney!, a learning management system (LMS). The VP for Innovation examines innovative industry practices to determine how to support and promote them and how to use existing technology for effective innovations to improve teaching and learning outcomes. The work of the VP for Strategic Partnerships includes helping interpret accessibility requirements with such entities as state technology directors, Council of Chief State School Officers, and other industry vendors.

The Senior Director for Student Services represented the second vendor, Connections Education, which has been supporting online schools since 2002. Connections Education is an accredited provider of virtual education in charter and blended schools to K-12 students. As of the 2015-2016 school year, Connections Education supports charter schools in 26 states and seven blended schools in Indiana, Michigan, and Ohio by offering courses, LMS, and instructors as needed. The Senior Director supports fully online schools in which they serve about 6,000

students with a variety of disabilities such as learning disabilities, emotional and behavioral disabilities, and cognitive, motor, and sensory disabilities.

The third vendor, D2L Corporation, founded in 1999, designated the Product Design Manager as the forum participant. D2L offers Brightspace, a LMS, to its K-12 and higher education clients that represent statewide consortia to individual schools. The Product Design Manager's focus includes improving technological accessibility, resulting in two gold level awards (2010 and 2011) from the National Federation of the Blind Nonvisual Accessibility, a leading advocate for Internet access by blind Americans. The Product Design Manager is now increasing focus on personal and classroom accommodations using the Universal Design for Learning framework.

The Director of Research from Edgenuity Inc., a 16-year vendor, was the fourth participant in the forum. Edgenuity creates content in the form of secondary level core, elective, and Career and Technology Education courses. Edgenuity offers supplemental instruction, courses for credit recovery, and is beginning to offer Tier 2 type interventions. The Director of Research conducts studies with districts partnering with Edgenuity to determine the accessibility and effectiveness of the courses and how to improve the course features to impact student learning.

Knovation, helping districts meet the needs of diverse learners for 15 years, sent their Chief Academic Officer (CAO) to participate in the forum. Knovation offers solutions and services centered on its collection of over 360,000 professionally-evaluated, standards-aligned digital learning resources. Knovation's products include netTrekker (find and share digital resources from its collection) and icurio (use digital resources from its collection to design and deliver digital lessons). The CAO works with industry organizations to research and share ideas supporting online learning and has formed a volunteer workgroup to advance UDL with vendors as they create or curate products to support online learning.

The sixth and final vendor Texthelp, founded in 1996, sent their Vice President of Professional Solutions to participate. Texthelp began by supporting reading and writing for people with communication and physical disability issues and are expanding their work to support all learners—including English language learners—through their literacy software. The VP licenses Texthelp software to publishers and large software developers and ensures their software can be accessed on any device, on any platform, so the software can be integrated into mainstream technology for classroom and home use for all learners. Most of their work supports districts and K-12 schools (90%), but they also support individuals, higher education, and government agencies with youth and adults struggling with reading, writing, and communicating.

Forum Topics

COLSD staff reviewed previous literature, revisited findings from previous research activities (e.g., case studies, surveys, and interviews), and evaluated responses from the first two forums to determine the topics for this third forum. As with the previous forums, 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
3. IDEA principles in the online environment (e.g., free and appropriate public education, least restrictive environment, due process protections)
4. Effectiveness of teacher preparation in the blended and online learning environment and promising (or negative) practices that facilitate (or negate) professional development
5. Schools and vendors as data collectors and users; effective and efficient access, sharing, integration, and instructional usage of student usage data (e.g. performance scores, clickstream, pages accessed, etc.)
6. Addressing privacy concerns: Vendor access and use of school and student information
7. Integration of universal design for learning (UDL) into courses (e.g. options for how information is presented, the ways in which students can demonstrate mastery, supports for engagement)
8. Instructional practices: Integration of optimal evidence-based practices
9. Availability of students' strategy instruction in online environments (e.g. selection, monitoring prompts for strategy use that support student learning as in reading comprehension or memory strategies)
10. Supervision for online learning in general education and, in particular, for supervision in special education

Prior to the meeting, participants received a packet of materials including the agenda (see Appendix B) and a list of the topics and questions to be considered. The forum began with introductions and a discussion of the importance of considering students with disabilities in the context of online learning. Each vendor then responded to a set of questions about the selected 10 topics. 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. Representatives from COLSD moderated the discussions to provide all participants with comparable opportunities to share insights about each topic. Participants responded to three questions (see below) for all 10 topics, and an additional 2-5 questions relevant to each particular topic:

1. How is your organization currently addressing this topic?
2. What is working well for you on this topic?
3. What is the top challenge you face and the direction you see your organization taking on this topic?

The discussion questions serve as the headings in the following text.

Vendor Access and Use of School and Student Data

This sixth vendor forum topic summarizes vendors' perceptions around privacy concerns and their practices in data collection and usage. The key concerns around data privacy in online environments include: sharing data among educational entities in light of state privacy legislation and Family Education Rights and Privacy Act (FERPA) policies; standardizing strategic

data collection, usage, and sharing across educational entities; and determining what data are useful for what purposes. When all parties work together to ensure that student data remains secure yet available, relevant, and useful for continual improvement then educators can determine how to use data responsibly to support student learning (Muilenburg & Berge, 2005).

The Center also conducted forums with state directors of special education and virtual school superintendents and administrators and asked them about data privacy and usage. In the forum for state directors of special education, most participants indicated that states are working to improve data collection, usage, and integration among education entities and that most data usage is focused on the general education population instead of special education data specifically (Burdette, Franklin, East, & Mellard, 2015). In the forum for virtual school leaders, participants expressed concern about sharing data in unsecured formats and difficulty in determining who "owns" the data. Ownership is an issue in that so many entities collect data for their particular monitoring and reporting requirements and don't have an agreement on data sharing. Ownership also includes ensuring that appropriate data are collected and access is allowed for those who need it when multiple educators work with one student with disabilities (Franklin, East, & Mellard, 2015).

How important is this topic to your organization?

The vendors all agreed that issues of data privacy and usage were critically important. They are keenly aware of the sensitive nature of the school and student data as well as the federal regulations protecting personally identifiable information (PII) in particular. The vendors discussed how data determine (1) outcomes for students' learning progress and (2) outcomes for overall schools and educational programs. Therefore collecting the right data and in a way that connects to individual students but still maintains privacy is important. Many school districts do not have the capacity to collect the necessary data to determine student and program outcomes and many vendors don't want to have the PII data for security reasons. The participants discussed the possibility of a third party, like the Center or some research entity, to house data useful to all stakeholders so outcomes research could be conducted to find what online programming or practice looks promising to continue.

What are the top challenges you face?

An in-depth conversation explored the challenges of online programs having incomplete PII data on students and often wanting different data than the data that is currently collected and housed in most learning management systems (LMS). The information may be available in a school district but is not accessible to outside programs. Vendors think that it is important to align what districts want and what vendors are providing and keep it within a reasonable cost window. Making changes to an existing LMS is costly.

One vendor brought up the need for a trusted independent organization (e.g. Software and Information Industry Association (SIIA), Data Quality Campaign, or Council for Exceptional

Children) to gather stakeholders to discuss what data is valuable and how to use data to provide districts and states with high-level reports, and to include students with disabilities in online settings. This discussion is important because so many different interpretations of FERPA exist among states and these interpretations impact the release of PII data for research that can help determine effective online programming and practices.

Vendors also discussed that districts and vendors need to feel comfortable with who owns the student data and what role each entity plays in the education of students with disabilities in online settings. Participants discussed a reality that in working with new districts it takes time to establish relationships and build trust. The participants talked about the potential usefulness of standardizing a list of data elements that all online vendors would collect on students with disabilities but, in order to be able to continue to innovate, they would also want to collect other data as needed.

How is the SEA involved in the PII issue?

The vendors experience a lot of variance in how SEAs respond to or interpret federal or state PII legislation. Most states or districts want to limit their liability due to improper access of student information, and vendors are unclear on how they should conduct their risk analysis. That is, with such variation in data access and reporting, the vendors have challenges in understanding the extent of their risks and liabilities. Some states provide a guidance document but much room for interpretation exists in their policies. Therefore, vendors must engage in lengthy conversations with each SEA or district to review the rules and determine what is possible. These conversations become technical with how to translate ideas into reality and then into programming code in order to meet compliance. From the vendors' perspective, often the features and data that states or districts want are too costly for the vendor to deliver.

What are the data that you as vendors would like to have about students?

Vendors discussed the importance of knowing how students learn and how they interact with particular tools offered within a course. If vendors know what motivates students and their knowledge and skills, then vendors are better able to identify, or even isolate, student attributes that contribute to successful online learning. In particular, the belief is that knowing about students' "growth mindset" or learning capabilities and the ability to explore their online behavior (e.g. time online, sequence of accessing content, when starting to explore correlations with the content) is beneficial to understand them as intellectual learners and as persons. Vendors use this information so they can respond flexibly to students' needs, curiosities, and requests.

Implications

Several implications can be drawn from this vendors' forum. Strong support was expressed for policies and procedures that clarify data sharing. A strong need was expressed for more standardized interpretation of federal and state PII regulations that allows for the

collection and usage of key data. The discussions also highlighted the complexities and competing views that emerge in addressing data access and sharing. Another implication is the need to involve a trusted third party to facilitate discussions among stakeholders about what data is valuable to collect on students with disabilities in online settings, who owns the data, and how data can be shared securely among users. Finally, if research is to move forward, vendor participants recommend that data should be housed with an independent third-party so research and education entities can have access to data to determine the state of online learning and programs and practices that look promising.

Based on the discussion, additional consideration is recommended for topics including:
1. What data are valuable to collect for students with disabilities in the online environment and for what purposes?
2. What data indicates students' "growth mindset" or learning capabilities and how is that data collected?
3. What data are necessary to determine if a program or practice is promising in supporting students with disabilities' learning in an online setting?

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Appendix A

Forum Participants

Vendor Related Practices and Challenges in Online Instruction for Students with Disabilities

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Appendix B

Forum Agenda

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

AUGUST 11TH AND 12TH, 2015

AGENDA

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

Tuesday, August 11th

12:00 - 12:45   Working Lunch
- Welcome: *OSEP staff and Bill East*
- Participant introductions: *a description of your organization; the targeted audience for your products; your role in the organization*
- 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

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

3:30 - 4:30   Discussion Topic #4: Effectiveness of teacher preparation in the blended and online learning environment; and promising (or negative) practices that facilitate (or negate) professional development

4:30   Wrap-up, suggestions for improving our process and preview for day two. Dinner plans?

Wednesday, August 12th

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

8:30 - 9:30   Discussion Topic #5: Schools and vendors as data collectors and users: Effective and efficient access, sharing, integration, and

instructional usage of student usage data (e.g., performance scores, dwell time, pages accessed)

9:30-10:15   Discussion Topic #6: Addressing privacy concerns; Vendor access and use of school and student information

10:15-10:30   Break

10:30-11:15   Discussion Topic #7: Integration of universal design for learning (UDL) into courses

11:30 – 12:00   Discussion Topic #8: Instructional practices: Integration of optimal evidence-based practices

12:00 – 1:00   Working Lunch – Discussion Topic #9: Availability of students' strategy instruction in online environments (e.g., selection, monitoring, prompts for strategy use that support student learning as in reading comprehension or memory strategies)

1:00 - 1:45   Discussion Topic #10: Supervision for online learning in general education and in particular for supervision in special education

1:45 – 2:00   Wrap up: Our next steps with this information: draft a summary; share the summary with you for accuracy and completeness; draft a report on each topic and share with you for edits regarding accuracy and completeness; and complete revisions and disseminate to you and interested parties.
                    Your closing comments
                    Reimbursement issues and our closing comments
                    Thank you and safe travels