



Equity Matters 2016

Digital & Online Learning for Students with Disabilities

The Center on Online Learning and Students with Disabilities

Equity Matters 2016

Digital & Online Learning for Students with Disabilities





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COLSD researchers and staff have made every effort to provide clear and accurate information. We recognize, however, that despite our careful efforts, some errors in accuracy and commission are unfortunately unavoidable.

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Table of Contents

Chapter 1	<i>Realistic Potential in Online Learning</i> Authors: James D. Basham Contributors: William (Skip) Stahl	10
Chapter 2	<i>National Review of Online Learning Guidance and Policy</i> Authors: Kelsey R. Ortiz, McKenzie Nicholis Contributors: William (Skip) Stahl, Susan Bulgren	16
Chapter 3	<i>Teaching in Online Learning Environments</i> Authors: Mary F. Rice, Richard Allen Carter, Jr., James D. Basham	46
Chapter 4	<i>Changing Practices in Special Education: Shifting Roles and Supporting Student Social Development</i> Authors: Sean J. Smith, Mary F. Rice Contributors: Richard Allen Carter, Jr.	64
Chapter 5	<i>Promising Practices for Enhancing the Enrollment, Persistence, Progress, and Achievement of Students with Disabilities in Online Settings</i> Authors: William (Skip) Stahl, Tracey Hall	82
Chapter 6	<i>Challenges, Opportunities, and Lingering Questions</i> Authors: Mary F. Rice, Kelsey R. Ortiz Contributors: William (Skip) Stahl, James D. Basham	96
Appendix A	<i>Glossary</i>	106
Appendix B	<i>State and Territory Scans</i>	110
Appendix C	<i>2016 State and Territory Policy Scan Survey Questions</i>	168
Appendix D	<i>Professional Development Opportunities for Online Educators Working with Diverse Learners</i>	174

Acknowledgments

The Center on Online Learning and Students with Disabilities 2016 Annual Publication would not have been possible without the contributions of many researchers and staff. Personnel from the University of Kansas, CAST and the National Association of State Directors of Special Education (NASDSE) have spent the past five years investigating and chronicling the involvement of students with disabilities in full-time virtual, blended, and supplemental online learning settings. Their collective insight, effort, and expertise are reflected throughout the pages of this publication. It is hoped that the research and considerations that have resulted from this collaborative effort prove beneficial to the parents, students, teachers, administrators, state officials, and other stakeholders who are working to make the reality online learning as inclusive and responsive as its potential indicates. It is also hoped that this publication and others of the Center's work will contribute to the foundation of future research and recommendations.

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Design

m-Design Studio

The Center on Online Learning and Students with Disabilities

The Center on Online Learning and Students with Disabilities conducts research on how K-12 online learning impacts the access, participation, and progress of students with disabilities. Research outcomes are expected to inform the design, selection, and implementation of online digital curriculum materials, the systems that deliver and support them, and the instructional practices associated with their use, in order to increase their efficacy for students with disabilities and other elementary and secondary learners. The research agenda is aimed at 1) identifying the trends and issues in online education, 2) developing and testing designs and practices that promise to make online education more effective and accessible, and 3) conducting research that impacts the future of online education. The Center is a partnership involving the University of Kansas Center for Research on Learning (KUCRL), the Center for Applied Special Technology (CAST), and the National Association of State Directors of Special Education (NASDSE). The Center is funded by the Office of Special Education Programs (OSEP) in the U.S. Department of Education.

Center for Research on Learning (CRL)

The Center for Research on Learning, at the University of Kansas Lawrence campus, is an internationally recognized research and development organization noted for creating solutions that dramatically improve quality of life, learning, and performance — especially for those who experience barriers to success.

In the mid-1970s, passage of a federal education law required that special education services be delivered to all students who needed them, from kindergarten through high school. That law changed the education landscape and planted the seed for what is now the Center for Research on Learning.

CRL's work centers on solving the problems that limit individuals' quality of life and their ability to learn and perform in school, work, home, or the community. CRL specifically studies problems in education and work to place solutions that make a difference into the hands of educators, learners, employers, and policy makers. Long-term goals of the Center include research, development, professional development, organizational change, and dissemination that reach the largest possible audiences.

Center for Applied Special Technology (CAST)

CAST is a nonprofit research and development organization that works to expand learning opportunities for all individuals, especially those with disabilities, through Universal Design for Learning. In 1984, a small band of education researchers founded CAST, the Center for Applied Special Technology, to explore ways of using new technologies to provide better educational experiences to students with disabilities. As CAST researchers tested and refined their principles, priorities, and vision over that first decade, they came to a new understanding of how to improve education using flexible methods and materials. They called this approach Universal Design for Learning (UDL).

CAST's work is inspired and informed by the learners who often get pushed aside in traditional education settings. In other words, "the future is in the margins," as Founding Directors David Rose and Anne Meyer write. By pioneering inclusive educational solutions based on Universal Design for Learning (UDL), CAST is researching and developing ways to meet the needs of all learners. CAST's efforts provide pre-K through college educators with knowledge, skills, strategies, and tools that maximize learning opportunities for all students.

National Association of State Directors of Special Education (NASDSE)

Since the time of its formation in 1938, the National Association of State Directors of Special Education has been providing leadership focused on the improvement of educational services and positive outcomes for children and youth with disabilities throughout the United States, its federal territories, and the Freely Associated States of Palau, Micronesia and the Marshall Islands. NASDSE works tirelessly with these education agencies to align policies and proven practices in order to ensure students with disabilities are afforded full participation in their education and successful transition to post-school education, employment, and independent living.

NASDSE serves state directors of special education through service and collaboration, providing effective leadership in the development of national policy related to services that produce those successful outcomes.

NASDSE offers strategies and tools to move to implementation of best practices through communities of practice, training on current issues, technical assistance, policy analysis, research, national initiatives and partnerships to enhance problem solving at the local, state, and national level. NASDSE works to engage students, families, communities, professionals and policymakers as full partners.



Equity Matters 2016 Executive Summary

The Center on Online Learning and Students with Disabilities (COLSD) has released the 2016 version of its annual publication *Equity Matters: Digital and Online Learning for Students with Disabilities*. This year's publication focuses on promising practices for addressing the needs of students with disabilities in full-time virtual, blended, and supplemental online settings. The publication summarizes state and territorial policies related to students with disabilities, research on students with disabilities in online settings, the shifting roles of parents and teachers in K-12 virtual education, and state educational agency responsibilities.

This publication includes six chapters focused on research compiled and published in the previous year. It provides field-based reviews and monitors current practice in the delivery of K-12 online education for students with disabilities. Chapter 1 contextualizes the report's focus on the link between the online learning environment and learner variability, and factors associated with the critical issue of the sustainability of K-12 online teaching. Chapters 2-5 provide findings from the Center's research. Chapter 6 recaps COLSD's five-year history and specifies critical questions that remain for researchers and other stakeholders. The primary audience for this publication includes educators, education leaders, teacher education faculty, parents, policy makers, researchers, and digital curriculum developers.

KEY FINDINGS:

Chapter 2 consists of U.S. state and territorial policy scans regarding each of the 50 states and five territories. The content summarizes their online education policies related to the implementation of the Individuals with Disabilities Act (IDEA) for students with disabilities. The state scan highlights the need for informed policy decisions at the state and local level. Sample findings include:

- Of the 55 states and territories, 21 have state-mandated vendor applications for online providers that specifically mention serving students with disabilities.
- Only 24% of states provide information on the supervision of special education, on Child Find (the IDEA legal requirement that schools identify children with disabilities), and on the provisions of Free and Appropriate Public Education (FAPE) in online programs.
- Thirty-eight states do not have any clear guidance/policy of who would provide special education services in a virtual/online school setting.
- Approximately 75% of all states and territories had *Unclear*, *No with Evidence*, or *Nothing Found* in six of the nine items most closely aligned with IDEA.

Chapter 3 discusses recent research on curriculum considerations, pedagogical strategies, and other service considerations for students with disabilities in online environments; and the preparation of teachers for the online instruction of students with disabilities. Primary considerations from Center research include:

- As many as 75% of universities offer online courses in teacher education, but teacher training institutions are not preparing teachers to offer instruction in online settings.
- Teacher education programs lack standards associated with teaching students with disabilities in online settings, and K-12 online education is not tied to program accreditation.
- When online teachers form relationships with students and their families and provide individualized explicit instruction, student progression through coursework improves.
- Teachers continue to need support related to the legal compliance responsibilities associated with addressing the needs of students with disabilities.
- In many online schools, teachers of students with disabilities leave their positions at higher rates than general education teachers, although reasons for this turnover remain unclear.

Chapter 4 discusses the shifting roles among professionals and parents within online learning environments. The chapter also covers the social experience of students in online education. Findings from the Center’s research indicate:

- High student-to-teacher ratios dominate in full-time virtual settings, sometimes in excess of 200 students per teacher in the upper grades.
- Related services continue to emerge online, including occupational therapy (OT), physical therapy (PT), and speech-language therapy (SLP).
- In full-time virtual schools, parents play a vastly expanded role in guiding their child’s online education compared to brick-and-mortar instruction, becoming what are sometimes referred to as learning coaches or site-based mentors.
- Parents’ decisions to move a child from traditional to fully online learning may be based on the negatives of one environment and not necessarily the strengths of another.
- Social skill development for students with disabilities requires explicit direct instruction with purposeful feedback, which must be factored into the academic supports the online environment offer.

Chapter 5 discusses the responsibilities of local and state educational agencies in serving students with disabilities in online learning settings. Sample findings include:

- Critical factors of success for students with disabilities in online education include proper teacher preparation and support for students to develop their self-regulation skills.
- Online education has provided an expansion of proficiency-based education, which can enhance the need for students with disabilities to be more highly self-regulated. Many states have struggled to adapt oversight procedures originally designed for brick-and-mortar classrooms for online learning environments.
- For local education agencies, successful implementation of personalized learning depends on fostering students’ abilities to take greater control of their learning by giving them and their teachers timely access to progress and activity data and more flexible competency-based pathways.

The confluence of technology-enhanced instruction, progress monitoring, competency-based education, and student-centeredness has the potential to create truly inclusive educational environments.

New online educational materials and delivery systems are increasingly focusing on learner variability as the implementation of “personalized” or “student-centered” designs continue to grow. These models hold significant promise for students with disabilities. This can be seen in the implementation of instructional practices, curricular materials, and delivery systems that have been either designed from the outset to address learner variability or have evolved into more flexible and responsive online educational offerings.

Nevertheless, critical issues remain surrounding the sustainability of online teaching, the social development of students with disabilities, completing coursework online, and the shifting roles of parents and teachers as they work to provide positive learning experiences for students and to accommodate disability.

Download a full copy of *Equity Matters: Digital and Online Learning for Students with Disabilities* at <http://centeronlinelearning.org/publications/equity-matters-2016/>.



Equity Matters Chapter 1

Realistic Potential in Online Learning



The 2016 annual publication shifts its focus to some of the more encouraging policies and practices taking place across the field ... the intent is to provide the field with a more balanced perspective, including promising approaches.

In the fall of 2015, the Center on Online Learning and Students with Disabilities (COLSD) released its first annual report, entitled *Equity Matters: Digital and Online Learning for Students with Disabilities*. The primary focus of the initial report was to highlight various issues across the field of K-12 online education for students with disabilities and their families. With an interest in encouraging a greater focus on online learning for students with disabilities and other diverse learning needs, the report provided the field of K-12 education and special education a foundational understanding of the uncharted and disruptive nature of online learning for these students. In this new world of K-12 education, practice is driven by many factors and has outpaced academic research and personnel development. In the trenches of the modern education system, educators are meeting the day-to-day challenges of technological innovation and societal demand with a measured acceptance of online learning. This acceptance includes caution associated with the transformative changes in various

policies and practices that online learning requires. Because the Center has been charged with conducting research, we understand the difficulties and complexities of measuring, designing, and implementing a learning environment that is comprised of both physical and digital elements. The emergent growth of online learning continues to challenge the field in designing and supporting learning environments that effectively engage all learners; most importantly, those learners with disabilities.

The 2016 annual publication shifts its focus to some of the more encouraging policies and practices taking place across the field. While the authors of the various chapters still highlight challenges prompted by the ever changing world of K-12 digital and online learning, the intent is to provide the field with a more balanced perspective, including promising approaches. Thus, we start this publication of *Equity Matters: Digital and Online Learning for Students with Disabilities* with a nod toward encouraging policies, practices,



and innovations in this newly emergent field. The hope is that the information shared in this publication will inform, inspire, as well as motivate others to ask questions and seek solutions for designing better digital learning environments for all students, especially those with disabilities.

The last five years have provided COLSD researchers an extended opportunity to understand some of the foundational inner workings of this new field of practice. The Center was funded to research the transformative changes taking place in K-12 online education. Within our charge, COLSD was asked to (a) identify and verify trends, issues, and outcomes for students with disabilities in online settings; (b) identify and develop promising approaches for increasing accessibility and effectiveness of online learning; and (c) test the feasibility, usability, and potential effectiveness of promising practices for online learning.

In reality, practices must be developed with evidence supporting their success. As the rapid pace of tech-

nology innovation take shape across the K-12 learning space, it is essential to find ways to support the education leaders and teachers on the frontlines of this adoption. Without a greater understanding of promising practices, the field will respond to the flood of innovation with limited and localized information rather than a more interwoven perspective of lessons learned from a variety of settings and contexts.

As digital learning reshapes K-12 education, educators, researchers, and developers have an unprecedented opportunity to reshape the education system themselves on the basis of a desire to create environments that are meaningful and equitable for all learners. To support these changes, various groups must work together to fully understand and design environments that consider variability and the environment that surrounds each learner. If online learning is the primary driver of a student's learning experience, considerations should be taken to support various domains, including academic, social, occupational, and life skills. By definition, students with disabilities

have more involved needs than students without disabilities, and design considerations must be made for how to support these demands within online learning environments. It is with this understanding that the Center’s work has been undertaken. Throughout this publication, authors have identified a number of emergent practices that support meeting this need. To support the contextualized understanding of these practices, the following terms will be used throughout this publication.

- **Online Learning:** Education in which instruction, content, and learning are mediated primarily by network technologies such as the Internet.
- **Full-time Virtual:** When students are primarily taking all academic classes in online environments. This type of learning generally takes place in virtual schools or what is referred to as fully online schools.
- **Blended Learning:** “a formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick-and-mortar location away from home; and the modalities along each student’s learning path within a course or subject are connected to provide an integrated learning experience” (Christensen Institute, 2013).
- **Supplemental Online Learning:** When students are enrolled in an online environment to supplement another primary learning environment. An example would be someone taking a course in Mandarin Chinese or object-oriented programming online rather than in a face-to-face classroom environment because the local school does not offer the course.
- **Digital Learning:** Use of digital technology to support learning. The use of this term is context

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free in terms of the type of technology, environment, pedagogy, instructional design, and learner-interaction with the material, technology, or environment. Digital learning includes, but is not limited to, online, blended, and personalized learning. Digital learning would also encompass non-online environments that are simply focused on integrating digital technologies to support learning.

- **Digital Materials:** Electronic textbooks, workbooks, activities, simulations, assessments, and other components of the elementary and secondary school curriculum made available to students via computer, tablet, or mobile devices.
- **Digital Delivery Systems:** Content management or learning management utilities that display, provide access to, or otherwise render digital materials for students’ use. Most of these systems require an individual student login via username/password or unique student identification number. They often record and display student usage and achievement data.
- **Personalized Learning:** An approach in which the instructional approach, outcomes, content, activities, pace, tools, and supports are customized for each learners’ needs. Personalized learning takes advantage of the real-time progress monitoring capacity of many digital delivery systems to provide timely (e.g., daily, weekly), actionable updates on student learning and/or achievement through a course of study. Many personalized learning settings also follow a competency or proficiency-based instructional design.
- **Competency/Proficiency-Based Learning:** In this curricular structure, students’ progress is based on mastery of successive goals. Students are often grouped by age and/or proficiency levels, not by grades. Movement through a course of study

is based on evidence-based skills or knowledge learning, not seat time.

- **Universal Design for Learning (UDL):** A scientifically-based framework that is focused on supporting the variability of every learner through proactive and iterative design that integrates multiple means of engagement, representation of information, and action and expression of understanding (Learn more at UDLcenter.org).

Overview of This Publication

Chapter One: This chapter provides an overview of the Center, Center work, and this publication.

Chapter Two: The second chapter offers an overview of a state and territorial policy scan of all 50 states and five U.S. territories, focusing on online learning for students with disabilities.

Chapter Three: This chapter discusses recent research on curriculum considerations, pedagogical strategies, and other service considerations for students with disabilities in online environments; and the preparation of teachers for the online instruction of these students.

Chapter Four: This chapter examines the role shifts among professionals and parents within the online learning environment and the social experience of students with disabilities in online education. Specifically, it found that parents play a vastly expanded role in guiding their child's education compared to brick-and-mortar instruction.

Chapter Five: This chapter discusses the responsibilities of local and state educational agencies in recruiting students with disabilities to online learning and providing ongoing support.

Chapter Six: This chapter recounts the work of COLSD over its five-year existence. It notes lingering challenges in providing online instruction to students with disabilities but also new opportunities for these students in this digital era and critical issues that remain for researchers in order to take full advantage of these opportunities.

Appendix A: This section defines key terms used throughout the Annual Publication; terms associated with federal and state policy on students with disabilities and nomenclature used within the research field.

Appendix B: This section presents detailed findings from the COLSD State and Territory Policy Scan of the 50 U.S. states and five territories, describing the information in text and graphic form. It includes findings from nine of COLSD's state scan survey questions, which were based on nine items most closely aligned with IDEA foundational principles: free appropriate public education, appropriate evaluation, individualized education plan, least restrictive environment, parent participation, and procedural safeguards.

Appendix C: This section contains original text from the COLSD state scan survey questions. It includes 14 questions and seven sub-questions centering on students with disabilities and the online learning environment.

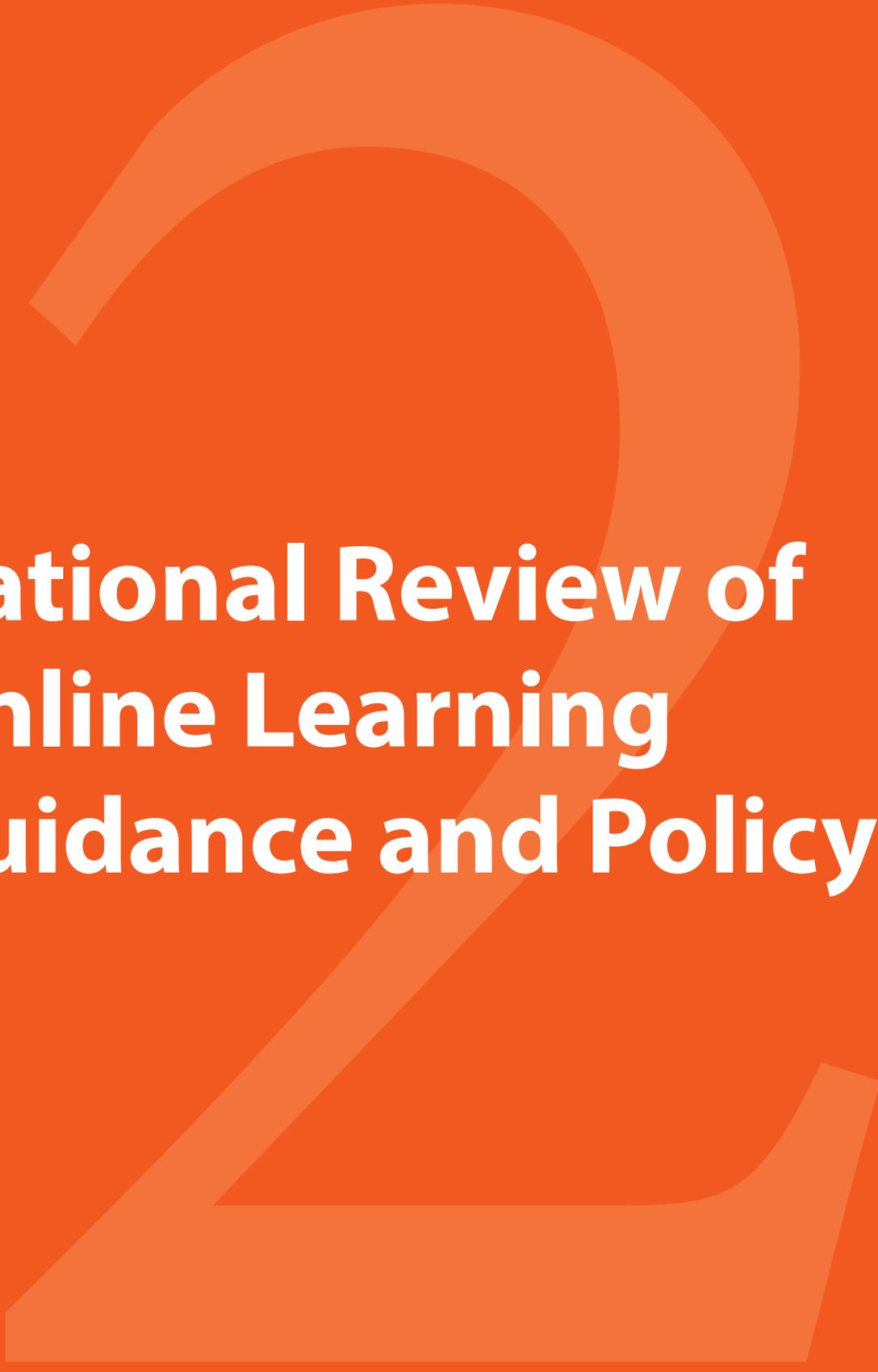
Appendix D: This section includes program summaries of 10 states that offer professional development on students with disabilities in online learning settings (Alabama, Florida, Georgia, Louisiana, Maryland, Minnesota, Rhode Island, Texas, and Vermont).

Contact Us: If you have questions or comments about this publication, you are encouraged to reach out to the Center by emailing: info@centerononlinelearning.org James D. Basham, Ph.D., jbasham@ku.edu, Skip Stahl, sstahl@cast.org.

Disclaimer: *The Center on Online Learning and Students with Disabilities works with teachers, parents, and industry leaders to research and disseminate high-quality reports about engagement, effectiveness, and accessibility of online education for students with disabilities. The contents of this publication were developed under a grant from the US Department of Education #H327U110011. However, those contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Celia Rosenquist.*



Equity Matters Chapter 2

A large, stylized number '2' is rendered in a light orange color, serving as a background graphic for the page. It is positioned behind the main title text.

National Review of Online Learning Guidance and Policy



“Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities.”

(Public Law 108-446, Sec 682 (c)(1))

To date, no federal education laws specifically reference special education in virtual settings; however, the U.S. Department of Education (on August 5, 2016) issued a significant guidance document to state departments of education. In this Dear Colleague letter, the Office of Special Education Programs (OSEP), identified state and local education agency responsibilities related to implementing the Individuals with Disabilities Education Act (IDEA) in full-time virtual schools. The letter focused on three key areas identified by the Center in its 2015 annual publication *Equity Matters*. These areas address (a) the general supervisory responsibilities of SEAs and LEAs to assure the delivery of IDEA-compliant education services in online settings, (b) pro-active approaches that ensure that child find provisions are met, and (c) assurances that every student with a disability will be afforded a Free, Appropriate Public Education (FAPE).¹

This U.S. Department of Education guidance has afforded states the freedom to develop and imple-

ment special education services that are as unique and diverse as the students they serve. On the one hand, the flexibility of this new generation of online teaching and learning models can open possibilities never thought possible. Conversely, the rapid adoption of policy, changing practice, and limited research in online settings can compromise full implementation of the IDEA safeguards. During this time of “building the plane as we fly it” we must remember that the IDEA statute and its corresponding regulations do not make any exceptions to these requirements or allow States to waive or relax these requirements for virtual schools. The current era of educational innovation and push to equip students for a 21st-century global community should be pursued with thoughtful caution so that momentum doesn’t occur at the expense of the most vulnerable learners.²

Throughout its investigations, The Center on Online Learning and Students with Disabilities (COLSD) has differentiated the structure of K–12 online learn-



ing into three categories: full-time virtual (students receive all instruction remotely and online), blended (students receive instruction both online and in a brick and mortar setting), and supplemental (students take individual courses online that augment their brick-and-mortar coursework). Predominantly, the references in this chapter refer to full-time virtual schooling. Few states distinguish between these three structural categories of online learning, and the majority of existing state policies target full-time virtual settings. Further, communication with many state policymakers revealed that policy references to “online learning” are presumed to address all three structural categories. Consequently, few, if any, of the COLSD state scan findings reflect policy distinctions in this area.

The purpose of Chapter 2 is to provide all education stakeholders (including state public education officials, virtual school principals, online teachers, parents, students, and local agency educators) with

an understanding of current online learning policies related to students with disabilities across the 50 United States and five territories. Building from the formal, empirical, and comprehensive policy review of state and territorial policies and practices completed in 2015, this chapter updates that state scan information for 2016.

Organization of the Chapter

This second chapter is organized in three sections: methodology, selected findings, and considerations associated with each scan item.

The methodology section explains how scan questions were generated and how data were collected and analyzed. Three methods were used to retrieve existing states’ and territories’ policy and guidance information from online sources: (a) a review of current existing state policy publications; (b) an in-depth, rubric-based review of state department of education websites; and (c) an extensive Internet search for

ancillary documents that might further clarify state policies. Findings were compiled and sent to state and territory special education directors for their review and comments. The findings were then used to create this overview of current state policies on online education for students with disabilities.

In 2015, COLSD researchers reviewed the literature regarding online special education policy and revisited questions that were received from parents and educators in order to design the most comprehensive yet succinct protocol possible. Findings were compared to emergent issues from the COLSD 2015 policy scan. Items were developed across 11 content domains: (a) access to and within online learning, (b) FAPE procedures, (c) teacher preparedness for students with disabilities in online settings, (d) features of online learning environments, (e) IEP development in online settings, (f) educator support and provision of accommodations in online coursework, (g) procedures for identification/child find, (h) provision of related disability support services, (i) data use and data privacy protection as it intersects with information about disability, (j) parental involvement in decision making and instruction provision in online learning settings, and (k) state reporting associated with IDEA monitoring procedures.³ In this year's annual publication, COLSD provided an in-depth explanation of how these items are grounded in the six principles of IDEA in an effort to reach the broadest stakeholder audience possible.

Findings from the state scan are presented in this chapter in this sequence:

1. The six core principles of the Individuals with Disabilities Education Act (IDEA) provide the anchor points for the state scan. This approach is designed to directly associate scan findings to federal special education law, specifically IDEA.
2. Ten scan topics are singled out for specific comparative reference:
 - a. Early Trailblazers: Online State-Sponsored Entities
 - b. Big Business: Understanding Vendors

- c. Who's On My Team?: The Provision of Special Education Services in Online Settings
- d. Virtually Seeking: Child Find
- e. Discovering What You May Not Know: Access to Online Content
- f. In With the New: IEP Guidance for Online Educational Settings
- g. LRE as Foundation to Successful IEP Planning: Online Enrollment
- h. Leveling the Education Playing Field: Online Accommodations
- i. Planning for the Future: Online Graduation Requirements
- j. Supporting Students through State Accountability: Special Education Monitoring in Online Settings

3. A "Considerations" section is provided following each scan topic that highlights state factors that (we believe) have emerged as important for policy, practice, and research.
4. Complete individual state and territorial scan summaries are presented in Appendix B. The full report of individual and state and territory scans are available at the following URL: <http://centerononlinelearning.org/>.
5. Using the state scan procedures discussed in the methods section of this chapter, COLSD researchers identified states that provide professional development that provide strategies, supports, and resources to online educators for working with students with diverse learning needs. The list of nine states and trainings are provided in Appendix D.

Scan Methods

State Scan Rating Scale

The state's availability and depth of information provided on the 20 scan items was rated on a four-point nominal scale. COLSD researchers developed a scoring rubric for the four points that focused on the availability and specificity of publicly available evidence.

A rating of 1, **Yes with Evidence**, indicated that policy or guidance information was located that directly addressed the scan item.

A rating of 2, **No with Evidence**, indicated that the appropriate sources were located but that policy or guidance that directly addressed the scan item was not located. This could mean that a policy related to an item that was found and online was not mentioned or that online was mentioned and clearly not addressed in the policy.

A rating of 3, **Unclear**, indicated the located guidance or policy was generally associated with an item (by keyword or included terminology) yet the information did not indicate whether—or how—the scan item was addressed. This rating was used to indicate that the state or territory policy did discuss the topic but that COLSD researchers could not clearly determine how that information addressed the scan item.

A rating of 4, **Nothing Found**, indicated that COLSD researchers could not locate necessary guidance or policy documents pertaining to the scan item.

State Scan Procedures

COLSD researchers completed the state scan between April and September 2016 using state departments of education and other affiliated websites and publicly available documents. In conducting the scan, researchers took on the role of an information-seeking parent or a field-based professional looking for guidance, for example, in preparation for an IEP meeting in which online learning was being discussed as a potential placement option.

A three-step process was used for conducting the state scan. First, when assigned a state or territory to scan, researchers familiarized themselves with the information that was most recently published about a given state or territory. Second, researchers located the state or territory department of education website(s)

and other key websites such as those maintained by state virtual school providers and then keywords from the item list were used to search for each of the scan items. Third, if inconsistencies were found in the located information, researchers would then initiate further computer searches in an effort to locate related guidance or policy documents. In these searches, only documentation from official state and territorial domains and/or known online service providers was used to document answers. Answers to all scan items were recorded in a Qualtrics database.⁴

Reliability and Consensus Checks

Upon completion of the state scans, each state and territorial scan was sent to the respective state or territorial special education director to review the findings. Directors or their designees responded to scan information with affirmation or additional comments. If the state's or territory's director found omissions or misinterpretations in the scan, they were asked to provide corrected information. Email reminders were sent to directors prompting them to review the results and submit any revisions before the publication deadline. Responses to state scan data were obtained from 36 (65%) of the 55 state and territorial agency representatives.

For changes suggested by directors of states or territories, meetings were held to review the disputed findings. After considering the disputed information, we either (a) changed the rating or (b) maintained the initial rating and noted the dissent of the state or territory's director in the state scan. Regular meetings to establish consensus ended when 100% agreement was reached for every item in every state or territory whose directors responded.

The Six Principles of IDEA

The Individuals with Disabilities Education Act (IDEA) (2004) outlines critical provisions to ensure students with disabilities can access public education in a way that is meaningful and empowering. IDEA guides and supports states to create policies and practices necessary to address the needs of students with disabilities. (20 U.S.C. Secs. 1400(d)(1)-(4)). During the 2015 COLSD State/Territory Policy Scan, researchers identified a number of state policies related to online learning that were unsupportive of or discriminated against students with disabilities in online learning settings. For example, one state makes a clear disclaimer on their website that they do not recommend that students with an IEP/504 plan take an online course due to demanding reading requirements. In another case, students are not allowed to enroll in an online course unless deemed appropriate by an enrollment coordinator. Additionally, one state enrollment policy for a virtual school states that students with IEPs may be denied access to online schooling based on inadequate classroom space or inability to provide appropriate services to the student with a disability. In other cases, no guidance or special education policy is provided at all. In response, COLSD researchers decided to link scan findings more closely to IDEA's six core principles in an effort to elicit deeper discussion related to students with disabilities and equity in online learning settings.⁵

The following 10 scan topics in this chapter have at least one of six colored icons displayed below the header. Explanations of these icons can be found in the table on the right. As each of these scan topics is based on the core principles of IDEA, this icon system serves to highlight which of these principles informed the topic at hand. Ideally, the findings from this scan will in turn support IDEA principles.

The six major principles of IDEA are as follows:

The six major principles of IDEA are:



1. Free and Appropriate Education (FAPE) occurs when a student receives an individualized educational program designed to meet the child's unique needs and as a result the child receives an educational benefit that helps prepare them for further education, employment, and independent living.



2. Least Restrictive Environment (LRE) reflects the presumption that the student's education will take place in a typical setting and with nondisabled students to the maximum extent appropriate.



3. Zero Reject refers to the process for enrollment and ensures that every child (under IDEA) is entitled to a free appropriate public education no matter how severe their disability.



4. Nondiscriminatory Identification and Evaluation occurs when a student is suspected of having a disability by the school or others. Schools must use unbiased, multifaceted methods of evaluation for disability determination and for whether special education is needed.



5. Due Process Safeguards are legally protected methods used to protect the rights of children with disabilities. These methods are for parents to hold schools accountable and for schools to hold parents accountable.



6. Parent Participation ensures that parents and students can be partners with educators in a meaningful and impactful way.⁶

1. Early Trailblazers: Online, State-Sponsored Entities



State-sponsored virtual schools and programs were among some of the first entities to pioneer new options for K–12 online learning. Consequently, a review of these entities provides the most comprehensive historical perspective of elementary and secondary online learning initiatives. These schools or programs are created by one or more actions by the state including state legislative action, administrative action by state education agencies (SEAs), and state appropriation or grant funding. These state-level arrangements provide online education services across the state and in some cases across state lines. Initially, many online, state-sponsored schools/programs provided only supplemental courses for high school students. Over the last ten years state-sponsored offerings have grown to provide a wide range of services that

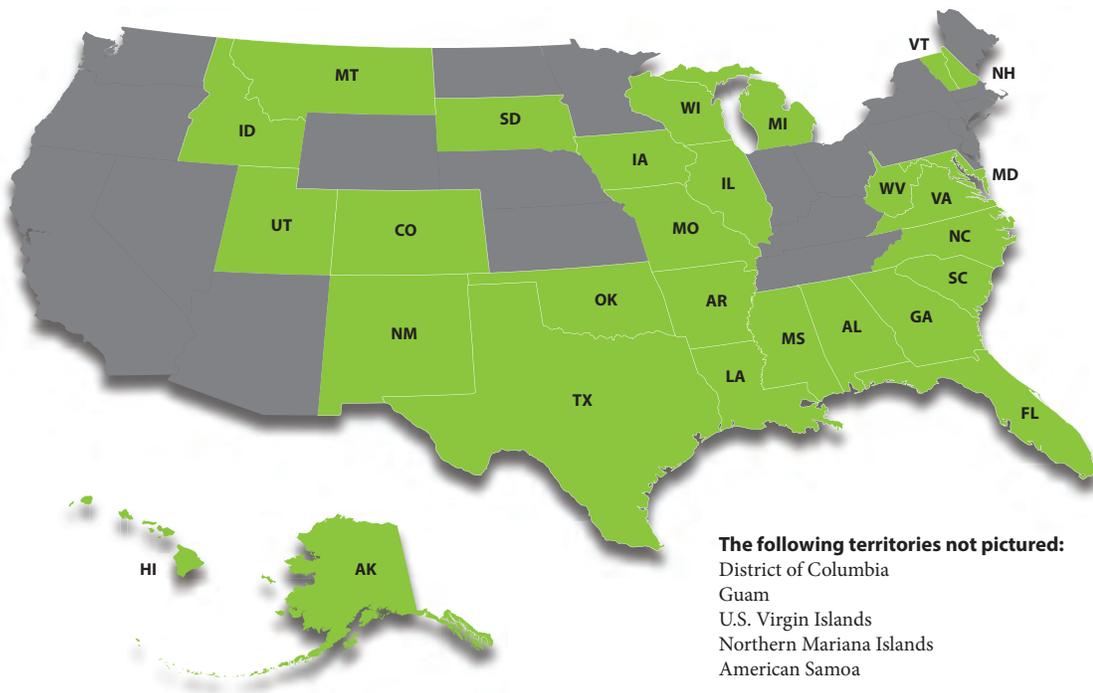
include supplemental courses, college and career readiness courses, career and technical education, credit recovery, blended learning and curriculum, learning management system (LMS) portals and tech support, professional development, and full-time online learning options.

COLSD researchers asked the following question regarding the provision of state sponsored online schools/programs/entities in operation:

Are there state-sponsored online schools/programs/entities in operation? (e.g., run by, managed or delivered with state oversight)

The 2016 COLSD State/Territory Policy Scan identified 28 states that had state-sponsored online schools/programs/entities in operation. The map below highlights the location of these schools/programs.⁷

STATE-SPONSORED ENTITIES



As mentioned earlier, these state-sponsored online schools/programs/entities may be unique to each state. Table 1 provides a representative snapshot of state online schools/programs and includes the type of service, grade levels served, and if the state provides those services across state lines.

The scan revealed that most services were described as either supplemental or full-time virtual options. The

few states offering both full-time and supplemental online services are referenced in the individual state reports in Appendix B. Supplemental services mean the online courses are provided only as alternative options to brick-and-mortar classes and that the program does not offer a diploma. Full-time is an option for students to take all of their classes online in order to receive their diploma. COLSD researchers were unable to locate state policies that specifically

TABLE 1

State	Virtual School	Services	Grades Served	Cross-State Line
Alabama	Alabama Connecting Classrooms, Educators, & Students Statewide	Supplemental	7-12	
Arkansas	Virtual Arkansas	Supplemental	K-12	
Colorado	Colorado Online Learning	Supplemental	6-12	
Florida	Florida Virtual School	Full-Time	K-12	X
Georgia	Georgia Virtual School	Supplemental	6-12	
Hawaii	Hawaii Virtual Learning Network	Supplemental	7-12	
Idaho	Idaho Digital Learning Academy	Supplemental	5-12	
Illinois	Illinois Virtual School	Supplemental	5-12	
Iowa	Iowa Learning Online	Supplemental	9-12	
Louisiana	Louisiana Supplemental Course Academy	Supplemental	9-12	
Maryland	Maryland Virtual Learning Opportunities	Supplemental	9-12	
Michigan	Michigan Virtual School	Supplemental	6-12	
Mississippi	Mississippi Virtual Public School	Supplemental	9-12	
Missouri	Missouri Virtual Instruction Program	Supplemental	K-12	
Montana	Montana Digital Academy	Supplemental	6-12	
New Hampshire	Virtual Learning Academy Charter School	Full-Time	6-12	X
New Mexico	Innovative Digital Education and Learning New Mexico	Supplemental	6-12	
North Carolina	North Carolina Virtual Public School	Supplemental	6-12	X
North Dakota	North Dakota Center for Distance Learning	Full-Time	6-12	X
Oklahoma	Oklahoma Supplemental Online Course Program	Supplemental	9-12	
South Carolina	Virtual South Carolina	Supplemental	6-12	
South Dakota	South Dakota Virtual School	Supplemental	6-12	
Utah	Utah Electronic High School	Full-Time	6-12	
Texas	Texas Virtual School Network	Full-Time	9-12	
Vermont	Vermont Virtual Learning Cooperative	Full-Time	7-12	X
Virginia	Virtual Virginia	Supplemental	6-12	X
West Virginia	West Virginia Virtual School	Supplemental	6-12	
Wisconsin	Wisconsin Virtual School	Supplemental	6-12	

referenced blended learning initiatives. Links to specific state websites used as information sources are included in the references section of this chapter.

Considerations

As reflected in the prior 2015 COLSD State Scan and the current 2016 edition, scan findings revealed that most comprehensive policy/guidance for special education (including references related to enrollment, accessibility, and accommodations) was most often found on state-sponsored online schools'/programs' websites. This detail can help stakeholders, including parents, gain a clearer understanding of state-level special education policy in online learning. Further, detailed state policies related to online learning and students with disabilities can help inform parents of these students with the range of educational options that exist as an alternative to local brick-and-mortar placements. Parents of students with disabilities often make the decision to remove their children from a brick-and-mortar setting (for many different reasons) and they may initially look to their local school district to inform or advise them of their alternatives, including online school options.⁸

Resources

Examples of helpful resources for parents and students with disabilities that have emerged from state-sponsored virtual schools include the following:

- **Florida**

Florida Virtual School (FLVS), *Exceptional Student Education* (2016)
<https://www.flvs.net/about/programs/exceptional-student-education>

- **North Carolina**

North Carolina Virtual Public School (NCVPS), *Special Education/504 Services* (2016)
<https://ncvps.org/special-education-504-services>

- **Georgia**

Georgia Virtual School (GAVS), *Special Education/Accommodations* (2016)
<http://gavirtualschool.org/Students/SpecialEdAccommodations.aspx>

- **South Carolina**

Virtual South Carolina (Virtual SC), *Virtual SC Student Portal IEP Policy* (2016)
<https://virtualsc.org/myvsc/iep-policy/>

2. Big Business: Understanding Online Vendors



The evolution of digital learning—characterized by full-time virtual, blended learning, and supplemental online course models—has drastically altered the lens through which we view education. The rapid integration of digital components in K–12 educational settings has created an increased demand for digital learning software and online providers. Large for-profit companies have played a major part in accelerating the growth of online schools and other vendors have followed their lead. It is reported that 74.4% of all full-time virtual schools are operated by for-profit vendors. Companies such as K12 Inc. served approximately 98,806 full-time virtual school students in 2014. This is just a small snapshot of the precipitous market growth in K–12 online education in the past few years.⁹

COLSD researchers asked the following question regarding state requirements of online vendors:

Does the state application or policy for a potential online provider of service reference regulations for serving students with disabilities?

Findings:

Of the 55 states and territories, 21 have state-mandated vendor applications for online providers that specifically mention serving students with disabilities. COLSD researchers noted in the state scan that state vendor applications are very different across the nation and that the degree to which states require

vendors to articulate what provisions exist for students requiring special education services or accommodations vary significantly. In some cases, states may just provide a general statement regarding IDEA requirements. The accompanying policy boxes provide examples of the guidance that states provide:

**POLICY BOX
UTAH**

C. A provider shall “provide services to students consistent with requirements of the IDEA, Section 504, and Title VI of the Civil Rights Act of 1964 for English Language Learners (ELL).”

*Utah Department of Administrative Services
Provider Requirements and Responsibilities,
Statewide Online Education Plan (R277-726-7-18f)*

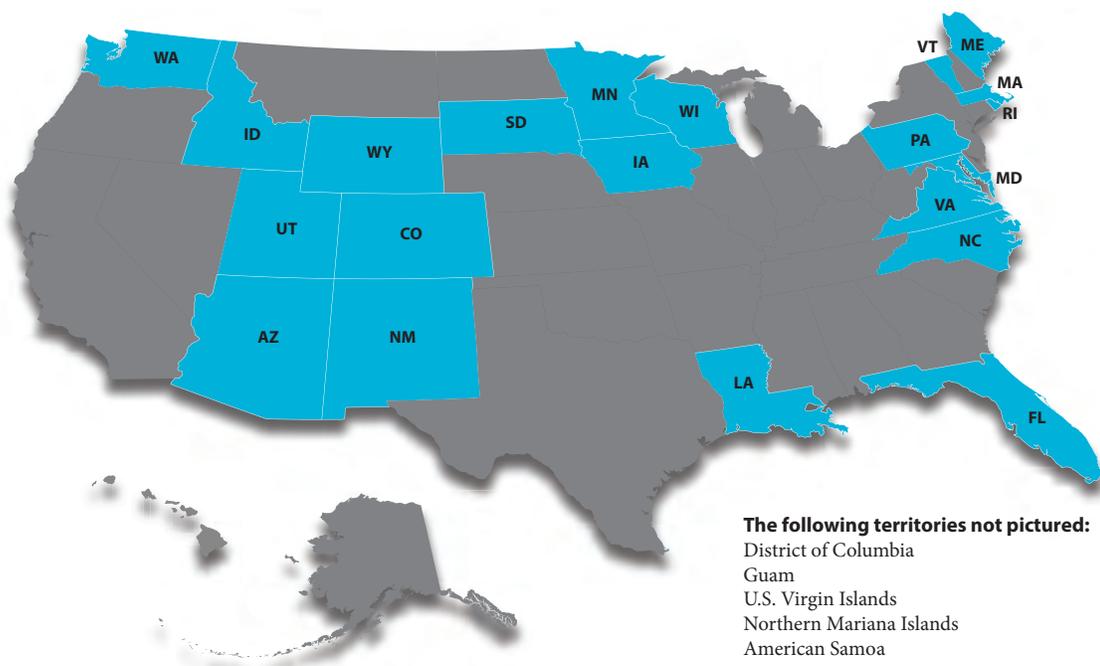
**POLICY BOX
IOWA**

“When considering vendor sources of online academic content, be aware that you are ultimately responsible for the quality of the content, the delivery of instruction (including Iowa teacher and/or administrator licensure), the provision of any needed student accommodations, and student outcomes. The content must be included in your ongoing implementation of the Iowa Core and included in your Comprehensive School Improvement Plan (CSIP). Also, you must continue to comply with all sections of the Iowa Code relating to Iowa schools and K–12 education.”

*Iowa Department of Education Online Learning
Providers and Resources: Guidance for School Districts,
Schools, Parents, Guardians, and Students (p. 2, no date)*

The map below highlights the states that reference regulations for serving students with disabilities on either vendor applications or in policy documents for a potential online provider of service.

STATES WITH VENDOR APPLICATIONS PERTAINING TO STUDENTS WITH DISABILITIES



Considerations

As commercial vendors continue to represent the majority of the virtual school market share, both LEAs seeking to acquire standards-aligned and educationally valid online learning materials and/or delivery systems and parents may have difficulty in accessing the complete and balanced information they need in order to make informed educational decisions on behalf of students. For full-time virtual schools in particular, parents should have access to accurate information, including student-teacher ratios, school performance data, and dropout rates in online settings. Additionally, information about qualifications of special education personnel, vendors' ability to adhere to IEPs that may include explicit individualized instruction, and special accommodations may be difficult to determine ahead of time and thus impede parents from making knowledgeable and prudent educational choices. States can support parents and students with disabilities by developing thorough applications that require providers to address how they will ensure alignment with IDEA requirements within their respective products.¹⁰

Resources

Examples of virtual school requirements that specifically reference access and accommodations for students with disabilities include the following:

- **Massachusetts**

Massachusetts Department of Elementary and Secondary Education, Commonwealth of Massachusetts Virtual School Performance Criteria (2014) <http://www.doe.mass.edu/odl/cmvs/PerformanceCriteria.pdf>

- **Kansas**

Kansas Department of Education, FAQ about Enrolling and Serving Students with Disabilities in Virtual Schools and Programs (2014) <http://www.ksde.org/Portals/0/TLA/Graduation%20and%20School%20Choice/Virtual/FAQ-SWD%20in%20Virtual%20Schools%20and%20Programs.pdf>

3. Who's On My Team?: The Provision of Special Education Services in Online Settings



The Least Restrictive Environment (LRE) provision of IDEA indicates that the placement of a child is to be “as close as possible to the child’s home” (IDEA (34 C.F.R. 300.116(b)(3))). However, many full-time virtual schools advertise an “any time, at any location” programming model. This means that there may be no physical location for the child to attend. So who then ensures that the student receives all of the special education services as articulated on their IEP? What if the services needed cannot be provided virtually? How does the online school ensure that services (that cannot be attained virtually) are provided to the student in proximity to the student’s neighborhood? Online schools and programs are relatively new in the provision of special education services, and, seemingly, brick-and-mortar schools have the expertise and experience in fully executing a student’s IEP. How will parents know if collaborative agreements regarding these services are in place between the LEA and the online school?¹¹

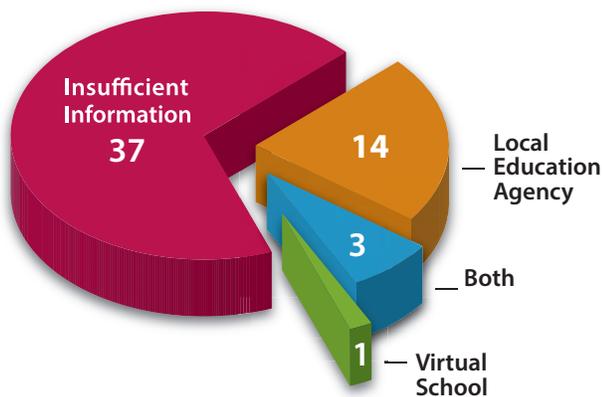
COLSD researchers asked the following question regarding who is responsible for the provision of special education services:

Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for Students with Disabilities enrolled in online courses?

Findings:

Fourteen states clearly stated that the student's home local education agency (LEA) is responsible for the provision of special education services when a student is enrolled in an online school. One state clearly designated the online school as solely responsible for the provision of special education services. Finally, three states required the LEA and the online school to work together to provide special education services. More concerning is that 37 states did not have any clear guidance/policy of who would provide special education services in a virtual/online school setting. An important consideration about this finding is that if guidance/policy was found on a state sponsored online school or program, COLSD researchers assumed that the policy applied to online schools and programs offered at the local level.

The pie chart below (figure 4) illustrates the number of state guidance/policies articulating where the responsibility lies for the provision of special education services.



Considerations

The August 2016 significant guidance document distributed by the Office of Special Education and Rehabilitative Services at <http://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/dcl--virtual-schools--08-05-2016.pdf> recommends that both SEAs and LEAs review their respective special education policies to specifically address issues related to students with disabilities enrolled in full-time online settings. The following three areas were highlighted:

supervision of special education, Child Find, and the provision of FAPE. As the present state scan attests, only 24% of states surveyed currently provide this information, leaving the majority of the nation's local education agencies with the responsibility of addressing these requirements on their own.

Depending on the circumstances surrounding a student's change of placement, parents may not inquire about the structure of an online special education program and the degree to which services are provided. In addition, parents may not understand administrative structure in an online school and how to use that structure to advocate on behalf of their child. Since many online schools are charters (and often exist as a separate LEA), it is important that parents are provided clear information as to whether the online charter school is connected to the child's district for special education services. In some states, online charter schools are given the choice to provide special education services directly or to hire a third party. Guidance to parents that provides thorough and specific information about who, what, when, and where regarding providing special education services is necessary in order for parents to make fully informed placement decisions.¹²

4. Virtually Seeking: Child Find



The zero reject principle supports the inclusion students with disabilities in public education. The August 2016 OSEP guidance document indicated that identifying a student with a disability may present challenges in full-time virtual school settings and that parent reports should not be the only mechanism employed. As indicated in the guidance document, IDEA requires each SEA to develop and conduct an annual plan in effort to identify, locate, and evaluate all students with disabilities. The zero reject principle is reflected in what is commonly referred to as the "child find" provision:

“All children with disabilities residing in the State, including children with disabilities who are homeless children or are wards of the State and children with disabilities attending private schools, regardless of the severity of their disabilities, and who are in need of special education and related services, are identified, located, and evaluated and a practical method is developed and implemented to determine which children with disabilities are currently receiving needed special education and related services”

(20 U.S.C. Sec. 1412(a)(3))
20 U.S.C. 1412 State Eligibility

As indicated above, Child Find requires a child census that includes finding children suspected of having a disability and also finding highly mobile children that have a disability (34 C.F.R. Sec. 300.111(c)).¹³

COLSD researchers asked the following question to states about Child Find:

Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?

Findings:

COLSD researchers found guidance and policy about Child Find provisions in online schools/programs in four states. The Florida Virtual School Full-Time (FLVS FT) discusses in their FAQ what processes are in place in order to meet the Child Find mandate. FLVS FT aligns policy to be consistent with other schools by reviewing data such as response to instruction (RtI), interventions, and assessments.

Examples of guidance and policy about Child Find in online schools/programs include the following:

POLICY BOX FLORIDA

“107. Who has the responsibility to evaluate FLVS FT students if it is suspected that a student may be a student with a disability?”

The FLVS FT school has the responsibility to implement procedures and processes to identify and evaluate students if the FLVS FT school has reason to suspect that an enrolled student may be a student with a disability in need of special education and related services. Consistent with the evaluation process for any student suspected of having a disability, FLVS must review all existing data for the student which would include data regarding the student’s response to instruction and interventions provided by FLVS and information from any assessments administered by FLVS. If it is determined that additional formal assessment data are needed to determine the student’s eligibility as a student with a disability, obtaining such an assessment(s) is the responsibility of the FLVS FT program.”

*Florida Public Virtual Schools
Questions and Answers 2014-15*

POLICY BOX SOUTH CAROLINA

“It is the responsibility of the sponsor school district to carry out its obligations for—Child Find, including the evaluation and eligibility determination of any child suspected as having a disability under the Individuals with Disabilities Education Act (IDEA) and State Board of Education regulation 43-243.1”

Virtual South Carolina: IEP Policy 2016

POLICY BOX PENNSYLVANIA

“To enable the Commonwealth to meet its obligations under 34 CFR 300.111 (relating to Child Find), each charter school and cyber charter school shall establish written policies and procedures to ensure that all children with disabilities who are enrolled in the charter school or cyber charter school, and who are in need of special education and related services, are identified, located, and evaluated.”

*Pennsylvania Code §711.21
Child Find. 34 CFR 300.111*

Considerations

In full-time virtual schools the actual execution of the Child Find mandate is not an easy task for a number of reasons. IDEA mandates Child Find but does not provide guidance to states on procedures for compliance, instead requiring states to develop their own method for the execution of Child Find (20 U.S.C. 1412(a)(3)). Often states delegate Child Find activities to LEAs. In brick-and-mortar settings identifying students eligible for special education services may be done via face-to-face outreach to parents and community service agencies, public service announcements on radio or television, or other “on the ground” activities. Some of these identification strategies may prove challenging or ineffective once a student enrolls in full-time online learning since the daily face-to-face interactions available to students in brick-and-mortar settings no longer exist or are diminished.¹⁴

It is likely that new Child Find procedures and processes will be developed and established in online learning settings as states and districts become more experienced in designing and delivering special education services in these environments. States will need a more comprehensive understanding of how student outcomes and coursework data generated in online settings can help identify students who need interven-

tion or referral for assessment. Parents’ reports will play a critical role in this process but should be considered only as a component of the Child Find process. Teachers and administrators working in online settings should have an established set of criteria and indicators available to them that can serve as a procedural guide for further investigation (if a student’s learning, achievement, or behavior warrants). Parents can be viewed as critical partners in the Child Find process but must be provided necessary support and training that aligns with Child Find policies established for online learning.

5. Discovering What You May Not Know: Access to Online Content



Issues of access to instructional materials usable by students with sensory, physical, and learning disabilities not only relates to fully online programs but also to blended programs and other classrooms that rely on technology to support student learning. All of these environments must ensure that students have access to free and appropriate educational opportunities that are delivered in an equitable manner, while taking the unique needs of students into consideration. Parents, teachers, and school administrators may feel inclined to rush to utilize technology in pursuit of promises of “personalization” or “individualization” and later realize that certain learners with sensory, cognitive, behavioral, and performance limitations can be left out unless thoughtful consideration is given before implementation or enrollment.¹⁵

In May 2011, the Office of Civil Rights (OCR) clarified legal requirements relative to digital curriculum resources:

—equal opportunity, equal treatment, and the obligation to make accommodations or modifications to avoid disability-based discrimination—also apply to elementary and secondary schools under the general

nondiscrimination provisions in Section 504 and the ADA. The application of these principles to elementary and secondary schools is also supported by the requirement to provide a free appropriate public education (FAPE) to students with disabilities.

U.S. Department of Education. (2011). Office of the Assistant Secretary: FAQ¹⁶

COLSD researchers asked the following question regarding which states and territories have policies or requirements pertaining to the accessibility of online offerings:

Does the state have policy or guidance, documentation, regulation, or statutes that ensure online courses are accessible to and open to enrollment by students with disabilities?

Findings:

In the 2015 COLSD State/Territory Policy Scan, COLSD researchers identified 19 states with accessibility policy, guidance, or statutes. Three additional states—California, Florida, and Minnesota—were identified in the 2016 scan for a total of 22 states. COLSD researchers noted that states have a great deal of variation in the breadth and depth of the information that they provide regarding accessibility and enrollment. For example, the California Department of Education provides a lengthy explanation of web content accessibility checkpoints including standards for the use of multimedia (audio files, presentation files, video files, and transcripts) in alignment with federal requirements. The Florida Virtual School documents present accessibility in terms of a least restrictive environment (LRE). Policy from the Minnesota Department of Education includes guidance for purchasing learning materials and suggestions for resources like the National Center on Accessible Education Materials at CAST. These three examples highlight the differences in accessibility policy from state to state.¹⁷

Considerations

Assurances related to the accessibility of curricular goals, methods, materials, and assessments exist throughout civil rights (the Rehabilitation Act; the Americans with Disabilities Act) and education law (Individuals with Disabilities Education Act; Every Student Succeeds Act), yet compliance with these requirements in many widely-deployed elementary and secondary online learning systems is still evolving. SEAs and LEAs can, as part of the procurement process, comply with federal requirements by requiring that curriculum materials, online delivery systems, and mobile devices be accessible.

Making sure that educational content delivered digitally is fully accessible to all learners takes a team effort. Clearly delineating the roles of the virtual course designer, online instructor, and program administrator seems not only helpful but a requisite to ensuring accessibility and enrollment alternatives. For example, COLSD researchers recommend that a virtual course designer develop the course according to universal design principles and build content in alignment with Section 508 and Web Content Accessibility guidelines (WCAG). Online instructors should understand legal mandates associated with the Americans with Disabilities Act, the Assistive Technology Act, and guidelines included in Section 508 of the Rehabilitation Act. Program administrators should develop policies and practices that support accessibility issues.¹⁸

If technologies are unable to conform to accessibility standards, educational institutions are allowed to provide students with disabilities other accommodations or modifications that provide benefits comparable to the digital content. While this “alternative effort” approach seems reasonable in theory, in practice replicating online affordances using offline digital and other traditional resources presents a significant challenge. A pro-active, accessible-from-the-outset approach reduces technology barriers for students with disabilities, offers both cost and time efficiencies, and provides flexible options for all students. Implementing inclusive strategies and products from the

beginning helps ensure that digital materials, delivery systems, and devices are accessible for all learners.

Resources

Examples of approaches that ensure the accessibility of postsecondary online offerings are widely available and relevant to K–12 online course design.

- **Faculty eCommons**
Web Accessibility Checklist (2016)
<http://facultycommons.com/free-download-web-accessibility-checklist/>

For approaches related to elementary and secondary digital learning materials and delivery systems.

- **National Center on Accessible Educational Materials**
Purchase Accessible Learning Materials (PALM) Initiative (2016)
<http://aem.cast.org/navigating/palm.html>.²⁰

6. In With the New: IEP Guidance for Online Educational Settings



A particular area of concern for COLSD researchers has been the lack of guidance provided by states to LEAs and parents of students with disabilities related to digital learning environments. States can empower stakeholders by providing relevant guidance and technical assistance (despite the numerous nuanced models of digital learning). Both educators and parents need to understand how foundational rights—including free and appropriate public education, education in a least restrictive environment, procedural due process, and parental participation—apply in digital learning settings. Regulations specific to the 2004 reauthorization of IDEA were published in 2006. Among the changes addressed were those related to IEP Team meetings and changes to the IEP itself.²⁰

One specific example of why information related to online settings should be provided is the practice of

teletherapy. This involves special education-related services being provided over the Internet rather than face-to-face. Not only is the actual practice and setting drastically different than the way traditional related services are provided, the role of the parent is much more involved. In a study that interviewed individuals working in the field of teletherapy, a key finding was that parents must attend teletherapy appointments and help the provider become oriented to their child. Parents were also reported to have the responsibility of keeping their children on task and providing feedback to the teletherapist. This one example illustrates how the shift to the online learning environment changes roles of the student's support system and the nature of service delivery.²¹

COLSD research staff reviewed state/territory IEP guidance for online learning to get a better understanding of what types of information parents have available to them as they pursue online school and programs on the behalf of their children.²²

COLSD researchers asked the following question about IEP guidance:

Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?

Findings

COLSD researchers looked for written guidelines that address IEP development and implementation. The topical focuses included how an IEP team will ensure access to technology and other appropriate accommodations during online learning, how supportive services will be addressed, how communication will occur among all parties responsible for implementation of the IEP, and any other special issues that arise in the online learning environment.

Findings reveal that states are only beginning to issue IEP guidance for digital learning settings. COLSD researchers did not find any states with guidance that spoke to all areas of the IEP; however, eight states had

made a clear effort to address the provision of special education-related services (see Considerations [below]).

Considerations

In order to facilitate parent involvement, guidance and information related to online schools and programs must be available. State-level guidance is important given the dynamics and variation in practice across districts. Optimal guidance would provide an in-depth discussion that explains all components of the IEP and how they apply to the online setting. Schools must work with both LEAs and parents to help them become informed decision makers while taking into consideration complex family and school relationships. States can consult the resource documents listed below as a starting point for building informative and thorough handbooks and technical assistance for parents of students with disabilities enrolled in online settings.

Resources

- **Alabama**
Alabama Connecting Classrooms, Educators, & Students Statewide (ACCESS), Distance Learning: Policy Manual for Students (2012)
<http://accessdl.state.al.us/sites/default/files/documents/manuals/StudentPolicyManual7-13-12.pdf>
- **Georgia**
Georgia Virtual School (GAVS), Special Education Accommodation (2016)
<http://www.gavirtualschool.org/Students/SpecialEdAccommodations.aspx>
- **Missouri**
Missouri Virtual Instruction Program (MoVIP), About MoVIP (2016)
<http://movip.org/about.html>
- **North Carolina**
North Carolina Virtual Public School (NCVPS), IEP/504 Guidelines for North Carolina Virtual Public School Teachers and School-Level eLAs (2015)

- https://docs.google.com/document/d/1VxuJXZW_sJfSSuCZeSxeVJvr3Hs5nbuOy8QsVG55N4g/edit
- **South Carolina**
Virtual South Carolina (Virtual SC), Virtual SC Student Portal IEP Policy (2016)
<https://virtualsc.org/myvsc/iep-policy/>
- **South Dakota**
South Dakota Department of Education, Individual Education Program (IEP); A Technical Assistance Guide (2013)
http://www.doe.sd.gov/oess/documents/IEP_TA_13.pdf
- **Vermont**
Vermont Virtual Learning Cooperative (VTVLC), Enrollment in Vermont Virtual Learning Cooperative for Students with Disabilities (IEP/504) (2015)
<https://www.vtvlc.org/policies/enroll%2%AD-ment-in-vtvlc-for-stu%2%ADdents-with-dis%2%ADabil%2%ADi%2%ADties-iep%E2%80%8B504/>
- **Washington**
Washington Digital Learning Department, Guidance for Serving Students With Disabilities in ALE Programs (2014).
https://digitallearning.k12.wa.us/ale/support/students_with_disabilities.php

7. LRE as a Foundation to Successful IEP Planning: Online Enrollment



In reauthorizing the IDEA in 2004, congress noted that—

“Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring

equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities”

(Public Law 108-446, Sec 682 (c)(1))

IDEA works to achieve these goals by focusing on a student’s educational experience in order to best meet individual learners’ needs. Additionally, the IEP team should work to build in appropriate supports that put the least amount of restrictions possible on the student’s ability to fully participate in academic experiences alongside their nondisabled peers.²³

Online settings, however, may add an additional layer of considerations, including what accommodations are available, the accessibility of technology, how modifications to curricular materials will be achieved and by whom, and the types of peer-to-peer interactions students are afforded. In a study that surveyed 20 state directors of special education, the general finding was that IEP teams are not equipped with guidance regarding various LRE options in online placements.²⁴

In response to this concern, COLSD researchers asked the following question about the review of the IEP prior to enrollment:

Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experiences?

Findings:

COLSD researchers found eight states with a policy requiring a review of an IEP prior to a student with a disability enrolling in an online learning environment. However, COLSD researchers were unable to find written procedures that could help IEP teams ensure the student is provided an online education in a least-restrictive environment. Below are examples of three states that provide a starting point for other

states to begin thinking about policy and procedures necessary to provide the least restrictive environment for students in online educational settings.

POLICY BOX ALABAMA

“Prior to registration for an ACCESS course, the counselor shall contact the student’s case manager for a review of the educational needs of the student based on the requirements of the IEP or 504 plan.”

ACCESS
Distance Learning Policy Manual for Students July 2012

POLICY BOX SOUTH DAKOTA

“If a student with disabilities is considering taking an online course the feasibility, planning and logistics should be discussed with the IEP team prior to registration.”

South Dakota Department of Education: Guidance Policy: Students with Disabilities Participating in Virtual High School August 2007

POLICY BOX FLORIDA

“For the FLVS FT Program, upon receipt of information indicating that a student who is enrolling is a student with an IEP, the FLVS FT program must convene a meeting of the FLVS IEP team. The team must be composed of individuals in accordance with the requirements of Rule 6A-6.03028 (3) (c), Florida Administrative Code (F.A.C.), Provision of Free Appropriate Public Education (FAPE) and Development of Individual Educational Plans for Students with Disabilities.”

Florida Public Virtual Schools
Questions and Answers 2014-2015

Considerations

IDEA notes that, for students with disabilities, “having high expectations for such children and ensuring their access to the general education curriculum in the regular classroom, to the maximum extent possible...” (20 U.S.C. Sec. 1400(c)(5)(A)) allows them to “meet developmental goals and, to the maximum extent possible, the challenging expectations that have been established for all children” (20 U.S.C. Sec. 1400(c)(5)(A)(i)) and to “be prepared to lead productive and independent adult lives, to the maximum extent possible (20 U.S.C. Sec. 1400(c)(5)(A)(ii)).²⁵

One major mechanism to ensure that a potential LRE has been assessed and identified is the concept of the continuum of alternative placements. This regulation (Sec. 300.115) requires that public agencies provide educational placement options ranging from least to most restrictive environments in terms of exposure to general education curriculum and peer interactions. These alternative placements can include instruction in regular classes, special education, home instruction, and instruction in hospitals and institutions. This provision recognizes that a single designated setting is not appropriate to meet all learners’ needs and that IEP teams must work to identify the setting that provides the most educational benefits to the student.²⁶

IDEA mandates that public education agencies ensure that—

- (i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and
- (ii) Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (CFR 300.114(a)(2)(i) and CFR 300.114(a)(2)(ii)).

If issues related to LREs are not addressed before enrollment in online learning environments it is unlikely that procedures to ensure LREs aligned with IDEA will be provided to students.

For examples of state procedures for addressing both LRE and IEP review and revision when students enroll in online learning, please refer to the examples of state policies referenced in the Considerations section of Item #1, Online State Sponsored Entities.

8. Leveling the Education Playing Field: Online Accommodations



Appropriate accommodations among other services for students with disabilities are legally protected when included in an individualized education program (IEP) that details special education services and supports or a Section 504 plan developed to provide civil rights accommodations.

An accommodation ideally provides a student with a disability the opportunity to complete academic lessons or assessments as equitably as other, nondisabled students. Accommodations may offer changes of aspects in timing, formatting, setting, scheduling, response, and/or presentation. For parents and educators an important consideration is that an accommodation (as used in this definition) is not intended to change or alter achievement expectations, test, or assignment measures.²⁷

COLSD researchers asked the following question about accommodations:

Does the state provide examples of appropriate accommodations in an online learning environment for students with disabilities?

Findings

Six states gave specific examples of accommodations that might be appropriate in digital learning settings. Virtual South Carolina offers a list of accommodations that can be provided such as “*allowing the use of a dictionary/glossary; use of graphic organizers; masking/templates; notes; outlines, and instructions; and visual organizers.*” Additionally, five states noted in their provided guidance that online accommodations will be provided by the online school but did not state types of accommodations commonly made for students with disabilities.²⁸

Considerations

Well-designed and supported digital learning environments are flexible. They can allow teachers to see easily the strengths and challenges of individual students as well as allow students multiple means and opportunities to show what they know and can do. Rather than making decisions about instruction for the “average” student, flexible supported digital environments support the learning of all students (including those students with learning and performance challenges), provide just-in-time feedback for students, and give educators the feedback they need to revise and improve instruction.

Just as educators in brick-and-mortar schools need to make choices about content and instructional approaches, online educators must also decide how best to teach content and skills to help students achieve their learning goals. In digital learning environments the combination of audio, video, text, and other means to convey meaning has the potential to provide students with a range of abilities a greater access to curricula and learning opportunities and additional ways to demonstrate their understanding when multiple options for student expression are made available. Another powerful feature of online learning environments is teachers’ increased ability to monitor real-time student progress. With more immediate access to student system usage data, teachers can customize the pace and focus of instruction to best meet students’ unique learning needs.²⁹

As digital learning systems evolve to increasingly incorporate learning supports and scaffolds—such as text-to-speech, multimedia glossaries, cited note taking (the ability to highlight, copy, and collect sections of learning media accompanied by source references), note making and outlining tools, etc.—features previously viewed as “accommodations” are now emerging as core components of online instruction. Teachers and administrators alike will have to determine if and how supports increasingly available in online learning settings alter instructional practice and present discrepancies between digital and non-digital learning settings that may challenge notions of equal opportunity. Similarly, since many learning support features of online learning materials and systems are easy to either activate or disable, what are the criteria for authorizing or withholding their use? In this regard lessons learned and protocols established by both the PARCC and Smarter Balanced assessment consortia may prove helpful. Additionally, specific accommodations for the online learning environments are mentioned in policy and guidance materials from Colorado, North Carolina, South Carolina, South Dakota, and Vermont.

Resources

- **Colorado**
Colorado Department of Education, Colorado Instructional Accommodations Manual: A Guide to the Selection and Implementation of Accommodations for Students with a Disability (2015-2016) <http://www.cde.state.co.us/cdesped/accommodationsmanual>
- **North Carolina**
North Carolina Virtual Public School (NCVPS), Assistive Technologies (n.d.) https://docs.google.com/document/d/1Am5i-phYrW8o_gwzsWHvO3RhhhhPop81tLyh-fiB-WK4g8/edit?hl=en&authkey=COv327Y-I&pli=1
- **South Dakota**
South Dakota Department of Education, Accommodations Manual: How to Select, Administer, and

- Evaluate the Use of Accommodations for Instruction and Assessment of Students with Disabilities, Third Edition (2015)
<http://doe.sd.gov/oess/documents/SDAccManl.pdf>
- **Vermont**
Vermont Virtual Learning Cooperative (VTVLC), Enrollment in VTVLC for Students with Disabilities (IEP/504) (2016)
<https://www.vtvlc.org/policies/enroll%2%ADment-in-vtvlc-for-stu%2%ADdents-with-dis%2%ADabil%2%ADi%2%ADties-iep%E2%80%8B504/>
- **Partnership for Assessment of Readiness for College and Careers**
PARCC Accessibility Features and Accommodations Manual (2016)
<http://avocet.pearson.com/PARCC/Home#10616>
- **Smarter Balanced Assessment Consortium**
Accessibility and Accommodations: Meeting the Needs of All Students (n.d.)
<http://www.smarterbalanced.org/assessments/accessibility-and-accommodations/>

9. Planning for the Future: Online Graduation Requirements



As high schools work to align curriculum to college and career readiness standards, educators must pay particular attention to ensuring that all course requirements are accessible to all learners and offer students the opportunity to work toward course completion with appropriate supports.

In a nationwide study of graduation policies for students with disabilities who participate in states' general assessments, a key finding was that states show considerable variability in requirements for gradua-

tion and exit assessments. In addition to the variability in graduation requirements, 30 states had different (less rigorous) requirements for students with disabilities compared to the requirements for their peers without disabilities. Additionally, the researchers found that 22 of the 30 states had graduation requirements for special education programs that were considered "far from" course requirements of their peers. As a result, students with disabilities quite possibly have limited access to more rigorous courses and risk being under-prepared for postsecondary training and the world of work.³⁰

One might anticipate that simultaneous with the development of high school programs, in alignment with the expectations of college and career-ready standards, a continued expansion of the use of online learning environments will occur. In the 2015 COLSD State/Territory Policy Scan, five states (Alabama, Arkansas, Florida, Michigan, and Virginia) were identified as having a state mandate requiring an online course requirement prior to graduation.

COLSD researchers asked the same question as in 2015 pertaining to state policy on online graduation requirements:

If your state mandates an online course prior to graduation, are students with disabilities required to take a fully online or digital course prior to graduation?

Findings

A review of state graduation requirements and special education graduation policy reveals that Alabama, Arkansas, Florida, Michigan, New Mexico, and Virginia have graduation requirements that include the completion of at least one online course. New Mexico is a little different than the other states in that its legislation allows three other options in addition to a distance learning course graduation requirement (*see policy box below*).

POLICY BOX NEW MEXICO

“For students entering the ninth grade beginning in the 2009–2010 school year, at least one of the units required for graduation shall be earned as an advanced placement or honors course, a dual-credit course offered in cooperation with an institution of higher education, or a distance learning course.”³¹

New Mexico Senate Bill O561

Due to the complicated issues that accompany digital learning environments and issues centering around rigor, COLSD researchers thought it was important to identify how states are approaching online graduation requirements with students with disabilities. In the 2013–2014 academic year, Alabama mandated that all students must take a Career Preparedness course that integrates the online/technology-enhanced requirement established in 2008. Students with significant cognitive disabilities may earn credit for Career Preparedness through a locally developed Alternate Achievement Standards (AAS) Life Skills course that aligns to the Career Preparedness course standards.

Florida House Bill 7198 (passed in 2011) requires that one online course be completed for graduation. The

Florida Department of Education issued a memorandum on December 2012 that “provides exemptions for meeting the online graduation requirement for students with IEPs if it is determined that an online course would not be appropriate or who have been enrolled in a Florida high school for one year or less.”³²

The Michigan Merit Curriculum law requires Michigan students to complete one online course with technology and access provided by the student’s school or district. The Michigan Department of Education also offers an alternative graduation plan that provides flexibility for students who may need accommodations or modifications. However, COLSD researchers could not find a clear statement that would help parents and students with disabilities understand if the alternative graduation plan is required in cases where the online course may present major difficulty toward graduation.

In 2013–2014, Virginia began requiring “the successful completion of one virtual course....” According to the 2015–2016 Virtual Virginia Mentor handbook, an online course instructor’s responsibility is to provide course “adjustments” for students on IEPs or 504 plans. However, according to VAC 20-131-50, other provisions are in place if a student with an IEP needs it.³³

TABLE 2

State	No mention of SWDs in online course graduation policy or guidance	SWD are mentioned, but it is unclear if course substitutions or modifications are possible regarding the online graduation requirements	SWD are mentioned and substitutions or modifications to the online graduation requirements are possible
Alabama			✓
Arkansas	✓		
Florida			✓
Michigan			✓
New Mexico		✓	
Virginia			✓

*49 states and territories do not require an online course for graduation.

The table below provides a quick glance at states with online course graduation requirements. It shows which states make provisions and considerations for students with disabilities in graduation requirements, policy, or guidance.

Considerations

Requiring that all students successfully complete an online course prior to graduation reflects a state's acknowledgement that comfort with and success in this type of digital learning setting is an important 21st-century skill for all students. Logically, this acknowledgement should also include the recognition that online learning is distinctly different from its brick-and-mortar counterpart. To date, none of the states that require online course completion prior to graduation associate or specify either the potential benefits or possible barriers that this requirement might pose for students with disabilities other than some offering an exemption or waiver if the online requirement is deemed to be inappropriate.

COLSD researchers believe that state policies associated with an online course graduation requirement, if deemed necessary for all students, need to be directly associated with information related to the accessibility of the curriculum materials and their delivery system and the process of acquiring and receiving appropriate accommodations. Without this connected guidance, students, parents, IEP teams, and educators are required to address these factors on an ad hoc basis—often with little understanding of the details involved. To date, no state requiring online course completion for graduation provides this guidance.

10. Supporting Students through State Accountability: Special Education Monitoring in Online Settings



IDEA and all corresponding regulations pertain to every state that receives federal funds to implement free appropriate public education (FAPE) in an LRE for all students with disabilities, including students enrolled in online schools and programs. In a recent “2016 Determination Letters on State Implementation of IDEA” the U.S. Department of Education reiterated that “the 2004 Amendments to the IDEA require each State to develop a State Performance Plan (SPP) and Annual Performance Report (APR) that evaluates the State’s efforts to implement the requirements and purposes of the IDEA and describes how the State will improve its implementation.” This letter also emphasized that determinations for both IDEA Part B (services to school-aged children) and Part C (early intervention for babies and toddlers) were to be equally weighed for both compliance and results reporting. The letter noted that compliance with IDEA regulations itself was “not sufficient if children are not attaining the knowledge and skills necessary to accomplish the ideals of IDEA: equality of opportunity, full participation, independent living, and economic self-sufficiency.”³⁴

In a 2015 forum conducted by COLSD, staff members from six state departments of education and one local district administrator (AZ, FL, GA, MA, OH, VA) met to discuss how online learning should change in order to accommodate students with disabilities. Participants shared that online schools are very aware of the need to monitor LRE compliance, maintain the availability of continuum of placement, and provide related services. States further discussed the need for deeper understanding on how to monitor these activities at the SEA level.³⁵

COLSD researchers asked the following question in relation to monitoring procedures:

Does the state have monitoring procedures [in place] in order to ensure that online school programs are in alignment with IDEA?

Findings:

Following our methodology, COLSD staff reviewed state published materials (e.g., monitoring tools, reports, recommendations) to identify if any clear distinction existed between the enrollment of students with disabilities in online schools/programs and brick-and-mortar schools. As mentioned earlier, states develop their own monitoring system and COLSD staff found it difficult to locate monitoring materials. Since a large number of online schools are charter schools and considered LEAs, it is possible that data from those schools is combined with charter school information and reported as one set of data or states are pulling data from districts that include online schools and the online school data are represented in combination with all other schools in the district. COLSD staff did find Florida Virtual School specifically identified in Florida's monitoring materials, but that was the only online school specifically identified.³⁶

Considerations

In interviews of 15 state directors, a general finding was that no procedural methods were developed for tracking outcomes of students with disabilities in online settings. However, all participants agreed that monitoring was needed to gain a better understanding of the effectiveness of various special education service delivery models.

Although current federal monitoring mandates and reporting procedures do not require states to identify students with disabilities in online settings, doing so would provide the ability to track student progress and the strength of instructional strategies that would assist in IEP development, placement decisions, and meeting the individual needs of students.

As the issue of monitoring students with disabilities in online settings continues to gain national attention, an important effort is that key stakeholders and policy makers engage in meaningful discussion to foster considerations and recommendations. In May 2011, a policy forum to provide input from key stakeholders to OSEP focused on the IDEA monitoring system specifically addressing the SPP process and indicators. Three questions were asked of OSEP representatives, state directors of special education, and other major stakeholder groups. The questions below drove recommendations for policy for that policy forum. These questions could be used to drive deeper discussions about the dramatic change in learning environments caused by online learning and gain stakeholder recommendations to the SPP/APR process and indicators.

1. What are the recommendations for changes to the SPP/APR process and indicators that could be implemented in the short term without statutory changes?
2. What are the recommendations for changes to the SPP/APR process and indicators that could be implemented in the long term?
3. What are alternative ways that could be recommended to ensure accountability for improved results (if we look at the entire accountability process)?³⁷

Summary

The 2015 scan results showed that at least 75% of all states and territories scanned were found to have Unclear, No with Evidence, or Nothing Found in six of the nine items most closely aligned with IDEA. The results of the 2016 scan found only limited advancement in guidance and policies related to online learning and students with disabilities. For example, there was no change in online guidance and policy related to the review of the IEP prior to online enrollment. There was also no change in guidance and policies to consider online learning variable when developing an IEP for online settings. Oregon was the only additional state identified in the 2016 scan for providing examples of appropriate online accommodations. Similarly, Pennsylvania was the only additional state

identified in the 2016 scan that had a clear statement of Child Find and identification considerations.

Conclusion

The implementation of the principles of IDEA in online learning presents considerable challenges. Often, approaches devised for a world in which students with disabilities are educated in brick-and-mortar classrooms with regular and ongoing face-to-face interactions with teachers, specialists, and peers are simply assumed to transfer to online learning settings. Simultaneously, online learning (whether in full-time virtual schools, blended learning classrooms, or supplemental courses) offers flexibility, customization, and timely data collection that holds enormous promise to individualize the process of education in a manner sufficient to address a wide range of learner variability. As is evident from this 2016 nationwide scan, states are attempting to address the new opportunities, challenges, and risks that accompany elementary and secondary online education, and, concurrently, identify and expand access for all students to its emerging rewards.

As previously mentioned, COLSD's approach to the scan process was to locate policies and guidance information of the type that might be sought by parents of students with disabilities, their teachers, related service providers, advocates, or students themselves. In some circumstances these resources were readily available, clear, and comprehensive; in many circumstances they were not. Some states had information available as web pages or documents buried deep within their respective websites; others provided guidance that was spread across multiple website sections (or multiple sites) and location and retrieval required considerable patience and perseverance. Despite the existence of state examples of easy to locate information, nearly all state approaches to informing the group of recipients that were targeted could benefit from improved usability design.

The recent August, 2016, "Dear Colleague" letter from U.S. Department of Education's Office of Special Education and Rehabilitative Services reaffirmed that important federal statutory mandates must be met regardless of how education opportunities are structured and delivered to students. The legal responsibilities placed on state and local education agencies are clear while the strategies for addressing these mandates and any resulting evidence of effectiveness continues to evolve.

Unsurprisingly, many states experience difficulty in deciding how to proceed with the implementation of online learning environments in the absence of definitive, evidence-based practice. SEAs are having difficulty interpreting the intent of IDEA as it would apply to virtual education and seeking implementation guidelines from both major education laws (ESSA and IDEA) to avoid missteps. The information sought includes the following: What are SEAs' responsibilities for supervision in the online environment? What is an appropriate ratio of students with disabilities to their typically developing peers in an online environment? What should characterize successful personalized learning for all students, including those with disabilities? What is the appropriate amount of time students will need special education services if they are enrolled in an online learning environment?³⁸

These questions and others continue to emerge and with the major re-allocation to states of both authority and responsibility for all aspects of elementary and secondary education that is a cornerstone of ESSA they will increasingly be called upon to address them. COLSD researchers hope that the analysis, comparative findings, and considerations contained in this chapter prompt states to look to one another to identify and implement effective approaches.

Endnotes

1. The *Dear Colleague Letter Regarding Education of Children with Disabilities Attending Public Virtual Schools*, designated a significant guidance document, notes that online learning environments bring with them new challenges for policy-makers, educators, curriculum developers, researchers, parents, and students; and that while existing research has been very limited in describing, testing, and accumulating information, SEAs and LEAs are nevertheless responsible for establishing policies and procedures that comply with federal law. The state scan included in *Equity Matters* (2015) found that few states have made such guidance publicly available.
2. In 2003, Stephanie Lee, Director of the Office of Special Education Programs, reaffirmed the responsibilities of states to address IDEA mandates in virtual school settings in a letter to the Texas Education Agency. Retrieved from <http://www2.ed.gov/policy/speced/guid/idea/letters/2003-4/barnes121803charter4q2003.pdf>
3. Burdette, P. J., Greer, D. L., & Woods, K. L. (2013) received survey responses from 46 state and jurisdictional special education directors noting wide variance related to how special education policies and procedures were designed, publicized, and implemented in their respective online learning settings. This finding was replicated in COLSD's 2015 annual publication, *Equity Matters*.
4. Keeping Pace (Dobrovolny, et al., 2015) studied the changes being made in the digital learning environment specifically pertaining to state virtual schools and how state policy affects them. The study represented how schools and online providers partnered up to educate at the state, district, and school level. Digital Learning Now (2014) breaks down a state-by-state "report card" on state policies for online learning settings. COLSD researchers referred to this in order to gain insight into what is missing from state policy covering online learning environments.
5. In 2015, the Center for Research on Online Learning and Students with Disabilities published *Equity Matters: Digital and Online Learning for Students with Disabilities* in order to inform readers of new developments, challenges, tools, and information from the digital learning environment.
6. Heward (2013) described the six principles of the Individuals with Disabilities Education Act, to whom they apply, and how they are implemented. COLSD researchers used these principles to describe the pillars of IDEA, as mentioned throughout the chapter. Turnbull, Stowe, & Huerta (2007) explained the laws surrounding students with disabilities by breaking down the parts of each law and explaining how to adhere to their sections. COLSD researchers focused on the explanations for IDEA and the six major pillars that pertain to the law. Wright & Wright (2007) provide discussion of Free Appropriate Public Education (FAPE) as mandated by the IDEA.
7. Keeping Pace with K–12 Digital Learning: State Virtual Schools Continue to Grow and Evolve. (2016). Retrieved from <http://www.kpk12.com/blog/2016/03/state-virtual-schools-continue-to-grow-and-evolve/>. This article focused on how state virtual schools are dealing with competition from outside providers (Watson, 2016). In order to manage the competition, Watson claimed, the state virtual schools are evolving so that they could provide students with the best online option in the state.
8. Beck, Egalite, & Maranto (2014) surveyed parents and students of a large cyber charter school and found that parents of students with disabilities were more likely to enroll their children in online schools due to issues relating to bullying, social problems, and learning and teaching issues.
9. Keeping Pace (2014); Keeping Pace (2016); Miron & Gulosino (2016); and the National Education Policy COLSD Virtual School Report (2015) presented and reviewed enrollment and achievement statistics surrounding virtual schools in the U.S. by comparing demographics, school performance ratings, and the difference between the virtual schools' data compared to matched brick-and-mortar school data. COLSD researchers extracted information related to for-profit vendors and online schools.
10. In 2014, The State Educational Technology Directors Association (SETDA) published a policy brief for state and district education leaders focused on considerations and strategies regarding the accessibility of digital content for all students. *The Accessibility of Learning Content for All Students, Including Students with Disabilities, Must Be Addressed in the Shift to Digital Instructional Materials* at http://www.setda.org/wp-content/uploads/2014/03/SETDA_PolicyBrief_Accessibility_FNL.5.29.pdf
11. IDEA (34 C.F.R. 300.116(b)(3)) noted that placement decisions must involve parents, up-to-date evaluation data, and an understanding of available placement options.
- Muller (2009) reviewed the rapid development of virtual schools and how it outpaces states' abilities to develop timely policy guidance, specifically as it pertains to students with disabilities and placement decisions associated with them.
12. Yochum (2012) provided a state-by-state analysis of jurisdictional assignments of charter schools, noting that charters (including virtual charter schools) could be designated LEAs, a school within an existing LEA, or as determined by the "authorizing" entity (independent agency or LEA), in which case the charter could be an independent LEA or within an existing one.
13. Wright & Wright (2007) discussed the efforts that exist to identify children with disabilities as it pertained to the Child Find mandate. COLSD researchers focused on the actions taken by states in order to address IDEA's Child Find requirements. MacArdy (2009) referenced the court case *Jamie S. v. Milwaukee Public Schools* in order to discuss the challenges urban schools face in upholding IDEA procedures. MacArdy suggests several methods to raise compliance with the Child Find mandate. Turnbull, Stowe, & Huerta, (2007) referenced additional court cases with resolutions which identify additional statute-aligned procedures.
14. MacArdy (2009) reviewed the resolution of a class action suit in a large urban district where Child Find procedures were deemed to be inadequate and detrimental, resulting in a denial of FAPE. The court then proceeded to recommend a detailed process for correcting the exposed systematic deficiencies.
15. Rose (2014) provided guidance on how to achieve equity in fully online and digital learning programs. Rose finds that, thus far, little policy exists to ensure all students are granted the same learning opportunities. Rhim, et al. (2013) discussed the growth of online charter schools and the ambiguity that exists surrounding who is to provide special education services in these settings.
16. The Office of Civil Rights discussed the enforcement of Section 504 and its mandated requirements (U.S. Department of Education, 2015). COLSD researchers focused on the description of the amendment to the Rehabilitation Act of 1973 pertaining to the assurance that technology is accessible and usable to persons with disabilities. Hashey & Stahl (2014) discussed the need for online education and virtual learning settings to embed learning supports and scaffolds for students with disabilities and that these environments be designed with accessibility in mind.
17. The California Department of Education published a list of online accessibility standards in order to provide students with disabilities services in the digital learning environment (2016). This list ensured online content remained compliant with federal requirements. Florida Virtual School (2016) discussed disability services in terms of a least restrictive environment (LRE) and ensuring students are placed in appropriate classes and environments. The Minnesota Department of Education (2015) provided guidance on purchasing learning materials that are accessible to all students in order to ensure compliance with federal law. The International Association for K–12 Online Learning (iNACOL) published an Accessibility Policy Checklist in 2014.
18. Section 508 of the Rehabilitation Act as amended by the Workforce Investment Act of 1998 (P.L. 105-220), provided specific approaches that technology developers can take, including the use of a Voluntary Product Development Template (VPAT) that can be used to detail accessibility compliance. The Web Content Accessibility Guidelines at <https://www.w3.org/TR/WCAG20/> provided specific detail on both why and how public-facing web resources can and should be created to address the needs of students with physical and sensory challenges. Rose (2014) and Smith & Stahl (2016) both referenced conformance to Section 508 as an accessibility baseline for instructional materials, delivery systems, and other technologies used in online learning.
19. The Office for Civil Rights of the United States Department of Education noted in their "Joint 'Dear Colleague' Letter: Electronic Book Readers" that educational institutions may provide alternatives to inaccessible learning technologies as long as "a student can acquire the same information, engage in the same interactions, and enjoy the same services as sighted students with substantially equivalent ease of use." See <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-20100629.html>.
20. The document from Building the Legacy: IDEA 2004 titled "Individualized Education Program (IEP) Team Meetings and Changes to the IEP" is available at <http://idea.ed.gov/explore/view/p/.root,dynamic,TopicalBrief,9..>
21. Rice & Carter (2016) discussed the emerging prevalence of remote-related special education service provision; Shepherd & Kervick (2015) explored the evolving role of parents working to ensure the alignment of available services with the needs of their special education students.

22. Bateman & Linden (2006); Shepherd & Kervick (2015) discussed the role parents of students with disabilities have in their education through the implementation of the “Parents as Collaborative Leaders” (PACL) model. COLSD researchers focused on the importance of providing parents with the necessary information in order for them to make educated decisions about their child’s education.
23. The full text of the 2004 IDEA reauthorization is available at <http://idea.ed.gov/download/statute.html>.
24. Greer, et al. (2015) explored the perspectives of state directors of special education on providing a free and appropriate public education (FAPE) within online learning settings. Through these interviews with state directors, the study found that guidance on least-restrictive learning environments is typically not available for online learning environments.
25. The full text of the 2004 IDEA reauthorization is available at <http://idea.ed.gov/download/statute.html>. Greer, Harvey, Burdette, & Basham (2015) and Müller & Ahearn (2004) noted the varying IEP policies employed by special education directors and highlight the lack of consistency that has emerged from one state to the next as well as the need for additional, evidence-based practices to be established and shared.
26. Sec. 300.115 regulatory language is available at <http://idea.ed.gov/explore/view/p/.root,regs,300,B,300%252E115> and the United States Department of Education in *Building the Legacy: IDEA 2004* provided extensive procedural detail related to the purpose and process of Individual Education Programs at <http://idea.ed.gov/explore/view/p/%2Croot%2Cdynamic%2CTopicalBrief%2C9%2C>.
27. Families and Advocates Partnership for Education (2001) published an article that describes school accommodations and modifications that pertain to students with disabilities. COLSD researchers used the FAPE definition for accommodations and modifications in order to outline necessary changes to online learning settings (*see in-text examples*). When Carter & Rice (in press) focused on three administrators assigned to support certified special education teachers in a large virtual school program they uncovered three key findings: 1) Providing access to technology for students with disabilities in a fully online setting requires collaborative effort on the part of all members of a special education team, 2) Professionals must consider a number of factors when making accommodations in online school curricula, 3) [Some] technological tools that could provide accommodations are not necessarily used in online learning.
28. Virtual South Carolina (<https://virtualsec.org/accessibility-and-accommodations/>) commits to digital materials and delivery systems that conform to the Web Content Accessibility Guidelines (WCAG 2.0).
29. Coyne, Pisha, Dalton, Zeph, & Smith (2012) reviewed the positive impact of making these learning scaffolds available to students with intellectual disabilities; Esteves & Whitten (2011) discussed reading comprehension benefits evidenced by students with reading disabilities when scaffolded digital reading supports were provided.
30. Wilson, Hoffman, & McLaughlin (2009) studied the preparation of students with disabilities for college which is affected by the support provided by schools. The study mentioned the difficulties students have while enrolled in secondary education, including the decreased likelihood that they would complete certain math courses for credit. These factors are important to consider when choosing a student’s course in preparing for college. Thurlow, et al. (2014) studied the different graduation policies for students with disabilities across the U.S. The study found that typically students with disabilities have different graduation requirements than their peers, whether it would be less rigorous coursework or lower requirements for exit assessments is not clear. Based on these findings, however, the study concluded that students with disabilities are at risk of being under-prepared for training that follows secondary education as well as the working environment.
31. New Mexico Senate Bill O561 (see <https://www.nmlegis.gov/sessions/07%20Regular/final/SB0561.pdf>) has required New Mexico school districts to offer distance learning courses since 2008 but there are other options to fulfill this learning requirement outside of an online class, including AP or honors courses and dual-credit courses offered by a college.
32. The Alabama Department of Education Graduation Requirements (2016) allow students with disabilities to take alternative courses in place of the online learning requirement. Students can meet this requirement through enrollment in a course aligned with Career Preparedness standards, as explained in the graduation requirements; Florida Governor Rick Scott signed House Bill 7063, Digital Learning (2012), into law which offers provisions for students with IEPs in cases in which the required online course is in need of modification.
33. The Michigan Merit Curriculum law 1278(1)(b) mandates LEAs to provide technology supports in order for students to complete online learning experiences; According to Virginia VAC 20-131-50 (2011) provisions are put in place to ensure that students with disabilities are able to successfully graduate with a standard high school diploma. Students are able to request a waiver of the online requirement to be granted by the Board of Education.
34. The 2016 Determination Letters on State Implementation of IDEA is available at <http://www2.ed.gov/fund/data/report/idea/ideafactsheet-determinations-2016.pdf>. Wright & Wright (2016) in *Back to School on Civil Rights* presented a comprehensive analysis of special education and civil rights laws in the context of elementary and secondary education; including a side-by-side comparison of federal and state monitoring responsibilities.
35. Burdette, et al. (2015) investigated the progression of online learning from the eyes of educators and administrators. The interviewees concluded that more could be done to ensure compliance with IDEA in online learning settings and to improve progress monitoring for students with disabilities. Other topics covered included teacher preparation, accessibility, student data, and parent participation.
36. Florida Department of Education. (2016). Monitoring/ESE Policies & Procedures (<http://www.fldoe.org/academics/exceptional-student-edu/monitoring>) and Florida Department of Education. (2015–2016). Exceptional Student Education Compliance Manual (<http://www.fldoe.org/core/fileparse.php/7673/urlt/eseCompliance-Manual1516.pdf>).
37. Ahearn, E. (2011) detailed the *State Performance Plan Process and Indicators: Policy Forum*. Alexandria, Virginia: Project Forum (<http://www.nasdse.org/LinkClick.aspx?fileticket=WmUtXZY4EhE%3D&tabid=36>); Rice & Carter (2015) differentiated responses from administrative and instructional staff noting that monitoring was referenced as important by both groups; Locke, et al. (2014) covered the challenges that states face in ensuring that virtual schools are held accountable for their services and the types of measures applicable to virtual schools. Brady, et al. (2010) highlighted accountability concerns and legislative irregularity in cyber charter schools. Some critics fear that cyber charter schools will escape state regulations and may not monitor student progress and ensure quality services as would be expected in the brick-and-mortar sector.
38. In a series of forums convened by COLSD and attended by state education agency representatives, these and other unanswered questions emerged from the dialogue. Forum whitepaper summaries are available at <http://centerononlinelarning.org/publications/center-research/?category=sea>.

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Equity Matters Chapter 3

Teaching in Online Learning Environments



If online teaching is to be a sustainable option for students with disabilities, it must also be a sustaining activity for the teachers themselves.

The difference between teaching students with disabilities online and in traditional settings are many. Teachers in traditional classrooms can call students (including those with disabilities) to their desks for individual conferences. Teachers in online environments, especially fully online environments, are more likely to call students on the phone or use a web-based communication platform for conferencing. Teachers in traditional classrooms provide instruction to their entire class at the same time, in the same place, and might make additional activities for students with disabilities and/or send them to a resource room for help from another teacher. In many schools, a coteacher or paraprofessional is on hand to gather together small groups of students who need extra help and hold a supplemental mini-lesson. In online environments, students have a web-based curriculum delivered through the Internet that in an ideal situation has either been selected for them by a teacher ahead of time, regardless of what instruction other students in the class are receiving, or has been chosen by an algorithm

in a computer system based on prior performance. In either case, students are expected to take control over when, where, and how they complete most of their assignments. Finally, in a traditional setting, general education teachers attend meetings to chart goals on Individualized Education Programs (IEPs) for students with disabilities that are managed by special education teachers and conducted under the auspices of a local educational authority. During these meetings, general education teachers represent their colleagues in offering opinions about what students need to participate to the greatest extent possible in general curriculum. The suggestions they make bind their colleagues to certain accommodations, modifications, and other related services. In online learning environments, meetings usually take place virtually. Sometimes members never directly interact but rather post suggestions and provide information on a web-based document. Students may have a general education teacher *and* a special education teacher, or they may have only one or the other. They might

receive general education instruction via online curriculum, and they might receive special education services in a brick-and-mortar building. In situations like these, it becomes less clear who has the ability to make recommendations for a service plan and who should implement that plan, especially when it comes to instruction. After all, part of the curriculum is coming from web-based applications and is delivered over the Internet. The application provides facts but certainly cannot offer an opinion. A teacher who reads available data does. How can those teachers be optimally prepared and supported in learning what students need so that they may help to ensure they receive it?¹

Notice that in the above description, what can be said about learning in a traditional setting is far more certain than what can be said about online learning environments. Although individual online learning environments have certain features in common with each other, such as a curriculum delivered over the Internet, there are significant differences from program to program; therefore, there are differences in what constitutes inclusion in “general education” for students with disabilities. Because of this variation, it is usually necessary to say *some* or *part of* the curriculum is delivered via the Internet because a student may have all of their lessons online, or only a few, and can still be considered to be participating in blended or technologically-enhanced learning. Even descriptive terms like *over the Internet*, *web-based*, and *online* require clarification and preclude certainty about the source of instruction. These issues must still be grappled with since at least 50% of high school classes will be available in a fully online format by 2019.² Students with disabilities and learners with other diverse learning needs are fast-growing populations who are being served in these online environments. Identifying exactly how to serve these students best is a moving target because of the sheer number of instructional delivery models and communication possibilities afforded by the Internet and its programs and tools.

Promising practices in online teaching that are effective and practical for learners who have disabilities should be centered on instruction, service coordination, accommodations, and social/emotional support

for the learners and their families. Further, options for students with disabilities in various types of online learning programs—from blended settings to fully online programs—also deserve attention. Finally, if online teaching is to be a sustainable option for students with disabilities, it must also be a sustainable activity for the teachers themselves. Supporting teachers in serving students with disabilities online is also a critical concern.³

The purpose of this chapter is to present research around two goals: serving students with disabilities and supporting their teachers. The first section discusses curriculum considerations, pedagogical strategies, and other service considerations for students with disabilities in online environments, according to recent research. It culminates in guidance for practice, research, and policy. The second section shares findings from recent research activities regarding the preparation of teachers for serving students with disabilities in online environments and their subsequent professional development as practitioners. As in the first section, the discussion of teacher preparation and professional support includes guidance for practice, research, and policy. The final section summarizes key points of the discussion and offers additional commentary regarding teaching students with disabilities online. It also highlights combined directions for future research and advocates policy changes that, based on the research presented, will improve teaching and benefit students.

Instruction and Service Delivery in Online Learning Environments

Students with disabilities that enter online learning environments should have IEPs or other service delivery plans. In such plans, goals are set to help ensure that students make academic, behavioral, and social progress. Traditionally, implementing an IEP required someone within the school environment to be responsible for coordinating and meeting the instructional and related service needs (e.g., occupational therapy, transportation) established within an IEP. Within the online environment, the relationship between teacher



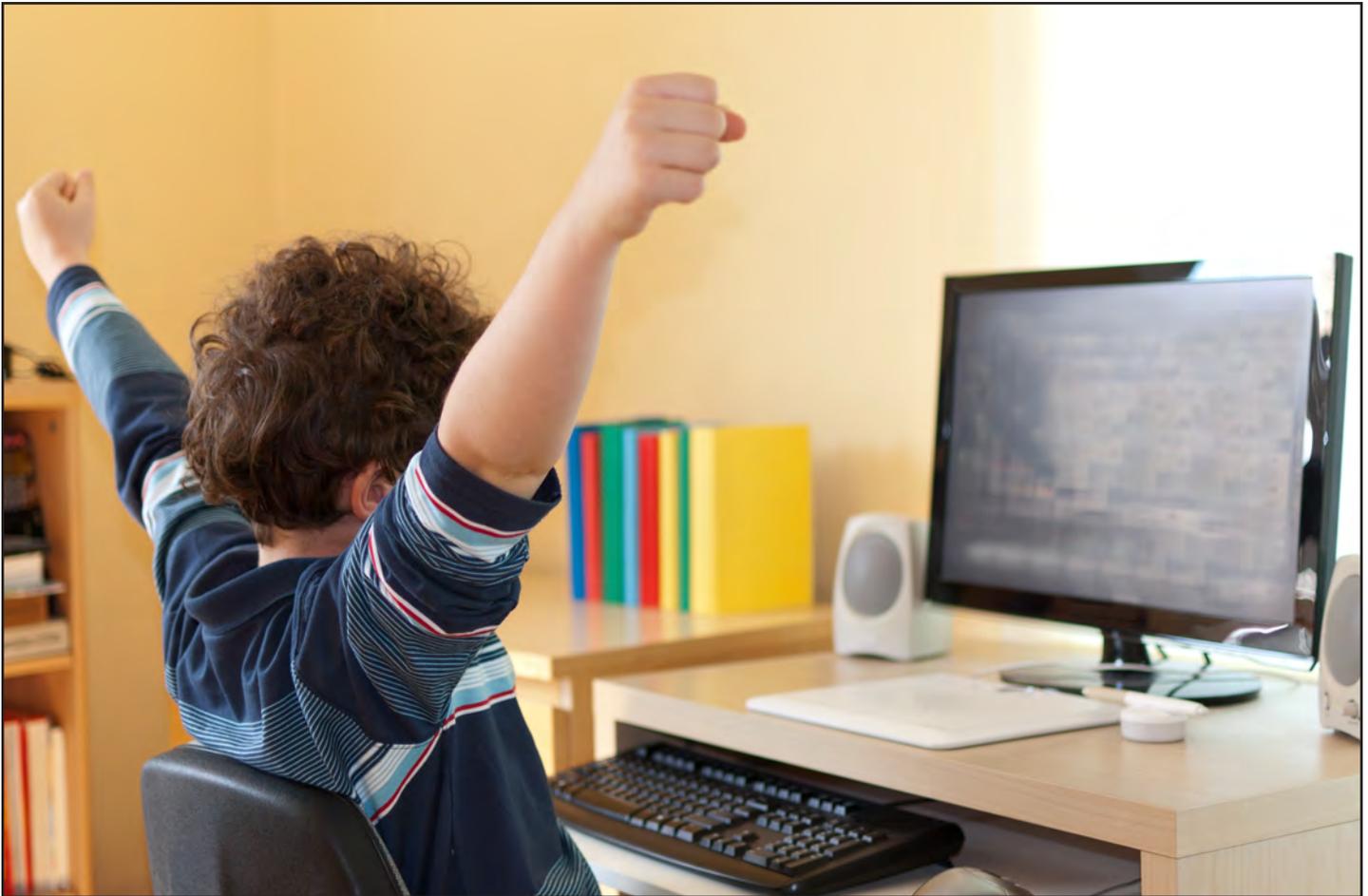
and student is more complex for several reasons. In online environments, where students and teachers do not see each other in person, the distance may present some complexity. Additionally, curriculum delivery and instructional communication are subjected to a host of variables such as bandwidth, the device used, online software systems, and the physical environment of both the professional and the student.⁴ While the obligations remain the same to uphold the relationships important to implementing an IEP and ultimately doing right by the student, mediating circumstances that underlie this relationship require research and systematic inquiry to understand when and how students, particularly those with disabilities, are working online.

General Impressions

The following are general impressions based on the work of researchers at COLSD and other institutions. They focus on embedded instruction (instruction provided using web-based software) and teacher-led instructional practices.

Embedded Instruction

In many online learning environments, instruction is embedded in curriculum materials. Students log on to a computer application and are given a text that provides information and assigns a task related to that text. For example, a language arts lesson presents a poem. A narrator provides direct instruction alongside the poem, or written words explain the poem and tell students what they need to do in order to demonstrate mastery of a poetic technique. Mastery may be demonstrated by answering questions that are scored by the application and reported to their teacher, or students may be asked to draft their own poem and email it to their teacher or upload it to the learning management system. Embedded instruction is not planned and designed by individual teachers. It is developed and tested by course designers working for a particular curriculum vendor.⁵



Course designers develop lessons and design assessments for a given subject at a given grade level. A course designer never interacts with students taking the course. Their sole responsibility is to design learning experiences that include an assessment and provide texts to support those learning experiences. These texts can be linguistic, visual, or both, but need to facilitate the chosen assessment. The course designer then constructs a script or drafts direct instruction to include with the text. When the course is finished, other technological support staff can link the curriculum to a learning management system and make the curriculum “live.”

COLSD researchers were interested in the readability of curriculum developed by course designers. They randomly sampled and tested the readability of 60 lessons from three large K–12 curriculum vendors. They found that the reading difficulty of online course texts varied substantially between lessons, did not follow a trajectory from easier to more difficult, and was gen-

erally above the 11th-grade reading level for English, science, and social studies courses—even in lessons designed for 6th graders.

In another study, COLSD researchers wanted to ascertain the types of vocabulary words targeted for instruction and the types of strategies used in online earth science curriculum.⁶ They found that these courses from three of the largest online curriculum vendors introduced as many as 20 technical or content-specific words or terms (such as *turgor pressure*) per lesson for students to learn. Since 30 lessons or more were included in these courses, students were being asked to learn as many as 600 words in a single course. This count was specifically for subject matter language and did not include general vocabulary words (such as *simplify* and *consolidate*). One set of earth science lessons reviewed came from online curriculum designed by practicing teachers and was delivered in a local district program. In this curriculum, there were far fewer vocabulary words introduced and

those that were had a greater variety of instructional strategies embedded along with them to support word acquisition. This set included stories about the words, analogies, or metaphors, and included some keyword/mnemonic instruction, the type of instruction most helpful for students with disabilities. Such findings demonstrate promise in allowing teachers more input in online curriculum.

Teacher-Led Instruction

Students often work on standardized curriculum that is likely very difficult for them individually and ask teachers for support when they recognize they need it, or they receive support when their teachers notice that they are struggling or have low scores on assessments. Students may also attend synchronous, small-group online discussions in which teachers can support them (if available). Potentially, it is in these places—the small groups—that teachers have the most opportunity to take the lead in providing instruction that is appropriate for students with disabilities.

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As practicing teachers transition from serving students with disabilities in the traditional environment to serving students with disabilities in online learning environments, they are likely to encounter common challenges. However, researchers from COLSD have identified some initial challenges that online teachers face and have made recommendations based on their research.⁷ In particular, they have suggested that teachers should acquire information about students, including their cultural background, access to technology, and technological competencies, as well as their academic strengths, desired areas of improvement, and preferred work hours.

Another challenge for practicing teachers in serving students is understanding IEP compliance.⁸ It is often difficult for practitioners to translate common accommodations identified for a traditional environment to a virtual setting, and most IEPs are not revised when

a student enrolls in online learning. An example of such an accommodation is preferential seating. In a traditional classroom, where a student sits (particularly if they have to do so for an extended period of time while a teacher provides direct instruction) is critical for sustaining attention, minimizing distraction, and meeting physical needs, such as making room for a wheelchair or some sort of sensory object. The more a student works outside of a traditional classroom, the less they need preferential seating because they can work whenever and wherever they are comfortable

and when they are the least distracted. In an online learning scenario, teachers have little to no control over where a student sits in their own home; in a blended environment, students are often moving around and working in groups rather than listening to a lecture. It would not be useful to say that preferential seating is outmoded completely or should never be part of an IEP for a student who enrolls in online courses. Instead, stakeholders have to think about what would be helpful for an individual student's circumstances, taking into account work habits, as well as their expected trajectory through various types of school environments since a student may not always be working online every year or even every semester.

In addition, teachers in online learning environments must still consider the related services students are entitled to receive as well as access to resources students need for learning. These related services may be therapies, transportation, or other counseling that helps students take advantage of special education services. Additional resources may include Internet access at local libraries or other public places, assistance from adults with technological savvy, and home routine supports that enable consistent work hours for students during the day.

Some online learning occurs synchronously, where students learn together simultaneously. Other learn

ing is asynchronous, meaning that students log on and work with content away from peers and teachers. When students are working synchronously with a teacher, the teacher manages the learning of the group. The asynchronous capabilities within online learning environments, in contrast, require students to be more autonomous in their learning than in traditional classrooms, in which most learning is synchronous.

Thomas has described some of these synchronous instructional practices.⁹ This researcher was interested in how students engaged in technologically enhanced learning in a resource classroom guided by a teacher. Students were guided in determining a problem to study, finding and evaluating resources, drawing conclusions, and making products that shared their processes and findings. The teacher's work involved in analyzing student responses demonstrated their commitment not only to analyzing the work the students were doing (specifically, to complete the tasks of developing research skills, using online reading strategies, and learning about a topic that was of interest to them), but also navigating the sociopolitical circumstances that led the students to their classroom in the first place. It also involved finding ways to use the learning experience to develop cognitive and metacognitive skills and push back against inequitable opportunities students may have had, were having, and would likely continue to have, as students with disabilities.

Communicating with students and parents is an important and indispensable aspect of providing instructional support to students with disabilities in online learning environments, as online teachers have described it to COLSD researchers. In order to engage in these communication efforts, online teachers often create a communication plan with an eye towards equity and sustainability of communication over time. COLSD researchers have used research about teachers to describe appropriate communication as being (1) considerate, (2) comprehensive, and (3) consistent. These aspects account for preferred communication times, information sharing on student performance, and supporting scheduling routines. In addition, building relationships is key to maintaining the mo-

tivation of many students using an online learning environment. Moreover, the extent to which practicing teachers build and maintain relationships with students and families is vital for implementing all of the IEP goals. Since parents now have greater responsibility for those goals, they must also be considered a resource in developing them and naming the resources necessary and possible within the home environment (which they know best) in order for the goals to be reached.¹⁰

Considerations

Research conducted by COLSD and others has brought important understandings to providing instruction using online learning technologies for students with disabilities. Among these are important considerations for practice, additional research, and policies.

Practice

In practical settings, research conducted to this point on service delivery suggests that online curriculum has features, such as large quantities of challenging vocabulary and readability patterns, that make it difficult for students with lower academic skills. Thus, teachers have to provide support that helps their students understand the curriculum. Teachers recognize this, and, to the greatest extent they have control, they work to provide individualized instruction to students. Helping teachers learn about students (e.g., progress monitoring or other formative assessments) and families, in addition to whatever additional data may be available, seems critical for implementing IEPs in online learning environments. Further, the research suggests that trusting teachers to help develop embedded instruction appears to be a promising practice, although there is only one study comparing course designer-made curriculum to teacher-made curriculum, and this study did not look at student outcomes—only at what kind of strategies the instruction employed.

Research

While researchers have learned much about the difficulties of online curriculum and the work that teachers have to do to learn about students with disabilities, what is less understood is how teachers provide in



struction directly to students once this information is gathered. Research that is not specific to students with disabilities is lacking because it is difficult to capture instruction data when students work at varying paces. Clearly, more work is needed that captures instruction data for students with disabilities.¹¹

Policy

Determining when to revisit an IEP and how to revise it as students come into and out of online learning environments continues to be critical to ensuring that students are receiving the support they need to be successful. Further, the individualization of services in the context of online education has not yet been well-theorized from a policy standpoint. As a result, educators in online environments are left to interpret the policies that exist or develop new ones that may or may not be based on research. In such cases, these informal policies or interpretations may not leverage the advantages of online education. The risk remains that insufficient guidance in this regard will result in students who move through their education unserved.

Developing Online Teachers in Online Learning Environments

Teachers are integral to the process of selecting instructional strategies, determining when and how to use accommodations, and interpreting performance data for students. If teachers are going to be able to do this well, they will likely need strong initial preparation and support after they begin practicing in online environments.

Preparing Teachers for Online Learning Environments

Currently, many prospective teachers enroll in online courses offered through their universities. Coursework in teacher education at institutions of higher education may include taking individual classes online through a traditional university or completing degrees in fully online university programs. In fact, according to the American Association of Colleges for Teacher



Preparation (AACTE), as many as 75% of universities offered online teaching preparation in 2013.¹² However, no direct evidence supports the notion that taking online courses in and of itself constitutes adequate teacher preparation for working with students, including those with disabilities, in online environments. A majority of teacher preparation programs have not incorporated preparation for teaching online and online teacher preparation practicum materials, and student teaching experiences are scarce. Recently published work on field-based experiences in teacher education suggest that teacher candidates increase their understanding about what online teaching is and what it takes to do it when they have practica in online settings. While this work is promising, it was not focused on students with disabilities, nor did it address the connection between online teacher preparation courses and courses *for* online teaching.

General Impressions

In order to learn more about online teacher preparation for students with disabilities, researchers at

COLSD invited teacher educators from across the country to discuss how they and their institutions prepared teacher candidates for teaching students with disabilities online. The work consisted of several discussion groups and a follow-up survey. Participants in the focus group were invited based on their status as recipients of Office of Special Education funding for personnel preparation and technology use in educating students with disabilities. Recruitment was also extended to individuals who were publishing and presenting research on teacher preparation around technological expertise.¹³

Although this could not be considered a representative sample, the 13 teacher educators who agreed to participate in the discussion group overwhelmingly agreed that preparing teacher candidates to successfully create and maintain an appropriate online learning environment for students with disabilities is a critical component of teaching in online learning environments. However, participants expressed concerns about teacher standards that addressed

disability and a lack of curriculum for engaging in this preparation. They noted that there was little research attending to instructional strategies that were specific to online learning. Because of this gap in the research, the teacher educators focused on providing more explicit instruction in one-on-one settings enabled by teleconferencing technologies.

Another concern that arose during these discussions was the lack of standards that addressed teaching students with disabilities online.¹⁴ Although online teacher preparation standards have been developed by multiple organizations, such as the International Association for K–12 Online Learning (iNACOL), the discussion panel felt these standards were underutilized, and, in some cases, these standards were completely unknown to the teacher educators. Further, they explained that current standards are not tied to program accreditation. It was unreasonable to expect that the standards could be implemented in course design and adapted for the preparation of teachers of students with disabilities. The issue of what content should be included in a course about teaching students with disabilities online was pervasive across all panel discussion sessions. Teacher educators expressed concern about providing quality learning experiences to teacher candidates on this topic. They were unsure of how to design useful assignments to prepare pre-service teachers to educate students with disabilities in online learning environments. These concerns suggest that teachers who become successful in online teaching do not do so because of targeted initial preparation.

In another larger study, researchers from COLSD surveyed special education teacher educators about specific practices they used to prepare teacher candidates for online learning with their students.¹⁵ The 64 teacher educators who responded had a range of teaching experience and came from a variety of institutions.

The survey questions were aligned to the iNACOL National Quality Standards for Online Teaching, but the questions were in regard to students with disabilities specifically. These teacher educators self-reported particular strengths in using emerging and established technologies in their own practice. The researchers also learned from the survey that teacher educators self-reported developing strengths in helping prospective teachers interact meaningfully with students with disabilities in online environments. Specific strategies included providing explicit instruction to students

with disabilities in online settings, providing feedback to students using online tools, holding conversations with students about Internet safety, and interacting professionally with colleagues and parents from a distance. These teacher educators noted, however, they were not including information in their courses about instructional practices specific to online learning, promoting assessment design and use, or addressing the legalities of providing online services. The findings of this survey demonstrate educators are interested in preparing teachers to move into teaching in online environments, but there are obviously several areas in which teacher educators need support for their work, including in-

structional strategies, assessment, and legalities.

Considerations

The work conducted by COLSD and other researchers of teacher preparation and support, also has important implications for practice, additional research, and policy. These are outlined below.

Practice

As special education teacher educators develop curriculum for pre-service teachers, they should plan to include instructional practices specific to online learning. However, they are correct in saying that this is difficult due to the limited research base. There also needs to be some incorporation of ideas

Determining when to revisit the IEP and how to revise it as students come into and out of the online learning environment continues to be critical to ensuring that students are receiving the support they need to be successful.

about assessment and the legal implications of online service delivery. These elements need to be added to supplement the relationship building and Internet safety discussions that are already beginning to emerge in teacher preparation, according to COLSD work. Another suggestion is that teacher preparation programs might prioritize finding and strengthening relationships with virtual school sites for practicum experiences, where teacher candidates can watch explicit instruction occurring, and where they might also see other learning strategies more targeted to online instruction. Additional promising practices include discussions of Internet safety and introducing the expectation that online teachers of students with disabilities will engage with students. Finally, promising teacher education practices need to be brought to wider scale. Those who said they are working to prepare teachers in online courses and as online teachers are not the majority of teacher educators. However, as these interested individuals continue to develop their curricula, they need to be positioned in their institutions to share lessons, assignments, and expertise with colleagues.

Research

Expecting special education teacher educators to overhaul their practices, particularly when few resources for curriculum development exist, is problematic. Researchers can assist teacher educators by designing projects around identifying instructional and assessment practices that produce positive learning outcomes for students with disabilities in online environments. From these research-based understandings, special education teacher educators and researchers can collaborate to build teaching modules, design assignments, and manage relationships with online schools as a partnership instead of requiring a school to have separate relationships with those who want to conduct research and those who want to place teacher candidates. Finally, the work of identifying and testing instructional strategies specific to online learning environments for students with disabilities is a pressing research concern. Learning about how instructional strategies are or should be developed and enacted by teachers would improve both in-service practice and pre-service preparation.

Policy

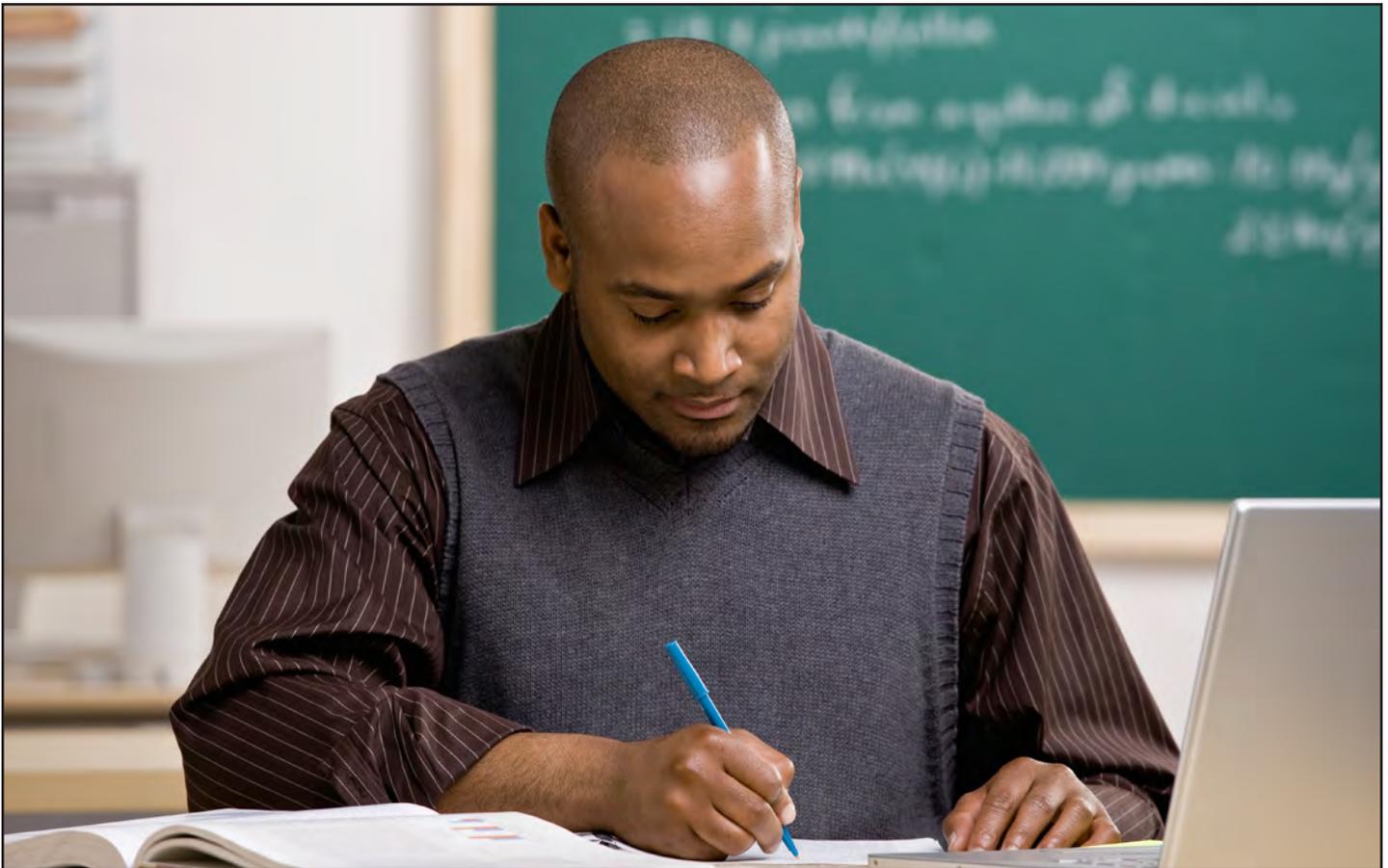
The legalities of service delivery online are still not well understood at present. Special education teacher educators will likely need policy guidance from accrediting agencies in order to design meaningful curriculum around these issues for prospective teachers. In addition, policies within a school of education in institutions of higher education that prepare teachers of students with disabilities need to be developed that will facilitate the work of teacher educators who desire to design curriculum and provide practicum experiences for online teaching generally and students with disabilities specifically.

Supporting Practicing Teachers in Online Learning Environments

According to a 2012 nationwide survey, only 1.3% of responding teacher education departments in a nationwide survey were providing any preparation at all for teaching via online learning, and field experiences were exceptionally scarce.¹⁶ Information about preparing teachers for students with disabilities was not collected in this study. Unfortunately, the findings of this survey mean that many teachers have already entered online learning environments without any initial preparation. Once in the environment, these teachers need support for their work with students, including students with disabilities. However, research on support for online teachers of students with disabilities was entirely absent when COLSD researchers summarized published, peer-reviewed research on this topic.

General Impressions

Fortunately, there has been an increase (albeit small) in work documenting what teachers need in order to help students with disabilities in online environments. For example, Rice and Carter sought to understand the phenomenon of student-teacher relationships within fully online learning environments where the students had disabilities and the teachers were subject-matter experts with additional special education certification.¹⁷ They collected and analyzed online teachers' stories about their students and constructed



understandings of relationships through interviews, videos, and other artifacts of interaction; communication logs; and student data from students with disabilities in the virtual classrooms of four teachers who were working as an interdisciplinary team. These researchers found that the teachers in the study craved relationships with students and families. Even small gestures, such as sharing a family story, uninitiated contact, and kind notes from parents helped the teachers feel justified in performing the increased monitoring and increased individualized explicit instruction that helped students with disabilities continue to progress through coursework. The teachers reinforced ideas about how relationships are formed in the course of their weekly professional development meetings with each other and a special education administrator whose main role was to mediate relationships between teachers and students. The findings of this study identified a positive teacher orientation towards students expressed as a need or desire to feel connected to children, and they illustrate the importance that teachers place on maintaining professional growth.

Work by researchers at COLSD that included not only teachers but also administrators responsible for students with disabilities found that teachers need support for enacting the legal compliance responsibilities in their work, and that was where much of any professional development occurred.¹⁸ In addition to legal compliance involved in service delivery, administrators found that many teachers, even those who were very competent in traditional settings, were not necessarily transitioning easily to online teaching because of the differences in student interaction and the asynchronous format that changes teacher work rhythms. As a response, some administrators increased professional development opportunities, and some focused their hiring efforts on novice teachers, whom they considered likely to take up online teaching more readily.

In tandem with these projects documenting professional development, researchers at COLSD conducted a series of focus group forums with several types of stakeholders in online special education, including state directors of special education, superintendents,



high-level administrators of online programs, and vendors who develop and distribute online learning content and coursework. Representatives of these groups indicated that both novice and experienced teachers with responsibilities for students with disabilities need support when entering an online learning environment and as they move through their career in these spaces. In fact, in many online schools, teachers of students with disabilities leave their positions at a greater rate than do general education teachers. The participating administrator with a high special education teacher retention rate suggested that his schools with low attrition rates were anomalies, but he could not say why.

Another interesting perspective came from the vendors during these discussion groups. Vendor representatives described a stance where they create lessons and expect to be more responsible for ensuring that students have the accommodations and other support they need because teachers interface with students and course designers do not. The vendors indicated

that the support they felt responsible for providing was technical—meaning that they were supposed to keep the platform up and running. This type of support was not specific to students with disabilities. They explained that their curriculum corresponded to national and state standards in which all students were expected to display competency.

In summary, research from the discussion forums revealed that vendors think they should design a curriculum according to national, and state standards and teachers should take up the specifics of service delivery.¹⁹ Employees of institutions of higher education think they should provide coursework online, but administrators and researchers should institute standards and build content. State directors of education think they should set licensing standards and provide professional development around compliance, but other entities should help teachers understand their responsibilities in specific environments and content and skill competencies. Administrators also think they have a role in professional development, but they

do not see themselves as being involved in the initial preparation of teachers. The teachers themselves want to build the best relationships they can with students, families, and colleagues, but they expect to have the greatest amount of decision-making power possible and for support to flow towards them that they can funnel back towards students in turn.

The state directors of education who participated in a focus group forum felt a great need to provide increased professional development to practicing online teachers, and, in fact, they had already planned and developed many of these new offerings. These new courses were designed to give teachers more experiences working with different types of technologies, as well as to provide information about online service delivery for students with disabilities with regard to legal compliance.

Finally, high-level administrators in online programs that attended the discussion group forum reiterated many of the findings regarding teacher interest in developing positive relationships with students.²⁰ In addition, some of these administrators added that online teachers working with special education students needed to learn to use data more effectively, including the need to sort which data are relevant for supporting student learning paths. Other administrators felt that teachers were using the data they were given adequately. With these concerns in mind, participating administrators were working to free teachers of responsibilities for instruction long enough to participate in the level of professional development they need and to be compensated for their time.²¹

Other work that offers perspectives from specific programs comes from a mixed methods study about online teacher work conducted within the North Carolina Virtual Public School's Occupational Course of Study program.²² The researchers conducting this study focused on aspects of co-teaching in a specific

program designed to provide students with significant disabilities an educational experience where a content teacher working fully online and a special education teacher working with students in a brick-and-mortar building collaborated to design technologically-based instructional materials for students. These materials were designed by surveying and interviewing practicing virtual school teachers. Findings from this study suggested that teachers do not just need initial preparation and subsequent professional development; they need constant coaching and support from one

another in order to do their jobs. The co-teaching relationship as mediated and supported by the administration in this virtual public school were working to provide just that.

Teachers do not just need initial preparation and subsequent professional development; they need constant coaching and support from one another in order to do their jobs.

Considerations

This final set of considerations focuses on practice, research, and policy for supporting practicing teachers in their work with students with disabilities.

Practice

In terms of practice, the research conducted by COLSD with multiple stakeholders in multiple contexts around support for practicing teachers provides some insight into the dense web of relationships and responsibilities that various entities must acknowledge in order to coordinate successful instruction for students. Although many of these studies were mostly descriptive in nature, with a small sample size, the critical stakeholders in these studies (vendors, institutions of higher education, state directors of education, administrators, and teachers themselves) were aware of the need to increase efforts to serve students with disabilities, and they all saw themselves and each other as having different roles in the process.

In terms of promising practices, the fact that some schools think their teachers are able to use data effectively is a positive sign. In these schools, the data the teachers have access to is provided by the administra

tion so that teachers only have to focus on data from a few sources. It would be helpful to know whether and to what degree such practices benefit students.

Research

The expectations that vendors, state directors, institutions of higher education that engage in teacher preparation, administrators, and teachers have for each other introduce interesting research questions. Studies attending to this web of expectations should work to uncover optimal sharing of responsibilities for preparing and supporting teachers as well as evaluating instruction and curriculum. Additional and complementary research opportunities lie in the development of high-quality models, content, and other materials for use in professional development for practicing teachers. Finally, research that seeks to learn how teachers develop the disposition to engage more often with students with disabilities and provide more explicit instruction to them and how teachers learn to move knowledge between traditional educational settings and online settings would be helpful in designing more effective teacher preparation and support. This research may be especially important in discovering why some online schools' programs are able to retain their teachers who work with students with disabilities, while others are not.

Policy

The work on practicing teachers working with students with disabilities suggests that no entity is taking responsibility for evaluating the content of preparation and professional development programs for teachers. It is likely that entities can share this role, but that each entity will have different strengths, and policies should leverage these role differences. For instance, research institutions and course designers (potentially along with vendors) might develop curriculum. Institutions of higher education can test this curriculum. Administrators can give feedback based on teacher and school performance and tailor professional development to their contexts. Teachers can give feedback based on practicality and student performance. State departments of special education can use what they learned to develop licensing and professional development requirements. Policies that encourage this kind of

collaboration may assist these entities in realizing their mutual goal of greater clarity regarding teacher work with students with disabilities in online environments.

Overall Summary and Conclusions

This chapter has discussed several important issues related to educational practice for students with disabilities. In particular, the review has illuminated the ways in which research in online learning with students with disabilities has attempted to describe and outline the complexities of providing services and the preparation and professional development required to do this well.

The research that has been conducted so far has identified several challenges to providing these services. One challenge is that the curriculum provided in courses is not yet fully accessible from a readability and vocabulary perspective, and teachers are expected to make up the difference in providing support. Some of this responsibility is taken on by parents, but teachers are the school representatives closest to the families; therefore, supporting teachers in their work would likely have many benefits, particularly given teachers' desire to connect with students and their families.

Although teachers expect relationships with students in online contexts, and they know they must achieve this with frequent, regular contact, they are unprepared to enact specific instructional strategies for the online environment because no such understandings about what strategies are effective exist. For the time being, their efforts seem to be mostly relegated to increased explicit instruction.

Next, teachers and teacher educators keenly understand the premise of inclusion, and they desire to apply that to online learning environments, but they do not have sufficient understanding of how to enact principles of inclusion with students in the case of teachers and with prospective teachers in the case of teacher educators. Some teacher preparation programs are starting to provide online field experiences and



practica that might allow teacher educators to raise these issues about inclusion with their teacher candidates, but there needs to be larger-scale initiatives at institutions that prepare a large number of teachers, and these initiatives need to include experiences where teachers interact with students with disabilities. More work around instructional strategies and the legalities of inclusion are necessary in order to design the policies that will optimize online environments for students with disabilities.

Finally, initial preparation of online teachers of students with disabilities is expanding, but it is not yet commonplace. As a result, teachers who are successful are likely learning from formal professional development and from informal interaction with colleagues. Supporting this professional development, providing resources to schools who offer professional development, and identifying criteria for strong professional development initiatives are critical needs in the field of online special education.

Endnotes

1. The above description is sourced from what COLSD, their partners, and other researchers have learned about K–12 online learning environments (Basham, Stahl, Rice, & Smith; 2015).
2. Horn & Staker (2011) explored the emergence of technology-enhanced blended learning and its flexibility for addressing the individualized and variable needs of learners; in addition, they charted the increase in elementary and secondary online learning between 2000 and 2009. Basham, Smith, Greer, & Marino (2013) noted that SWD and other at-risk populations are actively involved in online learning as an alternative or as an addition to traditional brick-and-mortar school attendance.
3. Rice (2015) edited a book profiling projects around diverse learners working in various contexts. Rice and Mellard (2015) highlighted the ways in which online teachers of students with disabilities advocate for curriculum changes in their schools as a way to sustain themselves in their practice.
4. Basham, Smith, & Satter (2016) discussed the process of device design, curriculum validation, and learning measurement systems embedded in the UDL scan tool, which was developed to provide critical benchmarks for educators and industry as they adopt new online learning systems.
5. Smith & Basham (2014) documented ways in which vendors provide curricula to students with disabilities in learning environments using technologies, generally without regard to accessibility or individual needs. Further, they offer suggestions for how teachers may maintain roles as curriculum designers.
6. Greer, Rice, & Deshler's (2014) findings are from an extensive linguistic analysis using multiple-measure reading levels; Deshler & Rice's (2014) work is built on Corson's (1985) notion of the lexical bar that Isabel Beck and her colleagues later used to develop systems of tiered vocabulary. Kennedy, Thomas, Meyer, Alves, & Lloyd (2015) provide the most recent work on the benefits of multimedia vocabulary instruction for students with disabilities.
7. Carter, Basham, & Rice (2016) drew from a set of research studies and drew collective conclusions about what teachers could do to serve students with disabilities in online learning environments.
8. Basham, Stahl, Rice, & Smith (2015) included an extensive discussion of how IEP implementation practices have shifted in online learning environments.
9. Thomas (2015) is a teacher and researcher who was collecting and using data in her own classroom. Her study is unique in that it addresses instruction for students with disabilities as online curriculum supported by teacher guidance; Vignare (2015) discussed these issues as a response to concerns about data and how it is used for K–12 students. More recently, Vignare, Moskill, Wise, & Pistilli (2016) have edited an entire issue of the *Online Learning Journal* dedicated to this topic.
10. Rice and Carter/Carter and Rice (2015b; 2016) studied the work of online teachers with special education students in their courses and online special education administrators. Both groups agreed that parent work for students with disabilities was greater than the expectations for parents of students without disabilities. In addition, Rice and Carter have noted the role constructions of these administrators that centered on helping parents determine how to meet IEP goals in their work. These findings aligned with a survey of parents conducted by Burdette and Greer (2014) where parents reported responsibilities for providing special education services and that they felt unprepared to do this.
11. Barbour (2013) lamented the lack of observational research about actual instructional delivery in K–12 settings. A year later, Coy, Marino, & Sorani (2014) identified three studies about instructional strategies: One study was about maximizing instructional activity in problem-centered small-group sessions for 11th-grade science, another was about scaffolding techniques used during a web-based inquiry project for secondary science, a third project looked at synchronous work with peer tutors for reading instruction with 10 to 11 year-olds.
12. AACTE (2013) produced an industry document about teacher education in general that named online preparation as an important trend; Archambault & Kennedy (2014) reiterated the need for online placements as part of teacher education practices; Kenne-

dy & Archambault (2012) conducted their initial survey about online teacher education programs and found that only 1.3% of responding schools of education were requiring online field experiences. Barbour & Harris (2016) conducted the most recent study of prospective teachers' perceptions of teaching in online learning environments after online field experiences.

13. The National Forum on Educational Statistics (2015) reported the prevalence of online instruction in teacher candidate programs. Molnar, Huerta, Shafer, Barbour, Miron, & Gulosino (2015) referenced stakeholder views on the notable differences between teaching and learning in a brick-and-mortar setting versus an online learning environment.
14. Archambault & Kennedy (2014) analyzed the technology-driven standards from iNACOL and ISTE. Their findings suggest that in their current form, these sets of standards do not attend to the instruction of SWD. While a great deal of research has focused on defining teacher quality in traditional settings, little is known about what constitutes teacher quality in virtual schools (Molnar, et. al, 2015).
15. Smith, Basham, Rice, & Carter (2016) surveyed 64 special education teacher educators from a variety of institutions of higher education for their study. iNACOL produced the National Standards for Quality Online Teaching in 2011.
16. Kennedy & Archambault's (2012) work on preparation for teaching in online learning environments has been discussed elsewhere in this chapter. Greer, Rice, & Dykman (2014) conducted a review of 10 years of research, targeting published, peer-reviewed studies of online learning that focused on students with disabilities. In this review, they found few studies, and those that did exist were mainly articles touting a particular curriculum rather than testing interventions, evaluating teacher education programs, or exploring policy issues in online learning.
17. Rice & Carter (2015a) conducted their work in in this study in one of the nation's largest state virtual schools.
18. Rice & Carter (2015a) conducted their work in this study with teachers and administrators in different types of online programs operated by various entities and established in different states across the United States.
19. Tindle, East, & Mellard (2015) conducted their focus groups as a two-day gathering of high-level administrators in online learning environments.
20. Refers to Rice & Carter (2015a/2015b) and Carter & Rice (2016).
21. Franklin, Burdette, East, & Mellard (2015) discussed issues around the use of student response data in their conversations with state directors of education. Franklin, East, & Mellard (2015) discussed issues around the use of student response data in their conversations with superintendents and other high-level administrators.
22. Dikkers, Lewis, & Whiteside (2015) have been studying various programs in the North Carolina Virtual Program for almost 10 years. They have conducted multiple surveys of various stakeholders in addition to teacher interviews as primary strategies.

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Equity Matters Chapter 4

Changing Practices in Special Education: Shifting Roles and Supporting Student Social Development



At its foundation, online learning offers the student a significant level of independence to interact and engage with a digital curriculum.

Online learning in its various forms—from fully online to blended—has altered the practices of both regular education and special education. This largely digital environment has specifically transformed the roles of the primary players in the educational experience, the form of student interaction, and socialization. This chapter explores two primary but central aspects of online learning. First, it addresses considerations regarding the changing roles of professionals and parents within the online learning environment. Second, it highlights an often overlooked aspect of online learning: the social experience. Research across the Center and the field has found that these two topics play important roles in the design of desirable online learning environments. Like other chapters in this publication, it connects these topics with research conducted by the Center and other investigators, with a specific focus on providing considerations for practice, research, and policy.

Understanding the Changing Roles in Online Education

At its foundation, online learning has the potential to offer students a significant level of independence to interact and engage with a digital curriculum. In an ideal scenario, students are able to determine how they will reach their goals by working through individualized learning paths at a pace structured by their academic needs, the content, and their online instructor. Further, online learning provides flexibility in the manner, rate, and accuracy in which students make progress and allows for adaptations specific to their individual needs. It also grants location independence: Online learning gives students the freedom to learn in their bedrooms, living rooms, on their kitchen tables, or in conducive learning spaces in their surrounding community. Finally, competency-based online learning allows students to dictate their level of progression through digital lessons via a series of continual assessments that monitor their progress, permitting them to

advance based on their individual performance and mastery.

The student-centered orientation of online learning impacts not only the student but also their parents, teachers, and other educational professionals involved in supporting and instructing them. In full-time virtual settings, the teacher is remote and rarely engages the student minute-by-minute, hour-by-hour, or even day-by-day. The home-based nature of full-time virtual instruction also alters the role of the parent or the adult in the home, necessitating an increase in their level of participation. Instruction methods are likewise impacted. The teacher and student are engaged in a new paradigm whereby digital materials (e.g., lessons, readings) are combined with a digital delivery system. These online lessons can guide the student's daily tasks, record what the student has completed, offer periodic assessments, and monitor the student's progress, indicating when they are ready for the next lesson series.

With these opportunities come new challenges. The virtual teacher is often in charge of a greater number of students when compared to their face-to-face counterparts. Larger class sizes may shift responsibilities to the parent (or the caregiver) in the home, causing them to assume a role more associated with a traditional classroom teacher. In fully virtual settings, the demand for increased parent involvement may occur regardless of the student's age or grade placement.¹

Teacher Roles

Understanding the differences between the traditional skills of the teacher and the skills they need for blended and full-time virtual online K-12 classrooms came alongside the growth of online learning. Researchers have noticed this trend. In 2011, the International Association of K-12 Online Learning (iNACOL) published their second version of the *National Standards for Quality Online Teaching*. Incorporating work from research that investigated online instruction and teacher expectations in this new online paradigm, iNACOL and its team of national experts sought to identify a set of quality guidelines for online teaching. By focusing on attributes unique

to the K-12 virtual classroom (e.g., online design, planning collaboration), iNACOL and others in the field have identified expectations, unique teacher knowledge and understanding, and teacher abilities specific to online learning.²

In line with this research, COLSD conducted a series of studies, culminating in a national study of all 64 Higher Education Consortium for Special Education (HECSE) institutions of higher education (IHEs). The purpose of the study was to further understand how current special education teacher preparation IHEs were considering the changing roles of online teachers and, as a result, addressing these needs in their teacher preparation coursework and aligned internship or practicum experiences. Survey questions were drawn from the *iNACOL National Standards for Quality Online Teaching*. The figures below include the questions as well as the corresponding findings. The survey responses did not directly identify a role change for teacher educators. The responses did raise the issue of what the ideal preparation experience for prospective teachers should be as they transition to teaching students with disabilities in blended and fully online instructional environments. While responses indicated some promise in teacher educators' ability and willingness to incorporate information about online learning into their activities and experiences, the data also suggested that IHE instructors have not yet fully responded to the changing demands and the expectations for teaching in the online classroom. Essentially, the survey illustrated the way in which the roles of novice teachers and teacher educators were interconnected when it came to making the move towards teacher preparation for online learning that attends to the needs of students with disabilities.

The findings of the survey, completed by 48 of the 64 HECSE member institutions, revealed self-reporting several strengths. One strength focused on the use of technologies to enhance student engagement, where 60.4% of teacher educators shared that they had addressed this issue more than three times in a course. Likewise, nearly half of all respondents (47.9%) reported their efforts to introduce new and emerging technologies at least three times a semester. Educators

TABLE 4.1: TEACHER EDUCATION SURVEY ON K-12 ONLINE PREPARATION AND CORRESPONDING RESPONSES

<i>How often were the following elements of teaching in a K-12 online setting addressed during your teacher education courses?</i>	Mean	Standard Deviation	1	2	3	4
			Not at all	Once	2-3 times	More than 3 times
			%	%	%	%
Using existing, established technologies to support K-12 student engagement	3.42	.85	4.2	10.4	25.0	60.4
Anticipating ways to use emerging technologies to support K-12 student engagement	3.13	1.02	10.4	14.6	27.1	47.9
Encouraging student interaction in K-12 online settings	1.98	1.11	48.9	17.0	21.3	12.8
Giving explicit instruction to K-12 students with online tools	2.13	1.12	40.4	21.3	23.4	14.9
Providing feedback to K-12 students through online tools	1.87	1.06	51.1	21.3	17.0	10.6
Discussing legal issues that arise when instructing K-12 students online	1.44	.82	72.9	14.6	8.3	4.2
Holding conversations with K-12 students about Internet safety	1.71	.90	52.1	31.3	10.4	6.3
Giving instructional support to K-12 students with disabilities in online settings	1.81	.99	51.1	25.5	14.6	8.5
Creating statistically valid assessments for K-12 online formats	1.62	1.03	68.1	12.8	8.5	10.6
Creating reliable assessments in K-12 online formats	1.54	1.05	75.0	8.3	4.2	12.5
Aligning online coursework with K-12 content standards	1.79	.16	63.8	8.5	12.8	14.9
Implementing online assessments of K-12 content mastery	1.74	1.18	67.4	8.7	6.5	17.4
Modifying online assessments based on K-12 student learning data	1.64	1.07	68.1	12.8	6.4	12.8
Interacting professionally with colleagues using online tools to support K-12 student success	2.34	1.16	31.8	25.0	20.5	22.7
Interacting professionally with parents using online tools to support K-12 student success	1.85	1.05	52.1	20.8	16.7	10.4
Arranging instructional materials to promote the transfer of learning in an K-12 online environment	1.69	1.01	60.4	20.8	8.3	10.4



also self-reported their weaknesses. In general, a large majority of teacher educators indicated that they had not addressed legal issues for the K-12 online learning environment (72.9%), created assessments for the online classroom (75%), aligned online curriculum to K-12 content standards (63.8%), arranged teacher education materials to promote the transfer to a K-12 online learning environment (60.4%), or other factors that would indicate teacher preparation for the K-12 online learning environment. The findings suggest a critical need for online education to be better integrated into special education teacher programs on these vital issues of instruction and assessment, as these are all elements that contribute to student learning.³

Achieving these outcomes has been complicated by a lack of teachers. Center research has found evidence of high student-to-teacher ratios, sometimes in excess of 200 students per teacher in the upper grades. Although this student-to-teacher ratio may be similar

to that found in brick-and-mortar high schools, the individualized nature of online learning (and consequently, online teaching) makes this proportion significantly more problematic in virtual environments. Large classroom size has often led to teachers having limited knowledge of student needs due to the quantity and variability of students. Further, within high student-to-teacher ratio, a higher percentage of students with disabilities (one large statewide school reported almost 27% of students were being served under an IEP or a 504 Plan), challenged parents to address issues independently and contact the teacher for just-in-time support. This change, in turn, required teachers to expand their communication of instructional directions, expectations, and procedures to accommodate an additional adult. As a consequence, problem-solving issues with instruction, online content, and other unanticipated challenges confronted the student, parent, and teacher.⁴

Related Services

Online learning has affected other educator roles besides the teacher's. The role of related service personnel has been expanded due to K-12 virtual learning. Although school-based related services often include a spectrum of options, including art therapy, adaptive physical education, and music therapy, by and large these services have not migrated online. There are some exceptions. Services or therapies primarily offered in online settings are occupational therapy (OT), physical therapy (PT), and speech-language therapy (SLP). In full-time virtual online settings, these services are referred to as teletherapies, which build upon the telemedicine efforts that date back to the late 20th century. The past five years have witnessed an increased interest and a corresponding expansion of teletherapies for online students due to the recent growth in virtual instruction, combined with brick-and-mortar schools encountering challenges in recruiting the necessary service personnel. In response, *International Journal of Telerehabilitation* was established in 2009 to meet the needs of an emerging service delivery method.⁵

COLSD researchers sought understanding of available online therapies and the roles of the therapists in online learning due to the rapidly evolving educational landscape. As recently as four years ago, if online students were to receive such services, they were required to work with their local schools or a similar entity to access these services face-to-face instead of virtually. In some instances, parents reported that when they enrolled their child with a disability in an online setting they forfeited access to therapies due to lack of availability. More recent findings suggest that SLP, OT, and PT are increasingly available online. However, teletherapists report that decision-making and jurisdictional issues persist in regards to access to teletherapy, the integration of teletherapy into students' routines and overall service plans, and licensing. Each of these issues reflects the

In many cases, the individualized nature of the online learning experience shifts the role of teachers away from being the central focus of instruction into that of a facilitator of learning.

challenges that have emerged in online learning environments when practitioners attempted to conform their practice to regulations and guidelines originally crafted for brick-and-mortar settings. These challenges present issues that need attention to effectively represent the new realities of online teaching.⁶

The role of teletherapists in virtual education and their interactions with other stakeholders, particularly parents, appears to be a complicating factor in the large-scale implementation of telerehabilitation in online learning environments.

With the change from face-to-face to an entirely virtual or online service delivery model, parents must often be present during the appointment and help the provider by orienting students, keeping them on task, or providing feedback to the teletherapist. Although the role of the teletherapist might not be significantly altered during the actual virtual therapy session, the role of the parent and his or her level of engagement and responsibility is quite different from traditional face-to-face, school-based therapies. Some service plans do not involve the parent at any level beyond the professional updating them with

a report that notifies them of movement towards achievement of specific goals and benchmarks. Other plans involve them quite heavily.⁷

Parents' Roles

Parent participation seems to be one of the key success factors in online learning. This is because a change in teacher and student functions is expected as learners become engaged in the more individualized experience of full-time online learning. Optimally, students enhance their independent learning skills and become further empowered while teachers might alter their level of engagement and facilitate as much as they instruct. However, the Center has found that parents play a significant role in fully online learning, with an increased level of involvement in the education of their children with disabilities. Their new

role is particularly pronounced in comparison with their previous level of engagement in their child's brick-and-mortar instruction. Emerging research has explored the roles for parents of students with disabilities. It argues that among these traditional roles, parents are often provided few, if any, opportunities to influence their children's education and overall learning experience. When parents offer contributions or suggest modifications, education professionals and even the parents themselves perceive the parents to be ill-equipped to proffer such advice.⁸

The Center has found that in the online classroom, the parent is a critical component of the online educational experience, particularly for elementary and middle school students. Parents report that they often take on the role of the teacher, implementing various instructional interventions, managing the day, determining which lessons will be completed and in what order, identifying areas of weakness, and seeking solutions from others. Parents report feeling obligated to ensure their child is on task toward completing specific digital lessons within a particular timeline. When asked to clarify, parents define their role as being the learning coach, instructor, and paraeducator—even acting as the primary educator in their child's learning experience.⁹

Online curriculum vendors and developers—and often the instructors using the digital materials in online learning—express a different perspective. Although they recognize the importance of the roles that parents play in helping their children with disabilities succeed, they consider their role secondary to the teacher and the digital material that guides the instructional experience to be primary. They report that although online parental resources exist, parents do not access them as often as vendors (or teachers) would like. Possible reasons include language barriers, assumptions that disabilities co-occur across family members, or other similar factors. Some vendors consider parent participation to consist primarily of monitoring their child's performance, along with involvement in decisions about curricular activities and objectives. Although vendors recognize the need for improving ways to foster parent interaction, findings

from the Center's forums indicate a disconnect between parents' perceived and actual role in their children's education, and vendors' conceptualization of parents regarding their level of cultural and educational preparation to help their child succeed in online learning.¹⁰

General Impressions

Fully online learning is changing the roles of teachers, related service personnel, parents, and the children that schools serve. Additionally, the K-12 online classroom has altered teacher expectations. Teachers' knowledge and skills have expanded to include improved abilities in communication, especially virtual interaction, and capabilities to perform tasks associated with the demands of their online learning and content management systems. Related service providers are also being impacted as they perform face-to-face delivery at a distance. In the past, a therapist engaged the child in a quiet, one-on-one environment, manipulating the room while verbally and physically engaging the child to support task completion. Today, the fully online environment necessitates a virtual interaction. These changing dynamics are further complicated by the inclusion of the parent or adult family member in the session. In the online classroom, the parent or other adult is often present and actively engaged by the virtual teacher or therapist. Parents report involvement in their child's education and supporting their child through task completion, instructional support, curriculum modifications, and home-to-school communication to ensure their child is advancing at an appropriate pace and level.¹¹

Center research and stakeholder forums (e.g. Vendor Forum Report 2, 4, and 9) indicate that parents have specific duties in the K-12 online classroom. Parents are aware of these roles and responsibilities. Although research has not centered on a comparison of face-to-face to fully online parent involvement, parents report added responsibility in their child's fully online environment. This role and the subsequent responsibility requires the investment of significant time and a new level of expertise in order to meet the instructional needs of their child, the online lesson content, and the supports and modifications often needed to further support their child.¹² When interviewed,



parents of students with disabilities enrolled in fully online learning explained that online schools expected the parent to serve as a physical learning coach. As the learning coach, parents reported an expectation to communicate to teachers the challenges associated with student progress. Likewise, when challenges were identified, parents were expected to implement instructional strategies and solutions identified by the virtual teacher or potentially suggested by the parent. Some therapists similarly stressed the importance of parent engagement, arguing that success is dependent upon the parents being present and acting as a full participant in teletherapy sessions.¹³

The changing roles and responsibilities on the part of the parent, often coming with the title of “learning coach,” include at least three assumptions. First, that parents or the adult in the home is present and available during a child’s instructional day. That is to say, that a parent is not working or only works an evening or night schedule, allowing them to be present and available to their child. Second, that parents have a

level of educational competency. Although online schools do not require a certain educational level of the parent, the demands of coaching seem to assume that the parent has at least some college. Parents report a sense of needing to understand their child’s specific educational requirements, identifying where online curriculum barriers might exist, the challenges their child is experiencing, and the attendant reasons. Third, the role of parents necessitates being part of the solution. As a result, student outcomes are increasingly dependent on the level of face-to-face parent support. This support takes the form of time, motivation, instructional strategies, interactions with school personnel, implementation of school directed interventions, and motivating their child to remain engaged in online lessons for four to six hours a day.¹⁴

Considerations

Practice

The roles of education professionals, parents, and students have all changed in full-time virtual school environments. In many cases, the individualized nature of



the online learning experience shifts the role of teachers away from being the central focus of instruction into that of a facilitator of learning. Digitally delivered lessons and accompanying digital resources come equipped with the capacity to chart student learning pathways, the rate of academic growth against learning targets, and other embedded monitoring and data analysis functions that automate tasks that were previously done manually. Still, someone must monitor the data.

Teachers, who are still central to the educational experience, are now required to incorporate a new, diverse set of professional skills to support online student learning. Class sizes of 40-50, instead of 20-30, require managerial prowess, where teachers often serve as project managers, facilitating student instruction while empowering parents to support the needed face-to-face instruction. Virtual instruction demands a relationship between the online teacher and the parent or adult in the home. While continuing to act as content and pedagogy experts, teachers now need

to excel at parent-to-teacher communication, serving at times as a consultant and at times a collaborator, all the while conducting this interaction at a distance (e.g., email, video-conferencing, phone).

For elementary and middle school-age children, this is of critical importance due to the additional face-to-face supports these learners require. These supports are necessary in order to engage with the digital materials, remain on task, problem solve when challenges occur, and offer adaptation and modification when and where appropriate. Teachers need to be aware of these changing dynamics and be provided with staff development or similar professional supports to inform and further enable this altered role.

Likewise, districts and the vendors with which schools may contract to provide online learning curriculum materials need to implement ways of orienting and educating parents on their changing responsibilities and roles. Although the technical details of the online learning management system are critical, parent

knowledge needs to extend beyond technical information and relevant due dates and timelines. Like their professional partners, parents require specific training to be equipped for this virtual interaction, as well as the face-to-face instructional demands that the fully online experience requires.

For online product vendors and the schools with which they are increasingly partnering, teacher, therapist, and parent development are needed for successful implementation of the online learning experience. Fortunately, there is overlap across the three stakeholders in such issues as communication, planning, student support, and help for students with just-in-time solutions. Vendors must realize that parent and teacher development needs to extend beyond the operational end of the learning and content management system. All parties must realize the shift in roles and the development of supports to further empower educators and parents.

Research

Considerable anecdotal evidence suggests that online learning—and the flexibility associated with full-time virtual schooling—may have much to offer students with disabilities. Yet recent large-scale outcome studies analyzing end-of-course data for both general and special education students document troubling academic achievement profiles in these settings as compared to brick-and-mortar growth patterns.¹⁵ The changing roles of all stakeholders supporting students in full-time virtual settings (e.g., parents, educators, and vendors) is in need of further research. The recognition that fully online learning alters the dynamic among the various stakeholders has emerged from initial descriptive research. In the area of teacher preparation, initial findings suggest that the knowledge and skills embedded in coursework and practicum experiences are inadequate for the demands placed on teachers moving into blended or fully online settings. For parents, a detailed understanding of their roles

and related obligations is needed. Further, there is little existing research on which types of parent support and training yield the best student outcomes. Inquiries into the scope, duration, frequency, and timeliness of parent preparation options are needed, as are additional evidence-based descriptions of the promising parent practices that have proven to be successful in supporting students with disabilities who are learning online.

For teachers, full-time virtual schooling, blended learning, and delivering supplemental online courses each require a different set of expectations and skills. Research has only begun to distinguish these variables. Questions still persist. What needs to be integrated into teacher preparation coursework and internships? In which settings? For how long? What are the best approaches for supporting practicing teachers? Further understanding of the roles teachers need to assume and the skills and knowledge they need to possess is essential. Little research exists on roles of related service providers in K-12 online settings. Study designs are needed that address a wider array of contextual, curricular, and student factors in order to confirm or negate the efficacy of current practices.

Findings suggest that pre-packaged social skill video modeling applications with and without virtual coaching had a significant impact on the child's ability to learn and generalize social skills in the school environment.

Policy

iNACOL's National Standards for Quality Online Teaching are an example of initiatives that seek to further inform and guide teacher preparation efforts, along with professional development endeavors that seek to enhance the knowledge and skills of educators. As indicated by current research, IHE teacher education programs do not sufficiently prepare educators for blended and fully online classrooms. Teacher education accrediting bodies, professional organizations that offer teacher education standards, and state teacher education licensing bodies must re-consider current efforts, requirements, and overall standards. Teacher development is dictated by state licensure,

which is directly related to state and professional standards. As iNACOL proposed in 2011, knowledge and professional skills that can further equip teachers for their changing roles need to be integrated into accreditation requirements in order to improve practice. At the state and local education levels, policies that reinforce further professional development are needed if blended and fully online learning is to be truly individualized. Similarly, initiatives are needed for the parent or adult in the home for the fully online learning experience, where educational stakes are quite high and are critical to the success or failure of the student. Here, policies are critical for a successful conclusion. They include guidelines that consider teacher development, role expectations, and criteria by which teachers can be evaluated; along with considerations for teacher-student ratios and overall responsibilities for curriculum and instruction.¹⁶

Social and Emotional Development in Online Learning

With the growth in online learning options and the availability of fully online experiences are present in all 50 states, parents, particularly those with children with disabilities, have increased access to online options. In some instances, parents select the fully online environment to avoid the social demands of the face-to-face classroom.¹⁷ While leaving the brick-and-mortar school might temporarily solve the social stresses, fully online education may not address social competence development.

The Center's forum reports suggest that the majority of the digital learning content does not address social skill development. Findings reported the Center publication *Invited In* found that online learning modules across K-12 education focus on the four primary content areas through vendor-developed digital lessons and related materials.¹⁸ Students are engaged with the online lesson with completion requirements set for a specific week, month, or related period of time. The digital lessons require students to login and complete a series of tasks and activities independent of the teacher and fellow online classmates. Although there may be periodic synchronous teacher instruction and

virtual interaction with fellow online students (e.g., email, discussion forum postings), the majority of online instruction is independent due to the student interacting with the assigned digital material.¹⁹ Similarly, recent parent interview data revealed that online options for student-to-student interaction within the fully online environment are few and far between. Virtual schools offer face-to-face interaction periodically throughout the semester (e.g., virtual field trips, targeted synchronous group-based activities), but parents report they are inadequate for the purposeful social interaction many of their children require in order to further develop social competence.²⁰

For students with disabilities, social demands of the 21st-century classroom are increasingly challenging. Difficulties in social competence can directly impact student learning, often leading to behavioral challenges that require disciplinary action.²¹ A student's unfamiliarity with social norms can even cause further emotional difficulties, leading to a withdrawal from the learning experience.²² Parents may witness heightened fear and school anxiety in their child. Student absences and excessive tardiness can become common. Regular calls from the school concerning inappropriate behavior or requests to come and pick up the child increase in frequency. Because of the asynchronous nature of online learning environments, some teachers, parents, and students may then perceive benefit in separating the academic and social aspects of learning.²³

Considerations

For the student with limited social competence, the asynchronous online instruction provides a learning environment that does not require face-to-face or virtual synchronous student-to-student social interaction. Instead, while academic skills may be addressed, students' social skill development may not be factored into their learning experience. Considering social development is a primary attribute of successful employment and similar post-secondary outcomes, social skills need to be addressed, even in the virtual classroom.²⁴ Working within the confines of the typical fully online learning experience, Center researchers sought to better understand whether social skills

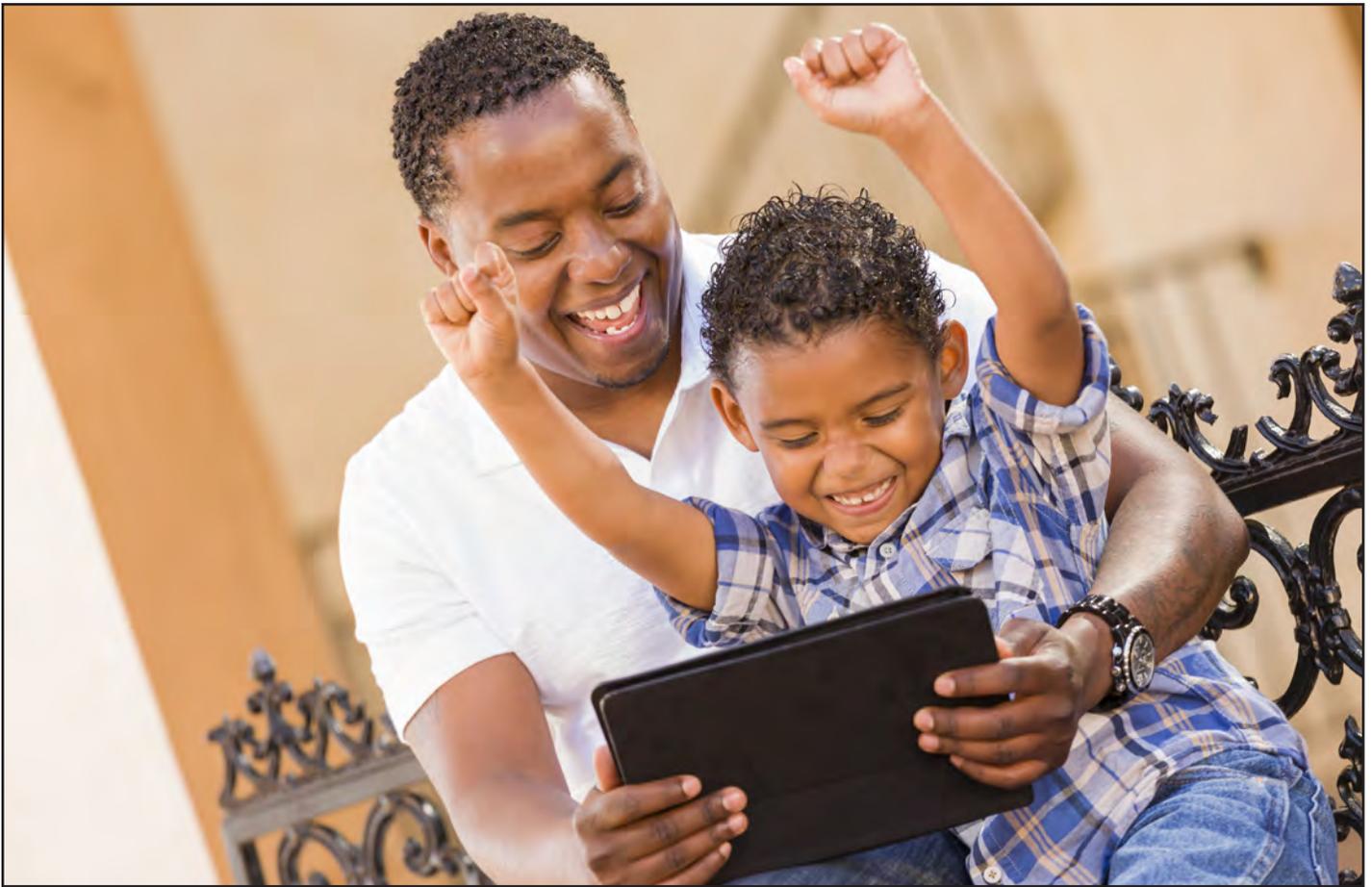


could be learned through a self-paced vendor-developed social skill curriculum. This study sought to do the following: 1) determine if a pre-packaged video modeling intervention with embedded supports and scaffolds in an online environment could improve social skill competency for students with identified social skill deficits, and 2) determine if the *addition of a coaching element* to the pre-packaged video modeling intervention with embedded supports and scaffolds improved social skill competency for students with identified social skill deficits. Social skill deficits were identified through a child's individualized education program (IEP).²⁵

The study utilized a pre-post design with measures concerning social skill development in the area of social communication. The design also involved pre-post observations to determine if the behaviors specific to social communication changed as a result of the pre-packaged video modeling intervention. Three groups were part of this design: (Group 1) Business-as-usual social skill instruction; (Group 2) Pre-packaged video modeling application - *School Rules*; and,

(Group 3) Pre-packaged video modeling application with *Coach: School Rules with an Instructional Coach*. A total of 45 high school-age students were randomly assigned into one of the three conditions. An additional five students per condition will be randomly assigned into the observation portion of the data collection.

In this study, teachers and parents were asked to complete the following social interaction measures before and after the three-week intervention: (1) *Profile of Social Difficulty* (POSD) and (2) *Autism Social Skills Profile* (ASSP). Findings suggest that pre-packaged social skill video modeling applications with and without virtual coaching had a significant impact on the child's ability to learn and generalize social skills in the school environment. Areas of particular growth concerned social interactions, including conversation starters, eye contact, and physical proximity within the demands of a social conversation. Observation data indicated that the addition of the virtual coach led to further engagement with the video modeling application, with students taking longer to complete



and often repeating video segments in comparison to the pre-packaged video modeling tool only.

**TABLE 4.2:
SOCIAL SKILL VIDEO MODELING
INSTRUCTION OUTCOMES**

Condition	Mean	Standard Deviation	N
0	108.38	36.934	13
1	115.22	15.958	18
2	113.00	17.045	12

0 = Business-as-usual social skill instruction
 1 = Pre-packaged video modeling application: *School Rules*
 2 = Pre-packaged video modeling application with Coach: *School Rules with an Instructional Coach*.²⁶

Practice

Continued growth in the virtual learning environments will test the need and the manner in which stakeholders develop social competence among all online learners, particularly those with identified social skill deficits. The current form of asynchronous

digital learning poses challenges. However, innovations and the expansion of teletherapies that were mentioned earlier in this chapter offer promise in addressing student social development. Video modeling, an evidence-based practice commonly used for social skill development in brick-and-mortar instruction, is one technology-based approach that warrants further consideration. Virtual and augmented reality practices are also deserving of further consideration. Often used to supplement social skill development, virtual and augmented reality are technology applications that should be considered in supporting social skill development in the online classroom. Although virtual social learning groups are part of some online curricula, the video-conferencing technology is limited and doesn't capture the interactive virtual component that current virtual reality appears to offer.²⁷

For the local district, advances in teletherapy technologies and the increased use of teletherapies for the online student's related services (e.g., speech and

language) provide further options for their social skill development. Although not widely used, some online schools that are contracting with therapists to conduct online social therapy sessions. Social development will further advance as the technology itself advances, the number of online therapists grows, and schools become more aware of these options. Previous technology-based social skill development success suggests further integration will occur because innovation alters current social competency practices. Social skill requirements are in constant transition due to virtual interaction with peers, direct and explicit instruction with online teachers and therapists, interactive video modeling and social narrative development, and the ever-changing options of virtual and augmented reality. The advances in online social skill development may shift face-to-face intervention as virtual innovations continue to offer a safe environment that is structured for sequential explicit instruction to navigate the complexity of social interaction.

Research

Research on social skill development, particularly in the area of autism, offers a field of exploration that has direct application to online learning. Although social skill interventions vary, video modeling and virtual reality have an evidence-base as interventions when applied to face-to-face settings. Because of the emphasis on technology solutions as a critical variable in current research, further innovation applied to social competence should be of interest to researchers going forward. The continued integration of virtual and augmented reality, video, images, and future interactive media offer the potential of direct application to a growing online learning experience that is open to embedding additional tools. Questions remain and require answers on specific variables, such as the ability to learn, apply, and generalize social skills across settings and among individuals and contextual environments. Other factors to be considered include the role of the teacher; the student's direct engagement with peers, applying a skilled learned in a virtual envi-

ronment to “real life”; and the balance between learning through technology and applying the knowledge within human interaction. The field of social competence, which is generating greater interest regardless of whether one has a disability, could benefit from knowledge gained through further research in social skill developments for the online setting.

Policy

The standards-based instructional and assessment efforts that have been the cornerstone of educational reform since the late 20th century promote a content-focused educational experience. Non-cognitive skill development, such as social skill development, has increasingly been removed from the educational setting, leaving the student to develop these competencies independent of the classroom, often learning through home or community-based experiences. Recognizing deficits in social competence is not enough. Shining a light on the hidden curriculum and purposefully bringing this into classroom instruction is needed

Academic skills alone are not sufficient for school success. Social competence is an integral part of the learning experience. Decades of studies promote this claim.

for positive learning outcomes, as well as the development of skills that are vital for postsecondary success. State and local educational efforts need to embed social development within existing curriculum and instructional experiences, further tying it to assessment measures. Such outcomes promise an engaging learning experience that incorporates group-interaction, collaborative problem solving, and the ability to embed instructional practices dependent on social interaction.

As innovations extend opportunities for social competence development, state and local educational agencies will need to further consider policies associated with professional practice (e.g., licensure, certification). For example, social skill supports provided by virtual out-of-state therapists may require additional licensure.



Overall Summary and Conclusions

Academic skills alone are insufficient for school success. Social competence is an integral part of the learning experience. Decades of studies promote this claim. For example, the top 10 skills that students need to succeed in school and in post-secondary learning and employment experiences, based on over 20 years of research, include: 1) listening to others, 2) following the steps, 3) following the rules, 4) ignoring distractions, 5) asking for help, 6) taking turns when talking, 7) getting along with others, 8) staying calm with others, 9) being responsible for personal behavior, and 10) doing nice things for others.²⁸ Likewise, the Collaborative for Academic, Social and Emotional Learning (CASEL) has identified five interrelated sets of social-emotional learning (SEL) that are essential for school and employment success (CASEL, n.d.). These include relationship skills, self-awareness, social awareness, self-management, and responsible decision-making. For students with identified disabilities, limited social competence is often a primary attri-

bute and the reason they require specialized services. Social skill needs are of particular importance to those students with a high functioning autism spectrum disorder (HFA), as well as learning disabilities (LD). For students with HFA, poor social competence is a primary defining characteristic, as it is estimated that 75% of all students with LD are challenged with social competence issues.²⁹

As students with disabilities leave traditional instructional environments due to social challenges (e.g., bullying, anxiety-related issues), the online setting needs to include solutions for academic as well as social learning. For students with disabilities, social skill development requires explicit direct instruction with purposeful feedback. This needs to be integrated into the academic supports the online environment offers. Parents and educators need to be aware of the impact social competence development will have in the child's further study (e.g., face-to-face K-12 or higher education) and employment after K-12 instruction.³⁰

End Notes

1. Work from the Christensen Institute offers an explanation of the demands of the blended learning environment on the roles of the teacher, the parent, and related professionals. NCLD's report offered further clarity to what is truly needed on the part of the teacher, the parent, the student, and the vendor (and the curriculum they develop) for successful blended learning initiatives. Smith (2016) found that the digital materials used for online instruction are not aligned to the learning needs of students with disabilities. Thus, adaptations and modifications need to be provided in order to support the instructional needs of the fully online student with learning challenges.
2. Smith, Basham, Rice, & Carter, (2016); Greer, Rowland, & Smith, (2014).
3. Smith, Basham, Rice, & Carter (2016) found that although most special education teacher preparation institutions addressed technology competency, current preparation efforts do not put the primary demands of online instruction on the instructor. These data proved essential to addressing the role of the teacher and the expectation of what the teacher needs to be empowered with in order to be successful in the classroom. Archambault & Kennedy's (2014) examination across general education teacher preparation institutions acknowledges the changing role teachers play in virtual instruction and the limited emphasis on preparing for this new role on the part of many teacher preparation institutions.
4. Rice & Carter (2016) conducted an analysis of a statewide fully online K-12 online program. Archambault & Kennedy (2014) note changes in the roles of the teacher representative to more support from the adult in the home. Johnston, Greer, & Smith (2014) suggest a shift in the parent role and also a perception of further engagement to support student learning.
5. Fairweather, Lincoln, & Ramsden (2016) offered an analysis of current practices in teletherapy services, specific to speech and language therapy, as an increasingly common practice and one that is meeting a distance education need.
6. Burdette, Greer, & Woods (2013) and Johnston, Greer, & Smith (2014) reported that parents had to make decisions on related services when deciding to enroll their child in fully online learning. Gross & Jochim (2015), who report on rural education and meeting the related services and needs of students in special populations, note the potential success of teletherapy. Rice & Carter (in press) report the need for states and similar licensure entities to make decisions regarding best serving online learners through teletherapy services.
7. Rice & Carter (2016) reported in their interviews of service providers that the mode of teletherapy, regardless of the service (e.g., OT, PT, SLP), altered the role of the parent in the various components of scheduling and providing therapy. ASHA's technical report on *Clinical Supervision in Speech-Language Pathology* provides a rich description of the changes in service delivery, particularly due to the intricacies of telepractice/teletherapy, including the role of the adult in the home and the changes technology require of the professional and parent.
8. Turnbull, Turnbull, Erwin, Soodak, & Shogren (2015) noted that parent participation means that parents and students with disabilities partner with educators in the decision-making process about students' education, which results in benefits for students, parents, and educators. However, their work also indicated that when parents of students with disabilities seek to participate based on the provisions provided in the Individuals with Disabilities Education Act, they are prevented from meaningful participation.
9. Smith, Burdette, Cheatham, & Harvey (2016) found that parents of children with disabilities enrolled in fully online K-12 instruction assume the role of the primary teacher in the life of their child. They reported a high level of responsibility that determines whether their child remains in the fully online instructional experience.
10. Turnbull et al. (2015) reported on the various roles of parents and the evolution of their roles, the role parents must take with schools, and factors schools need to consider in parent interaction and engagement. Tindle, East, & Mellard (2016) reported a number of variables that involved parent interaction, differences in perspectives from the professional and the parent, and the roles that vendors were increasingly trying to develop among parents and adults in the learner's home.
11. Smith, Burdette, Cheatham, & Harvey (2016) and Smith, Ortiz, & Rice (in progress) reported that fully online programs expect parent participation in their child's learning experience. Parents reported being assigned roles and responsibilities during the instructional day. Currie-Rubin & Smith (2014) also reported teacher requirements on parents offering illustrations of instructional supports and accommodations that parents were required to provide to support the fully online instruction.
12. Through a series of interviews, parents reported an enhanced level of engagement that the fully online elementary and middle school classroom required of them. Besides being present at home, parents report being assigned instructional task by the virtual teacher and being expected to modify online instruction when their son or daughter was unable to completed the required number of weekly online lessons (e.g., Currie-Rubin & Smith, (2014); Smith, Burdette, Cheatham, & Harvey, (2016); Smith, Ortiz, & Rice, in progress).
13. Rice & Carter (2016) reported in their interviews with teletherapists that related service personnel relied on the involvement of the parent or adult in the home in order to facilitate the necessary therapy. Smith, Ortiz, & Rice (in progress) found through initial surveys and follow-up interviews that parents were expected to assume instructional roles in order for their child to successfully complete assignments.
14. Center stakeholder forums reported an expected level of parent involvement. Vendor representatives and school leaders expressed a needed level of commitment on the part of the parent. Smith, Burdette, Cheatham, & Harvey (2016) and Smith, Ortiz, & Rice (in progress) reported on the required level of parent involvement for students with disabilities enrolled in fully online coursework. Initial surveys followed by parent interviews defined the roles, assumed involvement, and specific expectations shared to parents by teachers and related school personnel. Greer, Rowland, & Smith (2014) and Archambault & Kennedy (2014) noted changing roles among educators, particularly in the area of virtual interactions, to support students and interact/communicate with parents and other educational professionals. A report in *Education Week* (2013) on parent efforts to transform education—including the altering of curriculum, course delivery, and even new schools that adhere to the needs of their children—were included in this analysis in online learning and blended learning initiatives.
15. Center for Research on Education Outcomes (2015) found that students with special needs as a whole demonstrate weaker academic growth than their counterparts in face-to-face learning environments. Special education student performance in an online charter school is still more negative overall than being a student with special needs in a traditional public school.
16. Smith, Basham, Rice, & Carter (in press) reported survey results across 45 of the 64 HECSE institutions of higher education, indicating that they are not preparing preservice teacher education students for all of the demands of the blended and fully online classroom. The Forum papers on parent engagement and with vendor perspective indicate that efforts need to be improved to further develop parent capacity and ability for the demands of the online learning experience.
17. Smith, Ortiz, & Rice (in progress), Center forums, and Smith, Burdette, Cheatham, & Harvey (2016) reported parents often seek online environments as a last resort. The need for a change of placement is based on the negative aspects of the brick-and-mortar instructional experience. They report anxiety on the part of their child and the need to remove them from what is often perceived as an unsafe environment.
18. Smith (2016) conducted an analysis of six widely used online curriculums that developed digital lessons and related resources for students engaged in blended and fully online learning. These lessons represented content across the K-12 grade level, focusing on the four primary content areas, and did not include content or instruction on social emotional skills development or similar non-cognitive skill development.
19. Smith, Burdette, Cheatham, & Harvey (2016) found that parents were the decision makers in selecting the online experience, and although they offered mixed reviews of their satisfaction with virtual schooling, they were determined not to return to the problematic brick-and-mortar school for their son or daughter. Tindle, East, & Mellard (2016) report that online instruction focuses on the four primary academic or content areas. Smith's (2016) analysis of six widely used online content management systems found that all vendors focused on the four primary content areas, with none of the vendors, including supplemental or supportive digital materials, focusing on social skill building or social competence development.
20. In Smith, Burdette, Cheatham, & Harvey (2016) and Smith, Ortiz, & Rice (in progress) parents reported very limited student-to-student interaction. When synchro

nous group activities were planned, they were often optional. Attendees were also not required to turn on their video, and so much of the interaction was text-based (e.g., chat window) or audio-based.

21. Schall & McDonough (2010) found the negative impact of not having appropriate social skills, ranging from the inability to develop and maintain friendships to being ridiculed by peers, led to behavioral challenges, school removal, anxiety on the part of the individuals, and challenges in academic outcomes.

22. Bellini, Peters, Benner, & Hopf (2007) reported that limited social competence negatively impacts students' development, participation in the classroom, and leads to social isolation, enhancing anxiety, depression, and negative behaviors further limiting their involvement within the social demands of school and community environments.

23. Durlak, Weissberg, Dymnicki, & Schellinger's (2011) meta-analysis of social and emotional skill deficiency highlighted students' being ill-equipped for the social demands of the K-12 school environment described the associated challenges and the proven interventions. Weissberg and Cascarino's (2013) *Phi Delta Kappan* piece issued a call for the relevancy of social-emotional growth and the dire impact if left unaddressed in the overall development of students in the 21st-century classroom. Furthermore, the Newman and colleagues' report identified social competence and social emotional deficits as being a primary characteristic found across disabilities. If left unaddressed, they have negative long-term consequences for students as they transition across age groups and into postsecondary settings, including employment.

24. Billstedt, Gillberg, & Gillberg (2011) reported individuals with limited social competence are underemployed or not part of the work place. These individuals, while often intellectually capable, are not employed due to limited social competence. Reports indicated that they are often initially employed but not able to retain employment due to limited social skills and awareness of the social demands of the work environment.

25. Jones, Greenberg, & Crowley (2015) found in a 20-year longitudinal study direct relationships between social competence and success in postsecondary employment, independent living, and successful relationships with peers, family, and spouses. Smith's (in progress) study conducted across learning environments suggested students learn basic social skills in a virtual setting.

26. Smith's (in progress) study indicated that although there were no significant differences between Treatment 1 and 2, Condition 2 introduced a virtual coach along with the vendor-based social skill lessons. Both treatment groups showed a significant difference in their growth in comparison to business as usual.

27. Vasquez, Nagendran, Welch, Marino, Hughes, Koch, & Delisio (2015) conducted a meta-analysis of the current empirical literature on virtual reality as a practice for addressing social skill development. Their findings indicate significant impact when virtual reality is applied to social skill development. This study is further complimented by Lahiri, Bekele, Dohrmann, Warren, & Sarker's (2015) review of the literature on virtual and augmentative reality and its impact on social skill development. Ennis-Cole (2015) describes the use of various technologies used to support social skill development online, at a distance, and via face-to-face interventions.

28. Gresham & Elliott (2008) summarized the research findings that emphasize social competence as a primary indicator for school and postsecondary success for individuals with disabilities.

29. National Center on Learning Disabilities (2016) reported that students with learning disabilities increasingly are challenged with limited social competence, which impact their learning, attention, and overall learning outcomes.

30. Gresham and Elliott (2008) summarized the research findings that emphasize social competence as a primary indicator for school and postsecondary success for individuals with disabilities. Lorenzo, Pomares, & Lledó's (2013) meta-analysis of social skill development emphasizes that social skills are a learned skill and require explicit direct instruction, purposeful feedback, and direct practice in multiple environments to foster generalizations. Likewise, they require repeated practice in a safe environment that is oriented to the specific social competence goal.

31. Gresham and Elliott (2008) summarize the research findings that emphasize social competence as a primary indicator for school and postsecondary success for individuals with disabilities. Lorenzo, Pomares, & Lledó's (2013) meta-analysis of social skill development emphasizes that social skills are a learned skill and require explicit direct

instruction, purposeful feedback, and direct practice in multiple environments to foster generalizations. Likewise, they require repeated practice in a safe environment that is oriented to the specific social competence goal.

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Equity Matters Chapter 5

Promising Practices for Enhancing the Enrollment, Persistence, Progress, and Achievement of Students with Disabilities in Online Settings



“Investments for ‘student-facing instructional technologies’ nearly doubled from 2010 to 2013, with more growth expected in the future.”

– Bill and Melinda Gates Foundation

Focus Area #1: State Education Agencies

General Impressions

Technology is influencing education, as it has all walks of life, including business, industry, and even how we drive. Technology tools for education are rapidly expanding the ways in which educators are presenting, managing, and—most specifically—differentiating their instruction for learners of all abilities. Today’s technologies offer powerful capabilities for creating high-quality learning resources, such as capabilities for visualization, simulation, games, interactivity, intelligent tutoring, collaboration, assessment, and feedback. Advances in technology appear promising for how we improve educational outcomes; however, technology hardware and high-powered networks will not in and of themselves improve learning. High-quality learning resources and sound implementations are needed as well. State education agencies and local education agencies are challenged

to reevaluate their policies and practices in order to address these technology advances and to ensure their successful integration into elementary and secondary schools’ settings.¹

Large-scale analyses of students enrolled in online learning indicate that the number of K–12 students taking online courses has grown to number in the millions over the past decade. This increase in use and, to some degree, in demand for online courses has not come without considerable concerns. Teacher acceptance of, and skill in, the use of technology and digitally available course offerings has lagged behind that of students. Concerns about student retention linger, and educators continue to worry that online learning requires more effort than face-to-face instruction. As is well-known in the field, online learning in elementary and secondary settings may occur in full-time virtual schools, blended classrooms that combine digital learning with traditional classroom attendance, or be provided as supplemental coursework for credit recovery or unique courses not locally



offered. The rapid emergence of each of these online learning designs is requiring state education agencies to reevaluate approaches to teacher certification and professional development, student enrollment policies and reporting, parent involvement, and other time-honored practices. The involvement of students with disabilities (SWD) in online learning presents additional challenges to the development of state-level guidance, such as appropriate implementation and monitoring of the individual's IEP, the provisioning of appropriate information to teachers of online courses for SWD in online courses, and identification and delivery of appropriate accommodations for SWD. For a number of years, the Center on Online Learning and Students with Disabilities has been investigating factors that enhance or impede the enrollment, persistence, progress, and achievement of these students in online settings, and their impact on state education agencies and decision-makers.²

Recent research literature has found that academic achievement of students with disabilities has benefited

from online learning opportunities, particularly in the area of mathematics. A multi-year study of a blended learning district, in which students attended brick-and-mortar classrooms but completed the majority of their schoolwork online, found that students with disabilities performed at or above their non-disabled age-mates. This finding was similar to a large-scale study of student achievement in virtual charter schools, which noted that although special education students overall achieved at a significantly lower rate than their non-disabled peers, online charter school attendance reduced low self-esteem, low success rates, and thus overall negative impact for many students identified with disabilities. In a study that looked closely at factors accelerating or limiting achievement in online algebra courses, all students benefited from course designs that allowed for a high degree of individualization.³

For students with a variety of learning, scheduling, or preference needs (including those with disabilities or who are otherwise at risk for low academic per

formance), online learning offers a compelling alternative. With its potential to offer flexible scheduling; individual mentoring; safe communities in which to learn; and varied methods of teaching, curriculum delivery, and assessment; its flexibility and potential for “personalization” stands in contrast to the more rigid traditional brick-and-mortar options. The sections that follow review some important considerations for state education policy personnel.⁴

Considerations

Although success stories are reported for some students, including SWD, we must be cognizant that just because online learning *can* work does not mean online learning *will* work. As with traditional brick-and-mortar education, many high-quality online schools exist, and just as many fall short. Many online teachers are well-prepared for online instruction, while others are not. Many online courses are steeped in current pedagogy, while others are not. Determining which courses, schools, and instructional models are creating positive outcomes remains a challenge for all educators and policymakers, particularly for online providers because the opportunity for online coursework can attract students from across the entire nation and therefore has the potential to work at a larger scale than most physical schools. Currently, there is no collective census or management of these data.

In addition to the advantages of a powerful teaching environment provided by online instruction and supports, a tremendous potential exists for transforming education. How we put the power of the digital environment to best use is yet fully to be realized. In doing so, educators must consider all learners, as we have seen a full range of students participating at some level in online learning. To meet the needs of at-risk students, online learning environments must be designed with evidence-based strategies geared toward meeting their unique needs. However, there is a paucity of research regarding evidence-based practices in general and even less for students with disabilities, and this is a significant limitation.⁵

As media reports remind us, Internet assets have transformed us from a data-poor to a data-rich world.

The same is true in online educational environments. Rich data can be collected on all users—both students and educators. Yet, while an abundance of data is an advantage, massive data systems are not a solution. While available technologies can store data on the most minute information, down to each user’s click on a screen, collecting such data is only a requisite first step. The right data, however, can provide an evidential basis for making sound decisions when thoughtfully analyzed and interpreted. Sound decisions must be made at each step of a continuous, iterative improvement process to successfully guide refinements in online instruction. Without thoughtful data analysis and interpretation, reflection on the course, and on student progress, needed modifications to instruction or to the presentation of learning material is less meaningful and less accurate.⁶

Practice

The Center’s research and that of others identifies a number of elements that affect the progress of SWD and their persistence in an online course of study. These elements are (1) teacher preparation, and (2) support and students’ self-regulation skills.

Supporting Teachers

The exponential growth in K–12 online learning opportunities has placed expectations on teacher education programs to prepare future educators to teach in online and blended learning settings. Teaching in online environments requires skills, planning, and pacing that reflect a more remote reality than what exists in face-to-face instructional settings. Despite the fact that direct teacher/student interactions exist in blended classrooms, the addition of networked technologies for independent or small-group student work requires distinctly different instructional approaches. Educators working with SWD, in which online instruction and interactions are a part of the equation, need to be proficient in specialized instructional strategies—those specifically designed to address learner needs in an online context—prior to initiating online instruction. Both preservice teacher preparation programs and embedded professional learning need to include competencies based on professional standards for teaching SWD in settings that have an online component.⁷

With more schools offering virtual opportunities and more students considering this option, additional teachers are being hired to teach blended or fully virtual educational experiences. In many instances, teachers are not prepared for the demands of online curriculum and instruction, and on-the-job skill development becomes essential. For teachers working online, new skills are required. These skills include a working knowledge of strengths and limitations of the available technologies; balancing synchronous and asynchronous communication with individuals or groups of students; facility with different types of digital media; and an understanding of pacing, presentation, and timely response to student needs. Deficiencies that arise in any of these areas can have a detrimental effect on student engagement, and this detriment can become magnified when working to address the diverse needs of SWD. It is in these circumstances that state-sponsored professional development and/or policy resources and guidelines combined with local-level mentors can be most effective.⁸

To meet the needs of at-risk students, online learning environments must be designed with evidence-based strategies geared toward meeting their unique needs.

Supporting Student Self-Regulation

When asked their reasons for leaving school, students with disabilities report a dislike of school, not getting along with teachers, poor work habits, and a lack of belief that school was preparing them for future work. For many students, often a combination of multiple risk factors occurring over time caused them to leave school prior to graduation. Additional challenges included expectations in school and teaching procedures, such as tight regulations for attendance and tardiness, an abundance of outside class reading and writing requirements, too much lecture as instructional delivery, and intimidating expectations for collaboration. Further, since SWD leave school at a significantly higher rate than their non-disabled age-mates, research that suggests that the availability of technology-enhanced learning opportunities increases the engagement of these students and holds promise, by extension, for all learners. Despite the increased

potential for engaging struggling students, online learning also requires them to be more self-directed.⁹

One of the affordances of networked, online learning environments is the capacity of these systems to record the length of time a student spends on an activity or assignment and correlate that information with associated academic outcomes. While not exact, this information can provide one indication of student effort or persistence on a given task. Some online systems also prompt students to self-report on persistence-related items, such as their interest, effort, and understanding, in order to accumulate as much information as possible about the factors that increase or decrease student effort.¹⁰

The practice of embedding self-reporting functions in digital learning systems recognizes the expanded demand that independent online learning places on students' self-regulation skills and the potential of using the capabilities of an online system to support their growth. This is supported by research that found that design elements in successful

educational environments include the explicit teaching of self-regulatory behavior and includes embedded supports for the use of self-regulatory skills. State agency support to local school sites related to the use of systems that incorporate scaffolds for student self-regulation and practices that address these skills directly could support successful strategies for teaching in an online instructional environment and provide guidance that is not currently a part of teacher education or professional development.¹¹

Research

Recent studies show little evidence for the effectiveness of integrating technology into the learning process, despite continued advances in technology. The major issues of concern in relation to online instruction are evidence-based practices and appropriate teacher training. Unfortunately, as noted above, the lack of research on which change to support (partic



ularly for students with disabilities) creates multiple dilemmas for state department staff, local school district staff, parents, students, and other stakeholders. According to the Bill and Melinda Gates Foundation, investments for “student-facing instructional technologies” nearly doubled from 2010 to 2013—with more growth expected in the future.¹²

Available research has shown that teacher preparation for online and blended learning environments has a limited emphasis in preparing educators to be ready and able to address the needs of students with various disabilities and other learning needs (e.g., at-risk students). This lack of preparation has been evidenced in the disclosure of many online educators, who report little or no experience working with special populations of students in online settings.¹³

Some teachers are less able to support students with technology challenges, provide feedback in a timely manner, or, as in a traditional classroom, manage and provide a learning environment (be it face-to-face,

blended, or online) equipped to support all students. Additionally, in the scope of available courseware, educators have many options when they’re looking for adaptive digital curricula to personalize learning for math or English/language arts. But for those educators who want high-quality, adaptive offerings for science and social studies, options are much more limited.¹⁴

From the National Education Policy Center, some research considerations were summarized in their January 2016 publication regarding blended learning:

1. Education policy makers should continue to invest in technology but should be wary of advocacy promoting computerized instruction to an extent that oversteps current research during implementation.
2. Researchers should clearly distinguish among key systemic features of technologies in use. “Personalized Instruction” is too broad and vague an umbrella term to allow for meaningful evaluation or to guide policy.
3. Researchers should design studies focused on the

1. K–12 context because much available evidence to date has been extrapolated from studies done at the undergraduate and professional levels, where developmental and motivational factors differ.
2. Our field of education should promote more partnerships among developers, educational researchers, and teachers. Here, the potential is greater to produce evidence of what works and what doesn't, including studies that take into account various combinations of technical features, pedagogical approaches, implementation models, and student populations. The field of education should not rely on market forces alone to determine which systems are effective.¹⁵

Policy

Interestingly, correspondence schools or distance education programs were the start of online K–12 education. Initially, K–12 online learning was concentrated in state-run virtual and fully online charter schools with essentially no blended learning and very little district-level activity. Online learning was dominated by the virtual charter schools offering a fully online education to students, including state virtual schools offering supplemental online classes to students in states like Florida, Illinois, and Kentucky. During the past 15 years, the development of K–12 online learning has shifted to commercial sector deployments that transcend state boundaries, and, in many cases, highlight the inadequacy of state-specific education policies and protocols. For example, Florida's course choice program operates in conjunction with Florida Virtual School (now a global entity with commercial partners) and was the first state in the country to legislate that all K–12 students have full and part-time virtual options.¹⁶

The rapid expansion of online learning has resulted in inconsistent responses from state education agencies and legislatures in their attempts to simultaneously extend and oversee statewide supplemental course options, full-time virtual schools, and blended learning implementations. Consequently, in some states, students in all districts have access to a variety of providers of full-time and supplemental options, whereas in other states options are made available only to a

handful of students by their own districts. Two likely causes have contributed to this shift. First, in most states, individual districts, consortia, and commercial vendors have emerged as the dominant providers of online learning. Second, in many states, state-sponsored virtual schools have been underfunded or de-funded in recent years, resulting in insufficient capacity to meet demand.¹⁷

As the design, development, and delivery of elementary and secondary online learning has shifted from state to local and commercial initiatives, a number of states have struggled to adapt oversight procedures established for brick-and-mortar classrooms to the new reality. Enacted state policies have clustered around four factors: accountability, access, innovation and reform, and teacher preparedness. These policy categories have emerged as important for addressing equity and efficacy for all learners, especially for those with disabilities.¹⁸

As specified in the Every Student Succeeds Act (ESSA) (2015) and the National Educational Technology Plan (2016), Universal Design for Learning (UDL) can serve as a foundation for building and implementing responsive online learning environments. When these learning environments are UDL-based, they assume that students have widely variable learning needs. Effective UDL-based online learning is pro-actively designed to address instruction on an individual student basis by customizing features, such as the display of information, the sequence of instruction, the ways that students demonstrate mastery, and by offering an increased focus on self-regulation. State policies that encourage or enhance this approach help support the creation of responsive and flexible local learning environments and approaches.¹⁹

Focus Area #2 Local Education Agencies:

Students with Disabilities and Personalizing Learning

The term "Personalization" is currently a popular buzzword in education, and most definitions include references to outcomes, content, activities, pace, tools,

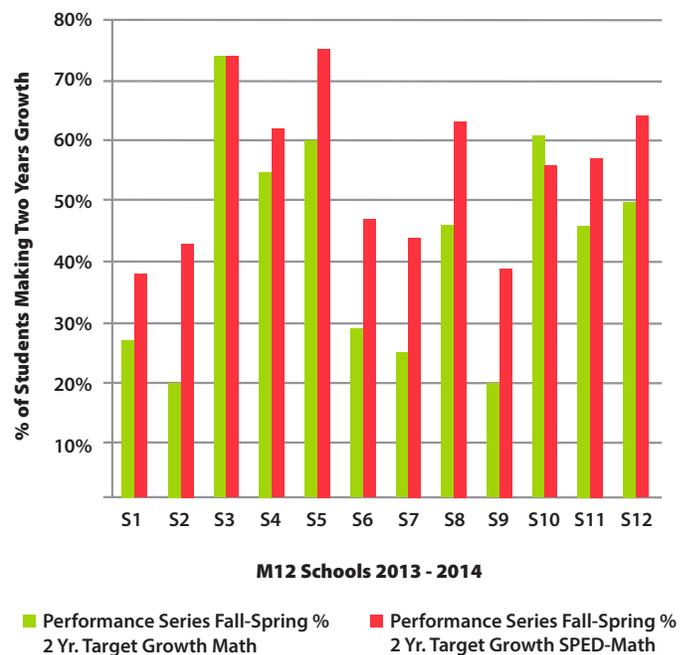
and supports optimized to the needs of each learner. Personalization is also generally associated with three key operational factors that make customizing instruction at the individual student level both possible and practical: 1) real-time student progress data provided by networked learning management systems that provide and record, 2) flexible opportunities for students to acquire and demonstrate, 3) competencies or proficiencies. What promise does personalization hold for students with disabilities, and what challenges exist for local education agencies desiring to implement this approach? An analysis of the key operational factors of personalized learning can provide a useful perspective.²⁰

Real-Time Student Progress Data

During the past decade, the growing prevalence of one-to-one devices and networked software in schools has been accompanied by a massive increase in the availability and impact of student data. A 2013 report from the International Association of K–12 Online Learning (iNACOL) references assessment data as the “most important element” of personalized learning and further notes that networked, digital technologies not only optimize this data collection but are essential to the process. For students with disabilities, the timely analysis and sharing of progress data is reported to be a critical factor in customizing interventions at the individual student level. A study of the Occupational Course of Study (OCS) program, offered through the North Carolina Virtual Public School (NCVPS), describes the OCS blended learning approach—online content-area courses augmented by local special education co-teachers—and notes that daily communication between the OCS general and special education teachers via spreadsheet or learning management system data review allows for addressing student learning issues in real time. This detailed daily access to the ups and downs of student learning trajectories is reported by all involved to be a unique and important factor contributing to the program’s success.²¹

In another example from the Center’s embedded research in an urban Midwestern school district, the personalization process (referred to district-wide as “student-centered learning”) relied on regular student

progress to promote a shift in the educational culture of the schools, with daily student data collection, progress monitoring, and weekly student/teacher conferencing as a part of the district’s classroom support structure. The graph below is a sample display of mathematics achievement data from 12 of the district’s schools (i.e., S1, S2, S3, ... S12) comparing mathematics achievement for students in general education and in special education against a two-year target growth benchmark. The achievement of the special education students met or exceeded that of their general education age-mates in all schools.



While access to daily or weekly student progress data was not the sole factor contributing to improved outcomes for students with disabilities, many school district staff believed that access to and use of students’ progress data was an important one. Without an accurate understanding of a student’s learning and achievement, how is it possible to guide them toward a future goal?²²

Center research found that continuous analysis of system usage data for informing educational practice in K–12 online learning is not yet the norm. Students working in online systems (full-time virtual, blended, or supplemental) now routinely generate daily progress information. Optimally, this information can be

used by both teachers and students to effect course corrections at the point of instruction; realistically, due to a lack of data interoperability (data systems that are not configured to share information, lack of time to analyze data, or other challenges), incorporating real-time data analysis into education practice requires significant changes to be made to existing education practice.²³

Flexible Opportunities

Additional factors important to personalized learning are the availability of information presented in multiple ways and flexible response opportunities for students to demonstrate knowledge and skill growth. The United States Department of Education, in the Higher Education Opportunity Act of 2008 and again throughout the Every Student Succeeds Act of 2015, supports the following educational practices:

- A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and
- (B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited-English proficient.

(HEOA, PL 110-315, SEC. 103(a)(24))

The flexibility in presentation, demonstration, and engagement included in these statutes reflect the core principles of Universal Design for Learning (UDL). In practice, UDL serves as a foundation for building and implementing personalized learning environments. Using the UDL Principles, Guidelines, and Checkpoints, these environments can be proactively and iteratively designed to integrate responsive instruction

on an individual student basis by customizing the display of information, the sequence of instruction, the ways that students demonstrate mastery, and by offering options that support student engagement.²⁴

While some personalized learning settings and system providers have anchored their practice in UDL (e.g., the OCS program in North Carolina, Desire2Learn/Virtual High School, and other state or district-based implementations), a recent Center study, *Invited In: Measuring UDL in Online Learning*, found that

the majority of vendor products reviewed—designed to address the learning needs of all students—had only minimal alignment with the UDL Guidelines. In the National Educational Technology plans of 2010 and 2016, UDL is identified as a foundation for building and implementing personalized learning environments. By incorporating the UDL framework, online environments can be proactively and iteratively designed to incorporate multiple opportunities for expression, representation, and engagement.²⁵

In traditional classroom environments, teachers monitor student engagement by interacting with students in face-to-face discussions,

asking questions to assess students' understanding, and observing students' behaviors. In personalized settings, this face-to-face interaction is, in many cases, drastically changed as students interact with digital content and delivery systems absent direct delivery by teachers. Teachers become facilitators; coordinating students, meeting and explicitly teaching in small groups or with individual students to support or scaffold learning content and application. Teachers within these settings require a deep understanding of the learning process, the associated variability of learning, technological knowledge and skills, an understanding of how to measure student progress, and the knowledge of how to retrieve and use data. Teachers could be relegated to the role of observers rather than

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facilitators who are unable to support students to the greatest extent possible, unless they have skills using technologies, including digital and blended learning tools.²⁶

Demonstrable Competencies

The expansion of competency (or proficiency) based education in elementary and secondary settings has gone hand-in-hand with the personalization movement. These systems challenge the educational status quo by replacing judgments based on a hypothetical “average” student’s performance; including seat time requirements, time-based assessments, in or out of grade-level achievement profiles, and summative assessments; with learner-centered mastery of critical skills.

Kindergarten	»»	Levels 1 and 2
Grade 1	»»	Levels 3 and 4
Grade 2	»»	Levels 5 and 6
Grade 3	»»	Levels 7 and 8
Grade 4	»»	Levels 9 and 10
Grade 5	»»	Levels 11 and 12
Grade 6	»»	Levels 13 and 14
Grade 7	»»	Levels 15 and 16
Grade 8	»»	Levels 17 and 18

Comparison of traditional grade placement with example of age-based levels in a competency-based system

The shift to a competency-based curriculum is often at odds with traditional grade-level student placements, since the latter generally confines student achievement opportunities to a discrete set of grade-level standards, while the former provides a much wider range of learning objectives that may span multiple grade levels. A competency-based system identifies a subset of skills that evidence indicates are associated with an academic standard, associates each skill with one or more rubrics that define competency in that area, and, in most cases, presents students with one or more pathways for acquiring skills and for demonstrating that achievement. In practice, most competency-based systems are paired with blended learning that allows

students to progress towards standards with a flexible pace and a flexible placement within the skills continuum. In other words, students are assumed to be highly variable and are not constrained to achieve within a grade-level equivalency but may evidence greater-than or less-than age-level achievement across all instructional areas.²⁷

For students with disabilities, a competency-based approach acknowledges and addresses what the evidence has indicated all along—that they may present wide variability in their academic achievement. For their non-disabled age-mates, a competency-based system establishes a focused personalization that was previously only available via an IEP. Competency-based systems, a hallmark of the personalization process, are based on an acknowledgement of both inclusion and learner variability. Individualizing education programs to address learner variability has been an expectation of educators working with students with disabilities for over 40 years. Personalized learning has the potential to expand that expectation to general education teachers and that focus to every student.²⁸

General Impressions

How to transition existing curricular practices—those involving standards, methods, materials, and assessments into more student-centered and responsive practices—involves the three components of a personalized learning system: 1) real-time progress data from a learning management system; 2) flexible opportunities for students; and, 3) the demonstration of competencies or proficiencies. Each function as key factors in ensuring cohesive personalized instructional practice. A 2010 symposium sponsored by state school superintendents, curriculum experts, and the educational software industry reaffirmed the critical need to disengage elementary and secondary education from an “industrial age model” that placed educational expectations within rigid time, place, learning path, and grade-level standards. Symposium participants advocated the widespread adoption of personalized learning that more clearly reflected current technological and research-based realities. The Every Student Succeeds Act of 2015 includes an opportunity for a limited number of states to pilot competency-based

models in both instruction and assessments in an effort to facilitate the development and implementation of personalized approaches.²⁹

Considerations

Practice

In blended learning—an online learning setting and the model position to provide personalized learning—students spend increased time in independent online work, combined with attendance and activities in a traditional brick-and-mortar setting. The expansion of independent student work that exists in the majority of these blended settings can provide teachers with the opportunity to personalize learning goals and pathways for each student, but these settings also require teachers to assume the roles of instructional designer and data analyst—roles for which they may not be totally prepared. Stakeholder-developed standards, such as the *iNACOL National Standards for Quality Online Teaching* (v2), provide rubrics and descriptions of teacher competencies (the “what” of good practice), while the collaborative general/special education structure adopted by North Carolina’s OCS program offers a strong example of how these competencies can be fostered and developed (the “how” of good practice).³⁰

For local education agencies, successful implementation of personalized learning depends on fostering students’ ability to take greater control of their learning. This framework requires giving them and the teachers who work with them timely access to progress and activity data and more flexible competency-based pathways aligned to clear objectives and standards. This shift in how learning occurs, in turn, precipitates the need for other changes: a curriculum designed to address learner variability, rethinking how students are grouped or placed, as well as rethinking how achievement is demonstrated and recorded. Overall, making the transition from traditional instructional practices to personalization will force major changes in the entire education system.³¹

Research

Nearly every researcher exploring the benefits and challenges of online learning for students with disabilities is calling for more research in this area. Because of its emphasis on learner variability and the growing adoption of Universal Design for Learning (UDL) as a framing paradigm, personalization is of particular interest to these researchers. The confluence of technology-enhanced instruction and progress monitoring, along with competency-based education and student-centeredness that are hallmarks of personalization, hold the potential for creating truly inclusive educational environments. Unknown variables exist across a variety of areas: the impact of social networks and peer collaborations, increased demands for student self-regulation and time management, and questions about which types of and how many demonstrations of mastery reflect authentic knowledge and skill acquisition. The personalization movement could benefit from a deeper evidence base in all of these areas.

Policy

The pilot programs related to personalized learning that are included in ESSA indicate the emerging federal support for exploring the potential of these systems to improve the process of elementary and secondary education by making it more student-centered. Beyond the support opportunities included in ESSA, many local education agencies are interested in or actively involved in implementing personalized learning. Policies that can support (or inhibit) these efforts exist at both the local and state levels. Grade-level placements, seat-time requirements, student grading and data systems, teacher certification and training, and other benchmarks of traditional education practice need to be reevaluated in the context of personalization. Perspective is critical to this process since true personalization is not simply an effort to reform what exists but an effort to re-imagine the entire education process. As a consequence, the multiple systems addressed in this chapter have to be engaged simultaneously. The potential is the creation of environments that are more responsive and inclusive of all learners, including those with disabilities.

Endnotes

1. Chan & Campisi (2014) report that technology-enhanced blended learning appears to offer an effective approach to combining evidence-based practices from traditional brick-and-mortar classrooms with the flexible affordances of networked learning and that the adoption of this model in elementary and secondary education settings is experiencing a precipitous increase.
2. Keeping Pace with K–12 Digital Learning estimates 2,254,000 elementary and secondary students are currently taking online courses in the U.S., and Dawson & Dana (2014) note that many teachers initiate online learning activities with little or no prior or embedded training or guidance. This factor is also reflected in the Center’s vendor reports (School Superintendent and State Leaders Forum). Drexler (2014) notes that some teachers are wary of the time involved in planning and structuring effective online learning and feel that the data collected by these systems may have a negative effect on their quality reviews.
3. Basham & Stahl (2014) document that the mathematics achievement of SWD in a student-centered blended learning system achieved parity with that of their non-disabled age-mates, and Woodworth, Raymond, Chirbas, Gonzalez, Negassi, Snow, & Van Donge (2015) have reported that the mathematics achievement of over 18,000 SWD across a sample of 166 virtual charter schools evidenced significant improvement on math measures in the online learning environment. Bakia, Mislevy, Heying, Patton, Singleton, & Krumm (2013) note that online algebra courses that incorporate designs based on Universal Design for Learning (UDL) were more appropriate and successful for SWD.
4. Cutri & Whiting (2015) review the importance of addressing multiculturalism and learner variability on the emotions and perspectives of both pre-service and in-service teachers and its impact on teacher practice and responsiveness. Dell, Dell, & Blackwell (2015) report how planning and implementing a Universal Design for Learning approach to online course design can address the unique needs of students with disabilities and offer increased options for all learners. From a similar perspective, Repetto, Cavanaugh, Wayer, & Liu (2010) review how the “6Cs” (completion, connection, climate, control, curriculum, and caring), when actualized in virtual school settings, have resulted in increased achievement and adjustment outcomes for students with disabilities.
5. Huerta, Shafer, Barbour, Miron, & Gulosino (2015) report 7.3% of students enrolled in virtual schools are SWD; Woodworth, Raymond, Chirbas, Gonzalez, Negassi, Snow, & Van Donge (2015), in a study of the demographics of students in online charter schools, report 11% are SWD. Repetto & Spitzer (2014), in an extensive review of research literature, note the absence of evidence-based practices within the already-limited research base associated with SWD and other at-risk learners in online learning settings.
6. Connell, Johnston, Hall, & Stahl, W. (2016) report on the potential for combining demographic, achievement, and system usage data to gain a more detailed composite picture of factors related to the progress of SWD in online settings and the existing challenges associated with comparing those data sets; Cator & Adams (2013) and the National Forum on Education Statistics (2015) both offer detail on the importance of fostering the establishment of integrated data systems in online learning environments in order to accurately measure the impact of educational interventions and practices on student achievement.
7. Archambault & Kennedy (2014) note that very few pre-service teacher preparation programs include any skill development associated with online learning. Dawley, Rice, & Hinck (2010) report that of 732 respondents to a non-random purposeful sampling of online teachers, 87% reported receiving job-embedded professional development, while only 12% of newly-appointed online teachers had received training in their post-secondary preparation; Repetto, Cavanaugh, Wayer, & Liu (2010) report improved student and teacher outcomes within schools that have implemented a well-structured and well-supported approach to online learning.
8. Dawley, Rice, & Hinck (2010) report from their survey of online teachers that the majority of the most helpful resources reported were those available on the job. Capdeferro & Romero (2010) report increased frustration among online learners when shared goals, procedures, and communication processes were absent or only randomly available in online education settings.
9. Darling-Hammond, Zielezinski, & Goldman (2014) report on the benefits of interactive computer-based activities for enhancing both student motivation and learning outcomes; Repetto & Spitzer (2014) note that online learning that incorporates evidence-based instructional practices increases positive outcomes for at-risk learners, including those students with disabilities. Repetto, Cavanaugh, Wayer, & Liu (2010) found that online options for school attendance could mitigate school dropping-out as an option for these students.
10. Participants in the Center’s Vendor Forum in November of 2015 all agreed that the student data generated by online systems could be uniquely beneficial to all concerned and discussed how each company was researching ways to support student effort and persistence by embedding targeted supports in their respective products.
11. Patrick, Kennedy, & Powell (2013) emphasize the importance of transparent progress and usage data being made available to both students and teachers as a means of highlighting and supporting student ownership of learning. Basham, Stahl, Hall, & Carter (2016)—in a multi-year study of a student-centered reform district—describe the positive academic impact of supporting teacher monitoring of all students, including those with disabilities and student self-regulation in learning. Zimmerman (2002) argues for the development self-regulation skills for all learners.
12. Enyedy (2014) notes the limited evidence basis for “personalized” learning since the definition varies from one study to another, and often any form of technology-enhanced instruction is used as a synonym for personalization. The author does acknowledge the potential benefits of personalization within blended learning classrooms. Chan & Campisi (2014) reference the continuing fragmentation of the EdTech marketplace and the lack of research explorations or evidence associated with the use of these products and practices on student achievement.
13. Dikkers, Lewis, & Whiteside (2015) note that any opportunities for developing online teaching skills are rare in teacher training programs and there is little evidence that any pre-service programs offering orientation to or skill development in online teaching includes SWD.
14. Davis (2016) reports that there are few computer-adaptive online instructional materials that cover content areas beyond English/Language Arts and math; Dawley, Rice, & Hinck (2010)—in a survey of online teachers with 830 respondents—note that the most prevalent content-area instruction was, in declining order, Mathematics, English/Language Arts, History/Social Sciences, and Science.
15. Enyedy (2014) notes that in the rapidly-changing and heavily-marketed landscape of online learning, educators need to distinguish between efficacy-associated evidence and marketing, with an understanding that access to technology alone is insufficient to guarantee successful student outcomes. Cavanaugh, Repetto, Wayer, & Spitzer (2013) detail the contextual systemic factors that have emerged for supporting the persistence of SWD engaged in online learning, noting that technology was used to make these factors easier to implement, acknowledge, and review, but did not itself emerge as a determinant.
16. Watson & Murin (2014) explore the transition of K–12 online learning from its roots in local initiatives offering adjunct courses to its present market-driven enterprise orientation, with the resulting policy and practice challenges that states have been required to respond. Barbour, Brown, Waters, Hoey, Hunt, Kennedy, & Trimm (2011) reported in an international study of K–12 online learning that governmental entities offer little guidance or policies that help local education agencies address learning online versus traditional brick-and-mortar settings.
17. Watson, Murin, Vashaw, Gemin, & Rapp (2013) document the precipitous rise of both blended learning and commercial investments in K–12 online learning and the challenges these changes have posed to state oversight, accountability, and reporting practices; Rice (2014) relates that despite the fact that hundreds of online learning bills were introduced in state legislatures in 2010–2013, fewer than 10% were enacted, with the majority of them focused on securing student data privacy rather than educational efficacy or oversight.
18. Rice (2014) identifies four policy factors as key components for states to establish both assurance and oversight guidance related to online learning and provides examples of strategies for instituting policies that are both sufficiently flexible for adapting to this rapidly-changing environment while remaining anchored in evidence-based education practice.
19. Maryland: Universal Design for Learning bill (HB 59/SB 467; Van Roekel, N. P. D. Universal Design for Learning (UDL): Making learning accessible and engaging for all students.; VA: http://www.doe.virginia.gov/special_ed/disabilities/universal_design_learning.shtml; NH: <http://education.nh.gov/news/udl.htm>

20. Wolf & Wolf (2010) reference timely progress monitoring, technology, and competency-based progressions as key personalization factors from a 2010 symposium hosted by The Software & Information Industry Association (SIIA), the Association of Supervision and Curriculum Development (ASCD), and the Council of Chief State School Officers (CCSSO), as do Patrick, Worthen, Frost, & Gentz, (2016) in Promising State Policies for Personalized Learning from the International Association for K–12 Online Learning (iNACOL), as well as many other stakeholders.

21. North Carolina Virtual Public School is the second largest state-sponsored virtual school in the United States, enrolling over 100,000 students, with approximately 15,000 course enrollments in the OCS program. Dikkers, Lewis, & Whiteside (2015) in “Blended Learning for Students with Disabilities: The North Carolina Virtual Public School’s Co-Teaching Model” emphasize the importance of timely student data in the North Carolina program for creating a shared understanding between the general and special education teachers who work with each student in the program.

22. Basham, Stahl, Hall, & Carter (2016) found that daily student usage and progress data provided by a district-wide networked personalized learning system gave students and teachers the capacity to make detailed targeted adjustments to academic objectives, to the expected pace of progress, and to areas that needed emphasis. These data proved essential to addressing a student’s IEP goals. Cator & Adams (2013) repeatedly acknowledge the important role played by real-time student progress data in establishing a longitudinal evidence basis for effective instructional practices and sustaining learning environments that are responsive to the variable needs of students.

23. Burdette, Greer, & Woods (2013) and Kim, et al. (2015) report that while timely access to student progress data is nearly universally viewed as desirable, few local education agencies and even fewer states have established systems that support data collection of this type. In addition, even if data were collected, few education agencies have the capability of analyzing them.

24. Bakia, Mislevy, Heying, Patton, Singleton, & Krumm (2013) identify UDL as a key framework for optimizing learning for all students in personalized environments; Dikkers, Lewis, & Whiteside (2015) report that in the “...NCVPS content area teachers design OCS courses with UDL in mind,” which helps support the overall responsiveness of that program to the needs of students with disabilities.

25. Smith (2016) reviewed more than 1,000 online lessons from a variety of vendors for UDL alignment, finding the highest connection to multiple representations of information with declining alignment in areas of action and expression and even less attention paid to supporting student engagement and persistence. These findings mirrored a previous exploration by Smith & Basham (2014). Cavanaugh, Repetto, Wayer, & Spitzer (2013) identify UDL as an effective approach for creating online environments to address the needs of students with disabilities.

26. Basham, Smith, Greer, & Marino (2013) note that the availability of learning technology itself is insufficient in the absence of informed teachers capable of exploiting its learning potential. Dawson & Dana (2014) found that few K–12 teachers engaged in online learning had undergone formal training or practical experiences, a finding that mirrored Center Forum findings from discussions with state and school leaders and vendors.

27. Steiner, Hamilton, Peet, & Pane (2015) report achievement findings from 32 schools deploying competency-based education that administered the Northwest Education Association Measures of Academic Progress (NWEA MAP) in reading and mathematics. These findings were compared, via a matched comparison group design, to the achievement of students in traditional classrooms. Personalized learning had a positive effect overall, with the lowest-achieving students evidencing the most gain. Vasquez & Serianni (2012) report that few studies focus on the impact of online instruction on students with disabilities, but those studies that do indicate options for multimedia access and expression and increased options for individualization boosted achievement.

28. Worthen & Pace (2014) detail the fundamental shift in instructional practice engendered by implementing a competency-based system and the potential for effectively addressing learner variability, as does Rice (2014).

29. Wolf & Wolf (2010) summarize the symposium’s findings and note widespread stakeholder support for investing in and exploring the merits of personalized learning (the 2015 ESSA authorization now includes funding opportunities for seven states to pilot competency-based systems); Patrick & Sturgis (2013) detail strategies for re-envisioning education within a student-centered, personalized education system; Worthen & Pace (2014) articulate a potential role for federal policy initiatives.

30. Archambault & Kennedy (2014) note that both teacher preparation and in-service programs have been slow to respond to the need for training educators in standards-aligned practices related to online learning; both Dikkers, Lewis, & Whiteside (2015) and Greer, Rowland, & Smith (2014) report that while promising models of teacher preparation for addressing the needs of students with disabilities in online environments exist, these practices are not widely disseminated.

31. Drexler (2014) notes that personalized systems require both teachers and learners to become adept at managing and exploiting networked digital learning environments, and teachers and administrators, in particular, need to be comfortable with co-developing learning pathways with students as those students gain decision-making capacity.

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Equity Matters Chapter 6

Challenges, Opportunities and Lingering Questions



Despite the efforts of COLSD researchers and that of others, it is difficult to obtain information about students with disabilities who are participating in online education ...

The staff of the Center on Online Learning and Students with Disabilities (COLSD) planned the *Equity Matters* publication as a means of compiling annual published research and other literature, providing field-based reviews, and monitoring current practice in the delivery of K-12 online education for students with disabilities.

The publication was intended in particular to report on the work occurring within COLSD itself. Since its inception in January 2012, COLSD and its partners, the Center for Research on Learning (CRL) at the University of Kansas, the Center for Applied Special Education Technology (CAST), and the National Association of State Directors of Special Education (NASDSE) have worked to address two perceived areas of need:

1) Determining the extent to which current online learning opportunities are available, accessible, and potentially effective in improving outcomes for children with disabilities.

2) Identifying promising approaches for improving the accessibility and potential effectiveness of online learning for children with disabilities.

The purpose of this chapter is to provide a broad summary of the ways in which those goals have been fulfilled. The chapter will revisit the highlights of last year's annual publication, summarize the highlights of this year's annual publication, and then address ongoing challenges and opportunities. The chapter concludes by posing several lingering questions around serving students with disabilities online.

Reviewing the 2015 Annual Publication

In alignment with the original goals of the project, the 2015 Annual Publication focused on learning if, when, and how students with disabilities participate in online learning and uncovering promising practices associated with teaching these students in online settings. With these goals in mind, researchers were



able to uncover research that students with disabilities were not prevented from participating in online learning and that coming into a fully online environment was often a choice parents made for social reasons instead of educational ones.¹

The 2015 Annual Publication also brought to light the substantial barriers to quality online education that students with disabilities faced. Among these barriers were that the collection and sharing of data about students with disabilities were limited and proprietary, that online educators struggled to reconceptualize and implement IDEA mandates, and that teachers spent much of their time monitoring student work instead of providing actual instruction. The state scan report also revealed that most states were unable to provide information about service delivery for students with disabilities in online environments. The reality was that most states simply were not making policies or providing information to stakeholders that addressed transition into, disability service during, and life beyond online coursework.²

Key Ideas from the 2016 Annual Publication

In this year's annual publication, COLSD researchers highlighted the implementation of online learning, instructional practices, curricular materials, and delivery systems relative to students with disabilities. In addition, this year's publication addressed critical issues of sustaining online teachers, the social development among students with disabilities completing coursework online, and the shifting roles of parents and teachers as they work to provide positive learning experiences for students and to accommodate disability. In terms of state-level policy for students with disabilities in online learning environments, little has changed from 2015 to 2016. This stasis is unfortunate because, as a result, (a) students with disabilities are still largely untracked within learning environments, (b) there is a lack of clarity how a student with a disability will be identified and served within many online environments, (c) parents are receiving little information on aspects of the online environment,

and (d) certification for online teachers (or some type of quality preparation with an accompanying credential) is still not occurring in most states.

Persistent Challenges

The staff at COLSD has found that nearly every state and district has its own unique policies. This uniqueness complicates gaining a deeper understanding of what constitutes successful practices and procedures in order to best serve students with disabilities and their families. Further, the comingling of for-profit education vendors and not-for-profit education service providers adds an additional layer of complexity wherein the delivery of educational support services to individual students may conflict with the need to maintain a profit margin. In addition, the very nature of the digital era lends itself to the development of products that not only provide educational content but also can deliver that content directly to the student. In short, the current system of online education is complex and highly changeable. These circumstances are difficult to navigate for all education stakeholders, including policy makers, researchers, practitioners, and parents. Two particular challenges to supporting students with disabilities in these environments are discussed here: counting the number of students with disabilities and holding programs accountable for instruction.

Determining Enrollment of Students with Disabilities in Online Learning Environments

Despite the efforts of COLSD researchers and that of others, it is difficult to obtain information about students with disabilities who are participating in online education in fully online, supplemental, credit recovery, and blended settings. For example, COLSD's efforts to capture student enrollment data revealed that most states and virtual schools are simply not collecting this type of student information. For schools or states that are collecting these data, it is often not stored in a way that enables easy retrieval for reporting purposes.

More detailed enrollment information is generally available at the local school level, but even locally, little distinction often exists between full-time virtual, blended or supplemental enrollments. This finding was confirmed in the 2016 COLSD State/Territory Policy Scan, in which COLSD researchers were unable to locate any state policies that specifically referenced blended learning initiatives. Pennsylvania and Florida were the only states that mentioned virtual schools in special education monitoring materials. To date, there are no federal reporting requirements asking states to document the extent to which students with disabilities are engaged in online learning settings. Few, if any, states compile these numbers for their entire student population. Without basic information like enrollment data, other data around student progress is also difficult to gather and analyze.

Paradoxically, this inability to provide hard numbers does not mean that local programs and teachers know who does and does not have a disability in a particular school. In fact, some do, and the students in that program are being served well. But it does mean that in far too many cases, data is separated into pockets that are not aggregable within computer systems. The fact that students with disabilities cannot be counted and reported on a large scale across schools, districts, and states raises questions about whether they are being served and to what extent. If schools and states are not monitoring these students' enrollment, progress, and outcomes, these entities lack critical information for determining how students with disabilities are performing in online learning environments.

Accountability for Instruction

Another question is how to improve the performance of students in online learning. Online teachers have reported that students with disabilities have a higher-than-average non-completion rate. Administrators have reported that students with disabilities are counseled out of online learning, usually because their learning and performance is poor. In one study of an online credit recovery program, having a disability was a demographic variable that predicted a low course grade. Making online learning a viable choice

for students with disabilities surely involves improvements in instruction and optimization of the data collected about students.³

Part of the accountability issue is that state-level educational policies for online learning for students with disabilities have been slow to develop. A majority of states have no policy in place to conform K-12 online learning to the requirements of IDEA. The 2016 COLSD State/Territory Policy Scan found that at least 75% of all states and territories analyzed had *Unclear*, *No with Evidence*, or *Nothing Found* in six of the nine items most closely aligned with IDEA foundational principles. The comparison between 2015 to 2016 COLSD State/Territory Policy Scan reveals no significant increase in online learning policy and guidance.

Nevertheless, the limited change in policy and guidance can be interpreted as an opportunity for states and local schools to reflect on ways to build policies that are inclusive and supportive of students with disabilities in digital learning environments. They might consider making use of COLSD’s state/territorial policy scans as a springboard for future professional development, policy development, monitoring, and research on online learning for students with disabilities.

For additional support, The Consortium on Inclusive Schooling Practices (CISP) has developed a policy framework that identified six policy areas, goals, and objectives that support an inclusive schooling perspective. These areas and goals are reflected in Table 1 (below). States and local schools can use this framework and adapt it to digital learning environments when working to build policy aligned with inclusive practices.⁴

Within these policy areas and goals, new opportunities are framed for online learning for students with disabilities that reflect common understandings about disability, online instruction, and the laws that protect individuals and families. These common understandings can then support united advocacy between schools, districts, and states.

New Opportunities

Education in the digital era has been characterized as an environment of rapid innovation, constant reinvention and approaches, and the evolution of school choice options. These circumstances have given rise to extreme variation in service delivery models. Although this variation has been admittedly difficult for planning well-specified and rigorous research projects, it may in fact represent tremendous opportunity to learn the conditions under which students with disabilities are adequately and, better yet, optimally served. In this spirit of innovation and expectation of redesign, perhaps the promises of IDEA can finally be fulfilled. In particular, the IDEA principles of least restrictive environment and meaningful parent involvement are two areas of great potential for improving the experiences of students with disabilities in online learning environments.⁵

Least Restrictive Environment in Online Learning

Federal laws stipulating that students with disabilities receive their education with peers without disabilities to the maximum extent appropriate present challenges in the context of online education. A fresh look at what it means to learn and flourish in the least restrictive environment is needed to create learning opportunities for students. In the past, an environment

TABLE 1: Policy Framework on Inclusive Schooling Practice from The Consortium on Schooling Practices

Policy Area	Policy Goal
Curriculum	High expectations and standards for achieving individual potential are reflected in the curriculum
Assessment	Measurable data are collected and analyzed for teaching and learning
Accountability	Responsibilities for student success are shared among all stakeholders
Personnel Training	Necessary training and tools are provided for all personnel
Funding	Educational dollars are maximized and dispersed equitably
Governance	Central leadership and support exist to sustain local control and responsibility

was thought to be more restrictive as students were removed from opportunities to interact with their peers and learn the same content as they were learning. In online learning, the possibility that *any* student, not just those with disabilities, has for working with peers is highly variable among and within programs. Further, as online platforms increase in their capacity to be truly personalized, it becomes less likely that *any* student will be learning the same content at the same time in the same way as another. Both of these circumstances make online learning, especially fully online learning, an area for new inquiry into what makes an online learning environment more or less restrictive.

In the course of these new discussions about the environments into which students with disabilities receive their education and the access to content they receive, new policies can begin to take shape not on the basis of whether the online environment is suitable for a student, but whether a *particular* online environment is suited to student strengths. Increasing equity will rely more than ever on good faith negotiations between stakeholders as disability service plans are developed, implemented, and evaluated.

The 2016 COLSD State/Territory Policy Scan identified eight states (Alabama, Florida, Kansas, Missouri, North Carolina, South Carolina, South Dakota, Vermont) that had developed clear policies indicating the necessity of a review of the IEP when students with disabilities enroll in a fully online or supplemental learning environments. More states should consider such a policy. In addition, COLSD researchers were unable to find guidance, checklists, or tools that could be used to determine how to identify student learning needs and environmental supports needed to be successful in the online environments. This omission will have to be filled in. Guidance documents and resources need to be developed that address these

issues. Additionally, COLSD researchers were unable to find state policies related to blended environments. Blended environments challenge the concept of least restrictive environments on two fronts: in the classroom *and* in the home, in which web-based learning is required there as well. In this frame, questions surface about who can change the restrictiveness of the environments—namely, teachers or parents—as well as when and how. Such conversations will bring about new moves toward the goal of participation in education as preparation for the students’ participation in society.

The work of this center has provided information that has the potential to make a difference in the hands of learners, educators, employers, and policy makers. Its long-term goals are to disseminate this research to the largest audience possible.

Parent Involvement in Online Learning

Another important component of IDEA is meaningful parental involvement in decision-making processes.⁶ This issue is important because historically, parents of children with disabilities have felt disempowered and/or left out of critical decisions. Parents generally report increased responsibilities when their children enter online learning environments, especially fully online ones because the home is the modal environmental setting in which students engage in their online education.⁷ These increased parental responsibilities include providing instruction, locating resources, monitoring progress,

structuring the school day, and providing praise and other types of emotional support. For parents who are embracing these new responsibilities, opportunities for meaningful partnerships with teachers are increasingly possible. In these partnerships, parents can participate in activities such as determining what curriculum students would be beneficial, what social skill development might be helpful, and what supports are needed as their children finish the course or leave it early for some reason.

School-to-parent communication via chat, text, Skype, and/or email regarding daily, weekly, and monthly stu

dent progress is providing new spaces that can foster a meaningful collaborative partnership between parents and school personnel. Many schools are making efforts to relay information to parents, but they are not always involving parents in decision-making processes about their own children or within the school. Parents could be involved in more central ways in the education of all of the students in the online school. Requests to participate will have to be organized by specific schools by specific teachers. Invitations take the form of attending IEP meetings, reviewing curricula, planning extracurricular activities, and recommending supplemental resources can be facilitated by the fact that virtual school personnel have a platform that lends itself to asynchronous communication. Finally, some parents of students with disabilities or other learning difficulties have come to the online environment because they are weary and/or wary of schools as an institution. Confronting those feelings and rekindling trust in education is a hurdle that most schools and individual teachers are going to have to clear in order to involve the parents and improve the educational experiences of students with disabilities.

One example of how virtual schools can leverage the wisdom and knowledge parents have of fully online learning environments comes from The Electronic Classroom of Tomorrow (ECOT) in Ohio.⁸ ECOT has a Parent Advisory committee that is involved in making academic and educational program decisions. In addition, ECOT involves parents by offering volunteer positions that include Parent Presenters and Parent Special Education Advisors. The ECOT model attends to many elements of Epstein's six types of parental involvement, which were based on research in traditional settings.⁹ It is not important to determine if the six types of involvement are "valid" or "replicable" in an online learning environment. It is important to use the framework as a set of guiding principles to determine where to begin conceptualizing ways for parents to be involved in the virtual schooling process beyond signing IEP documents and the work they do with their children to go through online course assignments. By conceptualizing and trying out various strategies, a set of activities that are generally successful could emerge.

Continuing Research

COLSD staff has spent the last five years documenting the state of online educational opportunities for students with disabilities. The work of this Center has provided information that has the potential to make a difference in the hands of learners, educators, employers, and policy makers. Its long-term goals are to disseminate this research to the largest audience possible.

However, several critical issues remain for researchers. The following is a list of research questions that are critical to answer in moving forward to improve the educational experience of students with disabilities and their families in online learning. These questions were designed broadly to incorporate understandings already gained in previous research, especially research that has been highlighted in other chapters of this annual publication and/or were prominent in the 2015 report. The questions were also written in ways that welcome research studies and approaches from multiple paradigms (quantitative, qualitative, and mixed methods). Within these questions, interested readers can identify numerous sub-questions that focus on specific stakeholders in specific settings.

1. How do educators (including parents acting in that role) recognize the boundaries among **individualization** (specially designed instruction, accommodations, and modifications built on IDEA safeguards), **personalization** (data-driven access to instruction), and **differentiation** (teacher-mediated adjustments during curriculum delivery) and enact them in online learning environments for students with disabilities?
2. How do various types of **teacher preparation experiences** (coursework and practica focused on serving students with disabilities) facilitate online teacher induction and promote both teacher retention and effectiveness?
3. How do **strategies for instructing students with disabilities** have to shift or alter in order to be efficacious in various online learning settings (fully online, blended, and supplemental)?



4. How can parents, teachers, and others involved in directly working with students with disabilities **equitably divide responsibilities for planning, implementing, and evaluating instruction** for these students?
5. How can parents, teachers, and others involved in directly working with students with disabilities promote and support **gradual learner autonomy in students while transitioning into, throughout, and out of online courses** in online settings (fully online, blended, and supplemental)?

As we learn the answers to these questions, we will see more clearly what policies are needed in order to facilitate students with disabilities' success in online learning environments.¹⁰

Conclusion

Across the country, online learning opportunities continue to increase. The 2016 COLSD State/Territory Policy Scan found that 80% of the states and territories surveyed had at least one fully online school in operation.¹¹ This change is an increase of two additional states from 2015. Furthermore, over 50% of the states and territories surveyed have state-sponsored online entities in operation. The increasing option to enter an online learning environment suggests that parents will continue to have the choice to enroll their children in online learning and that they will continue to need support in making the experience successful.

Chapter 2 of this year's annual publication highlighted the need to make informed policy decisions at the state and local level. To do so acknowledges the existence of online learning as a viable educational option for students with disabilities and the need to grant greater access to resources and support.¹² Chap

ter 3 discussed what researchers had learned about instruction that was both embedded in the curriculum as web-based programs and what teachers were providing via small group and individual tutoring. The chapter also reviewed research on teacher preparation and support and drew out the need for such preparation and subsequent development that was targeted to serving students with disabilities. Chapter 4 discussed the role shifts that various stakeholders have been making and outlined the concomitant responsibilities that accompany these new roles as seen through the eyes of these stakeholders. Understanding these shifts demonstrates why guidance is important—so that people know what they can do within their role and see what other stakeholders can do within their roles.

Moving forward into the future, we hope that online learning environments can achieve their potential to become places in which all K-12 students can learn what they need to know to live optimally significant lives.

Finally, Chapter 5 discussed the responsibilities of local and state educational agencies in recruiting students with disabilities in online learning coursework and in supporting their persistence. The chapter addresses the fact that online learning grew rapidly in a context in which students with disabilities were not an initial population considered in program and instructional design. The authors suggest ways to both retrofit what has been developed to support students with disabilities and ways to move forward more cautiously in designing environments that, from the outset, take learners with exceptionalities into account. Moving forward into the future, we hope that online learning environments can achieve their potential to become places in which all K-12 students can learn what they need to know to live optimally significant lives.

Endnotes

1. Beck, Egalite, & Maranto (2014) asked parents of students with disabilities why they chose online environments, and most said they were concerned about bullying; however, educational quality was also a factor. Many also reported disagreements with traditional school staff. Parents of students with disabilities reported higher levels of satisfaction with the online school in this study than parents of students without disabilities.

2. Burdette, Greer, & Woods (2014) reported findings from a survey of state directors of special education that highlighted concerns over data collection and application of IDEA principles. Rice & Carter (2015) found that teachers spent substantial amounts of time monitoring students with disabilities and enlisting parents as co-monitors to make sure that students make progress in the course.

3. Rice & Carter (2015) and Carter & Rice (2016) reported educator's challenges in enrolling and maintaining students in fully virtual online learning environments; Deshler, Rice, & Greer found that having a disability predicted low course grade percentages in one learning environment.

4. Roach et. al (2002) discussed the Consortium on Inclusive Schooling Practice efforts in policy surrounding training and technical assistance. The study was designed to follow the effectiveness of the inclusive schooling perspective policy framework.

5. Horn & Staker (2011) discussed the introduction and importance of blended learning in the modern classroom in comparison to strictly fully online learning environments. The study finds that as technology develops, teaching methods are modified to include digital tools. Horn & Staker conclude that education will continue to reform as the implementation of blended learning increases.

6. Both IDEA 2004 and P.L. 108-446 stipulate that parents of children with disabilities must be involved developing disability plans. Morningstar, Turnbull, & Turnbull (1995) conducted research on parent and family involvement in transition and outlined the ways in which families can contribute to positioning an individual with a disability for success outside of school.

7. Fishman & Nickerson (2015) surveyed parents of students with disabilities and found that the only factor that made a difference in involving parents who normally were less involved in schooling was for a teacher to offer a specific invitation to assist with or attend a particular activity. Bernstein (2013) highlighted the legal implications of charter schools who actively discourage parents of children with complex and difficult to accommodate disabilities from attending.

8. The Electronic Classroom of Tomorrow offers involvement in the Parent Advisory Committee to parents of students enrolled in the Ohio Virtual School. More information is available at <https://www.ecotohio.org/Info/ParentAdvisoryCommittee>

9. Epstein, Coates, Salinas, Sanders, & Simon (2005) suggested Six Types of Parental Involvement. These involvements include (1) parenting, (2) communicating, (3) volunteering, (4) learning at home, (5) decision making, and (6) collaborating with community.

10. Ferdig & Kennedy (2014) compiled the *Handbook of Research on K-12 Online and Blended Learning* as a resource for findings in the online education research field as well as to provide a wide audience with a resource that contains common findings across the online education research field. These questions also reflect many of the concerns articulated by chapter authors in that handbook.

11. Dobrovolny et. al (2015) investigated the rapid changes occurring within online education and include information such as available programs, enrollment numbers,

and state policy surrounding the delivery of digital education. There is also an emphasis on state-provided virtual schools and supplemental courses. Woodworth et. al (2015) released the *Online Charter School Study* in order to provide stakeholders with statistics on student growth within online charter schools. The study investigated the services available to students with disabilities enrolled in online charter schools and how their performances were impacted based on available services. Ahn (2016) conducted a comprehensive study on the logistics of virtual charter schools, including demographics, outcomes, student test results, and overall school performance. The study focused on Ohio virtual charter schools' performance.

12. Basham et. al (2016), through the 2016 COLSD State/Territory Policy Scan, surveyed the 55 states and territories in search of policies surrounding online education. Fully online options have become increasingly available across states and territories, as is evident when comparing 2015 and 2016 State/Territory Policy Scan data. The scan also focused on special education delivery in the online setting.

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Equity Matters Appendix A

Glossary

Accessibility

In the context of technology, accessibility refers to providing access for all users, including students with disabilities, to digital environments and tools. Designing digital materials and delivery systems to support the use of audio-only screen readers, text browsers, and other adaptive technologies; offering contrasting colors for readability; and providing alternative text tags for graphics are examples of accessibility. The Office of Civil Rights, U. S. Department of Education has issued a “significant guidance document” detailing the responsibility of elementary and secondary schools to meet accessibility requirements under both civil rights and special education law.¹

Accommodations

Accommodations, modifications, and other services for students with disabilities are legally protected when included in a highly structured Individualized Education Plan (IEP) or a more flexible plan created under Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act. An IEP is developed and implemented as a requirement of Special Education, and a 504 plan is developed and implemented by the educational institution to address civil rights mandates.²

Blended Learning

“A formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace; at least in part in a supervised brick-and-mortar location away from home; and the modalities along each student’s learning path within a course or subject are connected to provide an integrated learning experience.”³

Child Find

Child find is the legal requirement that schools identify children with disabilities who may be entitled to special education services. This requirement covers children from birth through age 21. This identification process allows schools to evaluate students.⁴

Children’s Online Privacy Protection Act (COPPA)

“COPPA imposes certain requirements on operators of websites or online services directed to children under 13 years of age, and on operators of other websites or online services that have actual knowledge that they are collecting personal information online from a child under 13 years of age.”⁵

Competency/Proficiency-Based Learning

In this curricular structure, students’ progress is based on mastery of successive goals. Students are often grouped by age and/or proficiency levels—not by grades—and movement through a course of study is based on evidence-based skills or knowledge learning, not seat time.

Digital Delivery Systems

Content management or learning management utilities that display, provide access to, or otherwise render digital materials for students’ use. Most of these systems require an individual student login via username/password or unique student identification number, and record and display student usage and achievement data.

Digital Learning

Use of digital technology to support learning. The use of this term is context-free, including the type of technology, environment, pedagogy, instructional design, and learner-interaction with the material, technology, or environment. Digital learning includes but is not limited to online, blended, or personalized learning. Digital learning would also encompass non-online environments that are simply focused on integrating digital technologies to support learning.

Digital Materials

Electronic textbooks, workbooks, activities, simulations, assessments, and other components of the elementary and secondary school curriculum made available to students via computer, tablet, or mobile devices.

Due Process/Procedural Safeguards

Compliance with the procedural requirements of the IDEA to ensure processes for parents regarding timelines for actions, receiving notice of changes, expressing disagreements with program recommendations, and resolving disputes through mediation or a fair hearing.

Family Educational Rights and Privacy Act (FERPA)

“The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records.”⁶

Free Appropriate Public Education (FAPE)

Development and delivery of an Individualized Education Program (IEP) of special education services that confers meaningful educational benefit and that meets State Education Authority (SEA) standards.

Full-time Online Learning

When students are primarily taking all academic classes in online environments. This type of learning generally takes place in virtual schools or what are referred to as fully online schools.

Individual Education Program (IEP)

According to the Individuals with Disabilities in Education Act (1997), an IEP is a statement of measurable annual goals, including academic and functional goals designed to meet the child’s needs, that result from the child’s disability to enable the child to be involved in and make progress in the general education curriculum; and meet each of the child’s other educational needs that result from the child’s disabilities. (Sections 300.320(a)(2)(i)(A) and (B)).

Individuals with Disabilities Education Act (IDEA)

The Individuals With Disabilities Education Act (IDEA) Amendments of 1997 (P.L. 105-17) established parameters for services provided in an educational setting. Part B of the document indicated that eligibility for services required that the impairment “adversely impacts educational performance.”

Least Restrictive Environment (LRE)

Education of students with disabilities with their nondisabled peers to the maximum extent appropriate.

Online Learning

Education in which instruction, content, and learning are mediated primarily by network technologies such as the Internet.

Parent Participation

Collaboration with parents in children’s individualized educational program development and implementation.⁷

Personalized Learning

An approach in which the instructional approach, outcomes, content, activities, pace, tools, and supports are customized for each learner’s needs. Personalized learning takes advantage of the real-time progress monitoring capacity of many digital delivery systems to provide timely (e.g., daily, weekly), actionable updates on student learning and/or achievement through a course of study. Many personalized learning settings also follow a competency or proficiency-based instructional design.

Protection in Evaluation for Services

Installment of assessment processes to determine if a student has a disability protected under IDEA and if he/she needs special education services.

Section 504

“Section 504 of the Rehabilitation Act of 1973 protects the rights of persons with handicaps in programs and activities that receive Federal financial assistance. Section 504 protects the rights not only of individuals with visible disabilities but also those with disabilities that may not be apparent.”⁸

Supplemental Online Learning

When students are enrolled in an online environment to supplement another primary learning environment. An example would be someone taking a course in Mandarin Chinese or object-oriented programming online rather than in a face-to-face classroom environment because the local school does not offer the course.

Universal Design for Learning (UDL)

A scientifically-based framework that is focused on supporting the variability of every learner through proactive and iterative design that integrates multiple means of engagement, representation of information, and action and expression of understanding. UDLcenter.org.

Zero Reject

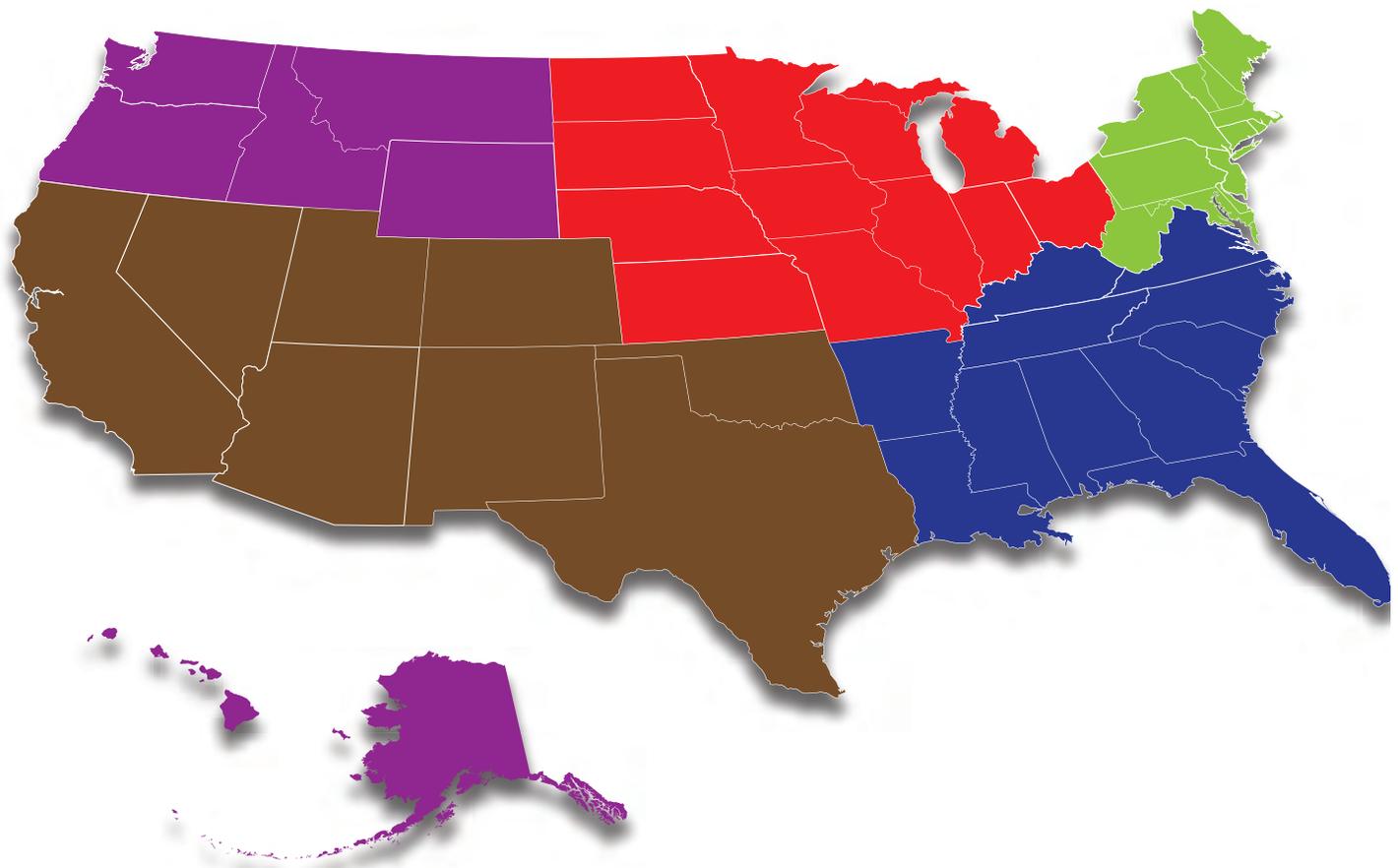
Responsibility of school officials to locate, identify, and provide special education services to all eligible students with disabilities.

Endnotes

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Equity Matters Appendix B

State and Territory Scans



Scan Legend

NORTHEAST

Connecticut
 Delaware
 Maine
 Maryland
 Massachusetts
 New Hampshire
 New Jersey
 New York
 Pennsylvania
 Rhode Island
 Vermont
 West Virginia

SOUTHEAST

Alabama
 Arkansas
 Florida
 Georgia
 Kentucky
 Louisiana
 Mississippi

North Carolina
 South Carolina
 Tennessee
 Virginia

MIDWEST

Iowa
 Illinois
 Indiana
 Kansas
 Michigan
 Minnesota
 Missouri
 Nebraska
 North Dakota
 Ohio
 South Dakota
 Wisconsin

NORTHWEST

Alaska
 Hawaii
 Idaho

Montana
 Oregon
 Washington
 Wyoming

SOUTHWEST

Arizona
 California
 Colorado
 Nevada
 New Mexico
 Oklahoma
 Texas
 Utah

TERRITORIES

District of Columbia
 Guam
 U.S. Virgin Islands
 Northern Mariana Islands
 American Samoa

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Alabama

The majority of the online learning activity in Alabama is provided through Alabama Connecting Classrooms, Educators, and Students Statewide (ACCESS), a state sponsored supplemental program for blended learning environments.¹ “Essentially all the online education activity in Alabama is through the state virtual school, ACCESS Distance Learning.”²

In 2015, Alabama passed a law stating, “before the 2016-2017 school year, each local board of education shall adopt a policy providing, at a minimum, a virtual education option for eligible students in grades nine to 12, inclusive, beginning with that school year. Any virtual school operating in this state that provides educational services to public school students shall comply with this act.”³

According to the ACCESS Policy Manual for Teachers, applicants must meet background checks, have classroom experience in the area being taught, be certified in Alabama, highly qualified in the content area being taught, or be faculty from an accredited institution of higher education.⁴ Alabama does not currently have an initial teaching licensure and/or endorsement in the area of online, blended, or digital learning.

Alabama provides teachers with a list of professional development options for online instructors, including Moodle Course Management System, Developing Online Learning Communities, and Becoming a Competent Online Facilitator.⁵ In addition, Alabama is recognizing the growing need to provide professional development to online instructors working with students with disabilities. Courses such as Special Students in Regular Classrooms: Technology, Teaching Universal Design are available to practitioners.⁶ ACCESS also provides a resource page that includes a virtual library, Alex, which is an educational resource web portal providing video archives of previous lessons, SAS Curriculum Pathways, and other resources.

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6. Alabama Department of Education. (n.d.). Special Students in Regular Classrooms: Technology, Teaching and Universal Design Course Syllabus. Retrieved from <http://elearning.alsde.edu/EDU4407pop.htm>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	Unclear*

* - State officials disagree with the Center’s findings on this question.



Alaska

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

The Alaska Learning Network (AKLN) was the state virtual school from 2011-2015. In the summer of 2016, funding for the AKLN was discontinued by the legislature.¹ Other online options are available to students from outside vendors, such as K12 Inc.²

Alaska does not require initial teacher licensure or endorsement in the area of online, blended, or digital learning for online instructors.

Alaska's Department of Education links to the Alaska Statewide Mentor Project, which has professional development for teachers through a series of online resources. The Mentor Project posts videos specifically aimed at supporting teachers' professional development.³ This project does include resources for teachers working directly with students with disabilities. However, the mentor project does not provide professional development for teachers in the area of online, blended, or digital learning.

* - State officials disagree with the Center's findings on this question.

1. Alaska's Learning Network. (2016). Retrieved from <http://www.aklearn.net/>.
 2. K12. (2016). Participating Schools in Alaska. Retrieved from <http://www.k12.com/participating-schools.html?state=alaska>.
 3. University of Alaska. (2008). Alaska Statewide Mentor Project Videos. Retrieved from <http://videos.alaskamentorproject.org/index.php?Vid-Cat=SPED>.



Arizona

Arizona has many fully online options and supplemental programs.¹ The Arizona Department of Education website supports online instruction by providing a centralized location for K-12 online programs and course offerings.²

Arizona does not have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

Arizona has made digital learning a priority for professional development topics for the state's teachers. Some of the past training topics included:

- Digital Tools for Digital Learners Webinar Series: Going Interactive with Thinglink
- Productivity Tools Webinar Series: Digital Classroom Collaboration with Lino Collaborate
- Chrome Extensions for Struggling Students
- Productivity Tools in the Classroom Series: Evernote part 1³

COLSD reviewers were unable to determine if Arizona professional development included topics on digital learning and students with disabilities.

No change in 2016

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2. Arizona Department of Education. (2016). Arizona Online Instruction. Retrieved from <http://www.azed.gov/innovativelearning/azonlineinstruction/>.

3. Arizona Department of Education. (n.d.). SIT Archived Webinars. Retrieved from https://docs.google.com/spreadsheets/d/1oqe9wjXirHqfv-jqZ8ybTTYQQf4ugmnrz_BCMLI7rr3s/edit#gid=0.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Arkansas

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Arkansas offers fully online school options through the Arkansas Virtual Academy, which operates as a charter school. The program is provided by K12 Inc.¹ Arkansas's state-sponsored school, Virtual Arkansas, is not a fully online school but supplements the public school districts with online course options.² This partnership between Virtual Arkansas and the local education agency (LEA) preserves the district's ability to issue credits and diplomas to students.

After a review of Arkansas Department of Education Teacher Competencies and Arkansas Department of Education Additional Licensure Plans, COLSD reviewers did not find an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

The Internet Delivered Education for Arkansas Schools site has a professional development course catalog with 16 available courses under the subject area of Technology such as "Planning Video Production" and "Introduction to Prezi."³ However, it is unclear the extent to which these courses apply to the online, blended, or digital learning context.⁴ COLSD reviewers were able to find professional development offerings through Virtual Arkansas for new course facilitators. No professional development courses were found pertaining to students with disabilities in online, digital, or blended learning environments.

1. K12. (2016). Retrieved from http://my.info.k12.com/Q214_All.html?st=ar&vendor=ef&leadsource=sem&product=ARVA&utm_medium=sem&utm_campaign=AR%3A+Arkansas+Local+-+Brand&utm_term=&ad_group=Arkansas+Virtual+Academy&lead_source_detail=Microsoft+Bing+Ads&keyword_match=&cf_id=VdsjsQAABT9Tw2Op:20150905212141:s
2. Virtual Arkansas. (2016). Retrieved from <http://www.virtualarkansas.org/home.html>
3. Arkansas Department of Education. (2016). Arkansas IDEAS Course Catalog. Retrieved from http://ideas.actn.org/course_catalog?
4. IDEAS: Internet Delivered Education for Arkansas Schools. (2016). Retrieved from <http://ideas.actn.org/>

* - State officials disagree with the Center's findings on this question.



California

There are fully online programs available in California, but there are no state administered virtual schools.¹ Students may still access online courses, but they are provided through school districts or district partners.²

California does not require teacher licensure for online, digital, or blended learning environments.³

The California Department of Education does offer various types of professional development through the CCSS Professional Learning Modules for Educators,⁴ and there are few available resources that mention online, blended, or digital learning environments, such as “CUE Video Collection” and “Math Star.”⁵ The few resources that do mention online, blended, or digital learning environments do not mention students with disabilities.⁶

There are no changes in 2016

1. California Virtual Academies (2016). Powered by K12. Retrieved from <http://cava.k12.com/>
 2. “California does not have a state virtual school and students have access to supplemental online courses only if those courses are offered by their district or a district partner.” Dobrovolny, J., Edwards, D., Friend, B., & Harrington, C. (2015). Keeping Pace with K12 Digital Learning. The Evergreen Education Group. Retrieved from <http://www.kpk12.com/>
 3. California Department of Education. (2016). Credential Requirements. Retrieved from <http://www.ctc.ca.gov/credentials/requirements.html> (Retrieved June 24, 2015)
 4. California Department of Education. (2016). CCSS Professional Learning Modules for Educators. Retrieved from <http://www.cde.ca.gov/re/cc/ccssplm.asp>
 5. Digital Chalkboard. (2016). “CUE Video Collection” and “Math Star”. Retrieved from <https://www.mydigitalchalkboard.org/portal/default/Content/ContentBrowser>
 6. Digital Chalkboard. (2016). Retrieved from <https://www.mydigitalchalkboard.org/portal/default/Content/>

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No With Evidence

* - State officials disagree with the Center’s findings on this question.



Colorado

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence*
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Yes with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear*
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.

The Colorado Department of Education operates a supplemental program, Colorado Online Learning (COL), to provide online courses. In order to register for a course with COL, students are required to be enrolled in their local school.¹ In addition, the Colorado Department of Education makes online schools and programs available to students across the state through full-time education schools and programs.² Colorado defines online full-time education schools and programs as being able to deliver a sequential program that is either synchronous or asynchronous instruction under the supervision of a certified teacher. This allows the student to exercise "choice over time, place, and path, and teacher-guided modality of learning."³ In addition, Colorado defines a supplemental online program as "one or more online courses to students to augment an educational program provided by a school district, charter school, or the Office of Blended and Online Learning," and lists four supplemental options in addition to Colorado Online Learning.⁴

Colorado does not currently have an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

Colorado has an online list of available professional development opportunities. The Colorado Office of Blended and Online Learning's Technical Assistance website also provides technical assistance and professional development, including a webinar series on best practices in online and blended learning settings.⁵ The COLSD staff could not determine if the technical assistance and professional development initiatives include considerations for students with disabilities.

1. Colorado Online Learning. (2016). Retrieved from <https://col.desire-2learn.com>.

2. Colorado Department of Education. (2016). Online Schools and Programs. Retrieved from <http://www.cde.state.co.us/onlinelearning/schools>.

3. Colorado Department of Education. (2016). Online Schools and Programs. Retrieved from <http://www.cde.state.co.us/onlinelearning/schools>.

4. Colorado Department of Education. (2016). Supplemental Online Learning <http://www.cde.state.co.us/onlinelearning/supplementalonlinelearning>

5. Colorado Department of Education. (2016). Technical Assistance. Retrieved from <http://www.cde.state.co.us/onlinelearning/events>.



Connecticut

Connecticut does not have a full time public option for students. Students are encouraged to pursue options in Vermont.¹

Connecticut does not have an initial teaching certification or endorsement in the area of online, blended, or digital learning.

The Connecticut State Department of Education website lists professional development trainers and contractors, but COLSD reviewers were unable to find actual professional development materials posted online.²

No change in 2016

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

1. Vermont Virtual Learning Cooperative. (2016). Welcome Out of State Students. Retrieved from <http://www.vvlc.org/students/out-of-state-students/>.

2. Connecticut State Department of Education. (2015). Professional Development Providers. Retrieved from <http://www.sde.ct.gov/sde/cwp/view.asp?a=2613&q=321398>.

* - State officials disagree with the Center's findings on this question.



Delaware

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	No With Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Delaware does offer fully online learning options but the state does not sponsor an online school.¹

Delaware does not currently have an initial teaching licensure or endorsement in the area of online, blended, or digital learning.

The Delaware Department of Education provides a course for teachers to better utilize digital learning in classrooms. The course, Blended Learning Utilizing Schoology, is a four-week course that focuses on teacher development in the use of technology in the classroom.² Course goals include exploring different models of blended learning, how to use digital tools, blended learning assessment design, and classroom management strategies. Course completion will mark teachers' understanding of the benefits of blended learning and effective ways to implement digital tools in the classroom. There is no mention of students with disabilities within this course.

* - State officials disagree with the Center's findings on this question.

1. K12. (2016). Delaware. Retrieved from <http://www.k12.com/schoolfinder.delaware.html>.

2. Blended Learning Utilizing Schoology. (n.d.). Delaware Department of Education. Retrieved from http://www.dcet.k12.de.us/elearning/Blended_Learning_Utilizing_Schoology_Course_Overview.pdf.



Florida

Florida provides provisions for K-12 students seeking online learning options. Florida makes full- and part-time online learning available through district programs as well as through Florida's state-sponsored entity, the Florida Virtual School (FLVS).¹

Florida does not currently require FLVS teachers to attain an initial teaching certification or endorsement in the area of online, blended, or digital learning. "FLVS is able to consider candidates with both professional and temporary Florida teaching certificates."² Candidates applying from out-of-state must obtain a reciprocal teaching certificate from the Florida Department of Education.³

FLVS offers professional development course offerings that include a "Teaching Online Series." Courses include:

- Teaching in an Online Learning Model
- Teaching in a Blended Learning Model
- Advanced Strategies for Online or Blended Instruction
- Teaching Literacy Strategies in an Online or Blended Learning Model
- Teaching Strategies in a Digital Environment⁴

COLSD reviewers found two courses, "Exceptional Student Education In A Virtual World" and "Applying Florida's Planning and Problem-Solving Process (Using RtI Data) in Virtual Settings,"⁵ that provide online teachers with additional perspectives when working with students with disabilities in the online learning environment.⁶

No change in 2016

1. Keeping Pace. (2014). Florida. Retrieved from <http://www.kpk12.com/states/florida/>.

2. Florida Virtual School. (2016). Teaching at FLVS. Retrieved from <http://jobs.flvs.net/teaching-at-flvs>.

3. Florida Virtual School. (2016). Teaching at FLVS. Retrieved from <http://jobs.flvs.net/teaching-at-flvs>.

4. Florida Virtual School. (2016). Global Professional Development Catalog. Retrieved from http://www.flvsglobal.net/wp-content/uploads/FLVS_Global_Professional_Development_Catalog.pdf.

5. Florida's Multi-Tiered System of Supports. (n.d.). Applying Florida's Planning and Problem-Solving Process (Using RtI Data) in Virtual Settings. Retrieved from http://www.florida-rti.org/_docs/MTSS_and_Virtual.pdf.

6. Florida Virtual School. (2016). Global Professional Development Catalog. Retrieved from http://www.flvsglobal.net/wp-content/uploads/FLVS_Global_Professional_Development_Catalog.pdf.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Yes with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes With Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Yes with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No With Evidence

* - State officials disagree with the Center's findings on this question.



Georgia

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Unclear
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No With Evidence

Georgia has three fully online schools and the Georgia Virtual School (GAVS,) a program sponsored by the Georgia Department of Education's Office of Technology Services. GAVS offers middle school and high school level courses in partnership with schools across Georgia.¹

Georgia offers a professional online teaching endorsement. Although teachers applying to GAVS are not required to hold the online teaching endorsement, applicants must complete the Effective Online Teaching course to be considered for employment.²

GAVS offers professional development opportunities for teachers, including the Badges program. The GAVS Badges program provides a means for teachers to track and expand their professional learning. The Teaching Online Open Learning (TOOL) badge requires teachers to demonstrate a series of skills for effective online teaching including using digital tools to support students with special needs.³

The Georgia Department of Education website provides a list of resources for teachers. Resources include ways to integrate apps for students with disabilities in the classroom and iPad and iPod resources that cater to the needs of students with disabilities.⁴

1. Georgia Virtual School. (2016). Retrieved from <http://gavirtualschool.org/>.

2. Georgia Virtual School. (2016). Employment at Georgia Virtual School. Retrieved from <http://www.gavirtualschool.org/Educators/Opportunities.aspx>.

3. TOOL. (n.d.). Effective Online Teaching. Retrieved from <https://www.openteachertraining.org/skills/>.

4. Georgia Department of Education. (2015). Professional Learning. Retrieved from <https://www.georgiastandards.org/Learning/Pages/default.aspx>.

* - State officials disagree with the Center's findings on this question.



Hawaii

Hawaii has several part-time options for online schools. Hawaii's state sponsored school, Hawaii Virtual Learning Network (HVLN), provides a variety of online courses and support to expand blended programs, educational resources, and consultation to schools.¹

Hawaii does not currently offer an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

HVLN provides technology related professional development for instructors in interactive whiteboards; VoiceThread; online course facilitation, and Microsoft products, (e.g., Excel, Word, and Powerpoint).²

COLSD reviewers searched the special education page and the HVLN page and were unable to locate professional development resources that are specific to online learning and students with disabilities.

1. Hawaii State Department of Education. (n.d.). Virtual Learning Network. Retrieved from <http://www.hawaiipublicschools.org/TeachingAndLearning/EducationInnovation/VirtualLearningNetwork/Pages/home.aspx>.
 2. Hawaii Virtual Learning Network. (n.d.). Technology Integration Staff Development Workshops. Retrieved from <http://demo2.ambrosio.org/>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Idaho

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Unclear
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	No with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Idaho provides students with online education options¹ including access to the state virtual school, fully online schools, and district programs. Idaho's state virtual school, Idaho Digital Learning Academy (IDLA), partners with local districts to provide full and part-time online options for students across the state.²

Idaho has an Online Teacher Endorsement that requires an eight-week online teaching internship and that participants study online teaching and learning in order to demonstrate knowledge skills as defined in the Idaho Standards for Online Teachers.³ COLSD reviewers were unable to find evidence confirming that the online teaching endorsement includes competencies in online learning and students with disabilities.

The Idaho Digital Learning Academy posts professional development options on its website. Topics for blended teachers include understanding blended learning models, approaches and strategies; redesigning a course for a blended format; introduction to the BrainHoney LMS; and designing and developing a blended course.⁴ Additional professional development topics include digital citizenship, social networking, designing a virtual field trip, mobile devices for learning, and cell phones as learning tools.⁵ COLSD reviewers were not able to locate professional development resources that included digital learning and students with disabilities.

* - State officials disagree with the Center's findings on this question.

1. Keeping Pace. (2013). Idaho. Retrieved from <http://www.kpk12.com/states/idaho/>.
2. Idaho Digital Learning. (2016). About Us. Retrieved from <http://www.idahodigitalllearning.org/AboutUs.aspx>.
3. Idaho State Board of Education. (2010). Online Teacher Endorsement, Pre-K-12. Retrieved from <https://www.sde.idaho.gov/cert-psc/shared/forms/B14-Online-Endorsement.doc>.
4. Idaho Digital Learning. (2016). Blended Learning. Retrieved from <http://www.idahodigitalllearning.org/Educators/BlendedLearning/Training.aspx>.
5. Idaho Digital Learning. (2016). Blended Learning. Retrieved from <http://www.idahodigitalllearning.org/Educators/BlendedLearning/Training.aspx>.



Illinois

Illinois school districts have developed full- and part-time online learning programs and the Illinois Department of Education sponsors the Illinois Virtual School (IVS), a supplemental program for students in grades 5-12.¹

Instructors interested in teaching for IVS must complete the online course “Teaching Online 101: Teaching in an Online Learning Model”² before their application for teaching is accepted. The application process also may include IVS Learning Management System or Course System training and System Information System training. No special licensure or endorsement is required (at this time) to teach online in Illinois.

IVS offers professional development opportunities to learn more about online learning as well as teaching in the online or blended learning environment. IVS does not have professional development courses targeted for support of students with disabilities. Below is a partial list of courses offered.

- Moving to Mobile Learning
- Creativity in the Mobile Classroom
- Introduction to Online Learning
- Teaching in a Blended Learning Model
- Introduction to Online Learning
- Teaching in a Blended Learning Model
- Teaching Online 101: Teaching in an Online Learning Model
- Teaching Online 102: Advanced Strategies for Online or Blended Instructors
- Collaboration in the Digital Classroom
- Bringing Mobile Learning into the Classroom
- Designing Blended Learning³

No change in 2016

1. K12. (2016). All Participating Schools in Illinois. Retrieved from <http://www.k12.com/participating-schools.html?state=illinois>.

2. Illinois Virtual School. (2015). Employment Opportunities. Retrieved from <http://www.ilvirtual.org/about/employment.cfm>.

3. Illinois Virtual School. (2015). Professional Development. Retrieved from <http://www.ilvirtual.org/pd/index.cfm>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear*
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



Indiana

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found*
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Indiana has multiple fully online schools, but there are no state sponsored virtual schools.¹

Though there are standards for virtual instruction², there are no requirements for teacher licensure or endorsements in the areas of online, digital, or blended learning.³

Indiana does offer Virtual Professional Development aimed towards special education⁴, but it is unclear whether there are additional trainings for teachers working with students with disabilities in online classrooms. Some of the available trainings include "Support for Struggling Readers and Writers Blog"⁵ and "2015 Summer of eLearning Map."⁶

No changes in 2016

1. Keeping Pace. (2013). Indiana. Retrieved from <http://www.kpk12.com/states/indiana/>.
2. Indiana Department of Education. (2012). Indiana Content Standards for Educators: Virtual Instruction. Retrieved from <http://www.doe.in.gov/sites/default/files/licensing/virtual-instruction-standards-final.pdf>.
3. Indiana Department of Education. (2016). Office of Educator Effectiveness and Licensing. Retrieved from <http://www.doe.in.gov/licensing>.
4. Indiana Department of Education. (2016). Virtual Professional Development. Retrieved from <http://www.doe.in.gov/specialed/virtual-professional-development>.
5. Indiana Department of Education. (2013). eLearning: Support for Struggling Readers and Writers Blog. Retrieved from <http://indianadld.blogspot.com/search/label/special%20education>.
6. Indiana Department of Education. (2015). Summer of eLearning Map. Retrieved from <http://www.doe.in.gov/elearning/2015-summer-clearing-map>.

* - State officials disagree with the Center's findings on this question.



Iowa

The State of Iowa supports online learning through Iowa Learning Online and Iowa Online AP (Advanced Placement) Academy. Iowa Learning Online is designed to expand local school districts by offering online courses to high school students.¹ The Iowa Online AP Academy offers advanced placement college course work through Apex, the online learning provider.² In addition to the two state sponsored virtual schools, Iowa has at least two fully online schools.³

All courses are taught by qualified teachers. Iowa does not currently have initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

Iowa provides ongoing professional learning experiences partially through Intel® Teach:⁴

Teaching with Technology: Tools 1&2

Teaching with Technology: Tool 3”

Assessment in 21st Century Classrooms

Educational Leadership for the 21st Century

COLSD staff were unable to locate professional development and/or technical assistance initiatives in online, blended, or digital learning that mention students with disabilities. However, applications included on the ILO page that can increase student access to online instructors and learning coaches include Zoom for Videoconferencing and Voicethread.⁵

No change in 2016

1. Iowa Learning Online. (2016). Online Learning Opportunities for Iowa High School Students. Retrieved from <http://iowalearningonline.org/>.

2. University of Iowa College of Education. (2013). About Iowa Online AP Academy (IOAPA). Retrieved from <http://www2.education.uiowa.edu/belinblank/Students/ioapa/About.aspx>.

3. Iowa Connections Academy. (2016). K-12 Online Public School in Iowa. Retrieved from <http://www.connectionsacademy.com/iowa-online-school/home.aspx>.

Iowa Virtual Academy. (2016). Retrieved from <http://iava.k12.com/>.

4. Iowa Department of Education. (2012). Intel Teach Program. Retrieved from http://educate-old.iowa.gov/index.php?option=com_content&view=article&id=2161.

5. Iowa Learning Online. (2016). Resources. Retrieved from <http://www.iowalearningonline.org/resources.cfm#guidance>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



Kansas

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Unclear
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Unclear

Kansas does not have a state virtual school, but has an approval process for the state's digital programs, many of which are fully online.¹ Kansas's virtual education requirements state that, "a. Kansas licensed/certified teachers must be employed to provide instruction, assistance and support to students. b. Teachers must be licensed/certified in their content area."² Currently Kansas has no requirements for initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

Kansas provides practitioners with a unique professional development opportunity through the Infinitect project.³ This ongoing project provides professional learning in the uses of technology in the classroom and has been an ongoing initiative in Kansas for the past ten years. COLSD reviewers were unable to locate professional development for online, blended, or digital learning environments that included working with the unique needs of students with disabilities.

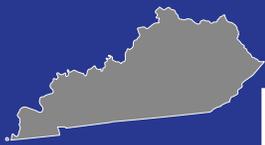
No change in 2016

* - State officials disagree with the Center's findings on this question.

1. K12. (2016). Kansas. Retrieved from <http://www.kpk12.com/states/kansas/>.

2. Kansas State Board of Education. (2008). Virtual Education Requirements for Kansas. Retrieved from <http://www.ksde.org/Portals/0/TLA/Graduation%20and%20School%20Choice/Virtual/Virtual%20Education%20Requirements%20in%20Kansas.pdf>.

3. Infinitect. (2015). Retrieved from <http://www.myinfinitect.org>.



Kentucky

The Kentucky Department of Education (KDE) does not operate an online school, but both Barren Academy of Virtual and Expanded Learning (BAVEL) and Jefferson County Public e-School (JCPSeSchool) are operated by public school districts in the Commonwealth of Kentucky, and KDE provides oversight of those districts¹

Kentucky does not have an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

KDE's Office of Next Generation Schools and Districts, Division of Student Success, offered professional development and technical assistance for online, blended, and digital learning in more than 28 districts during the 2014-15 school year, as well as regional professional development, according to Kentucky's response to the COLSD survey.

However, COLSD reviewers found that KDE's professional development page did not list professional development to support online or digital learning skills for teachers.

No change in 2016

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence*
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Unclear
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

1. See state comment within state scan.

* - State officials disagree with the Center's findings on this question.



Louisiana

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Louisiana offers fully online schools, including online charter schools.¹ The Louisiana Supplemental Course Academy (SCA) is a state-sponsored entity that offers supplemental online high school courses. SCA does not offer a fully online option to students. High school courses supplemented by SCA target “career and technical preparation, advanced coursework not available at the home school, dual enrollment, and intensive remediation for students struggling to stay on pace for graduation.”²

Louisiana does not currently have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

Tools and professional development resources are available for teachers to upgrade their skills in online, blended, or digital learning, and ways to work with students with disabilities.³ Topics such as using free Internet sites to support accommodations and lesson development—as well as using an Apple mobile device to support modifying instruction—are included.⁴

1. Keeping Pace. (2013). Louisiana. Retrieved from <http://www.kpk12.com/states/louisiana/>.

2. Department of Education. (n.d.). Supplemental Course Academy. Retrieved from <http://www.louisianabelieves.com/courses/supplemental-course-academy>.

3. Louisiana Department of Education. (2016). Online Registration System. Retrieved from <http://www.solutionwhere.com/ldoe/cw/CourseByCateg.asp>.

4. Louisiana Department of Education. (2016). Learning to use an Apple Mobile Device. Retrieved from <http://www.solutionwhere.com/ldoe/cw/showcourse.asp?3181>.

Louisiana Department of Education. (2016). Low Tech Make & Take. Retrieved from <http://www.solutionwhere.com/ldoe/cw/showcourse.asp?1425>.

* - State officials disagree with the Center's findings on this question.



Maine

Maine's two fully online charter schools are the Maine Connections Academy and Maine Virtual Academy.¹ The schools are managed or delivered with state oversight and are funded with state subsidy funds. A state charter school committee oversees the charter schools' programs. The schools also receive federal funds and are subject to state monitoring of their compliance with IDEA and state regulations. The Maine Online Learning Program (MOLP) requires that all online learning providers are approved by the Maine Department of Education.²

According to Maine's application for online learning providers, teachers must hold valid a teaching certificate in the content area that aligns with the online course they will be teaching. Teachers must also receive preservice and in-service professional development that includes topics pertaining to class management, technical aspects of online education, monitoring students' assessment, and other training.³

In addition, the Maine Learning Technology Initiative (MLTI) hopes to increase the uses and advantages of technology by equipping students with personal learning technology and increasing the amount of professional development available to teachers in the areas of online, blended, and digital learning.⁴

MLTI has begun to include courses such as Students with Special Needs Using MLTI and Universal Design for Learning as awareness increases for the need to understand how to better serve students with disabilities in the digital learning environment.⁵

No change in 2016

1. Maine Connections Academy. (2016). About Our Online School in Maine. Retrieved from <http://www.connectionsacademy.com/maine-virtual-school/about>.

2. Maine Department of Education. (2007). Maine Online Learning Program. Retrieved from <http://www.maine.gov/education/technology/molp/>.

3. Maine Department of Education. (n.d.) Application for approved status as an online learning provider. Retrieved from <http://www.maine.gov/education/technology/molp/application.pdf>.

4. Maine Learning Technology Initiative. (2009). About MLTI. Retrieved from <http://maine.gov/mlti/about/index.shtml>.

5. Maine Learning Technology Initiative. (2012). Supporting Students with Special Needs Using MLTI and Universal Design for Learning Workshops. Retrieved from <http://www.maine.gov/tools/whatsnew/index.php?topic=MLTIPD&id=436653&v=Calendar>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Maryland

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence*
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.

The Maryland State Department of Education manages The Maryland Virtual Learning Opportunities Program (MVLO), an online course delivery program.¹ Maryland also requires that the Maryland State Department of Education (MSDE) approves all online courses in order for students to receive high school credit. "Students may take a course through Maryland Virtual School (MVS) only with the permission of the local system and the school principal. Credit can only be awarded for MSDE-approved online courses."²

Teachers are not currently required to hold a certification or endorsement in the area of online, blended, or digital learning.

MDSE does offer professional development options in the area of digital learning, including:

- Learn to Blog
- The Connected Educator: Learning and Leading in the Digital Age
- Introduction to Social Media
- Creating a Social Media Presence
- The Edcamp Model
- Digital Learning in the Elementary Classroom³

Additionally, the Maryland Department of Special Education and The John Hopkins University Center for Technology in Education are collaborating on a grant-funded initiative that strives to create professional development training for teachers using technology to teach students with disabilities.⁴ In addition, Maryland Learning Links include the "Tech it Out" video series and articles describing IDEA compliance. These initiatives focus on bringing technology into the classroom and managing IDEA compliance.

1. Maryland Virtual Learning Opportunities. (n.d.). Welcome to Maryland Virtual Learning Opportunities. Retrieved from <http://mdk12online.org>.

2. Maryland Virtual Learning Opportunities. (n.d.). Welcome to Maryland Virtual Learning Opportunities. Retrieved from <http://mdk12online.org>.

3. Maryland State Department of Education. (2015). Maryland Professional Learning. Retrieved from https://msde.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_552_1&content_id=_68190_1.

4. Maryland Learning Links. (n.d.). Retrieved from <https://marylandlearninglinks.org>.



Massachusetts

The Massachusetts Department of Elementary and Secondary Education has an Office of Digital Learning dedicated to providing information and resources to stakeholders. The site articulates three types of public school arrangements that could qualify to be Commonwealth of Massachusetts Virtual Schools (CMVS). These types of schools include a statewide CMVS “that can only be sponsored by an educational collaborative or a school district.”¹ This type of CMVS must be able to serve students across Massachusetts. A CMVS can also be formed through a collaborative or multi-district agreement. Students served by this type of arrangement must reside in one of the member districts.² A single district can form a CMVS that is allowed only to serve students residing in that district.³ Currently two CMVSs are approved and provide fully online options for qualifying students.⁴

Massachusetts’ teacher license types and general requirements do not include online, blended, and digital learning.

The Office of Digital Learning provides digital learning tools including PBS LearningMedia, Federal Registry for Educational Excellence, and Out of Print: Reimagining the K-12 Textbook in the Digital Age.⁵ In addition, professional learning resources are available to support the development of digital literacy in the K-12 classroom setting.

COLSD reviewers identified two professional development courses that are built to equip teachers with competencies needed to work with students with disabilities in the digital learning environment: Assistive Technology and UDL: The Tools that Facilitate Learning Technology for Students with Visual Impairments and Multiple Disabilities⁶

No change in 2016*

1. Massachusetts Department of Elementary and Secondary Education. (2016). Office of Digital Learning. Retrieved from <http://www.doe.mass.edu/odl/cmvs/>.

2. Massachusetts Department of Elementary and Secondary Education. (2016). Office of Digital Learning. Retrieved from <http://www.doe.mass.edu/odl/cmvs/>.

3. Massachusetts Department of Elementary and Secondary Education. (2016). Office of Digital Learning. Retrieved from <http://www.doe.mass.edu/odl/cmvs/>.

4. Massachusetts Department of Elementary and Secondary Education. (2016). Office of Digital Learning FAQ. Retrieved from <http://www.doe.mass.edu/odl/cmvs/faq.html?faq=ParentsStudents>.

5. Massachusetts Department of Elementary and Secondary Education. (2016). Office of Digital Learning. Retrieved from <http://www.doe.mass.edu/odl/cmvs/>.

6. Massachusetts Department of Elementary and Secondary Education: Office of Digital Learning. (2016). ESE-Sponsored PD Offerings. Retrieved from <http://www.doe.mass.edu/pd/offers.html>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence*
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	Unclear*

* - State officials disagree with the Center’s findings on this question.



Michigan

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence*
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence*

Michigan currently has 10 Public School Academy (PSA) Cyber Schools and several other fully online programs at the individual district level. In addition, the Michigan Virtual School (MVS) provides supplemental online course offerings to Michigan students. MVS does not attach credit or award diplomas, but students do earn a certificate of completion from the local school district in which they are currently enrolled.¹

Michigan offers a teaching endorsement in the area of Educational Technology. This endorsement requires teachers to "Successfully complete and reflect upon collaborative online learning experiences; demonstrate an understanding of and the ability to create an online learning experience and demonstrate continued growth in technology operations and concepts, including strategies for teaching and learning in an online environment."² COLSD reviewers were unable to determine if this endorsement includes the skills needed to work with students with disabilities.

Michigan provides professional development listings on the MVU website. The listing includes the inaugural iEducator 21st Century Digital Learning Corps that offers "extensive professional development in online and blended learning, attendance and presentation opportunities at leading edge state and national conferences, mentoring by an experienced MVS® educator."³ None of the available professional development courses mention students with disabilities in online, blended, or digital learning settings.

1. Michigan Virtual School. (2016). Getting Started with Online Learning. Retrieved from <http://www.mivhs.org/Getting-Started>.

2. Michigan State Board of Education. (2008). Standards for the Preparation of Teachers: Educational Technology. Retrieved from www.michigan.gov/documents/mde/EducTech_NP_SBEApprvl.5-13-08.A_236954_7.doc.

3. Michigan Virtual School. (2015). First-of-its-kind program prepares new teachers for 21st century teaching. Retrieved from <http://www.mivhs.org/News/ID/301/First-of-its-kind-program-prepares-new-teachers-for-21st-century-teaching>.

* - State officials disagree with the Center's findings on this question.



Minnesota

Minnesota offers several fully online education options that include charter schools and a number of single- and multi-district programs.¹ In addition, the Minnesota Learning Commons (MnLC), a joint initiative between the Minnesota Department of Education and Minnesota State Colleges and Universities, provides a centralized portal for online resources, educational opportunities, and tools.²

The MnLC features the Open Education Resources project that provides resources and rubrics to share for public education.³

Minnesota does not currently have an initial teacher licensure or endorsement in online, blended, and digital learning.

The Minnesota Department of Education does provide professional development in the area of digital learning for students with disabilities:

- Apps to Support a Successful Transition
- Go-To-Training — iPad Tips, Tricks and Apps Everyone Should KnowSM
- Accessible Instructional Materials (AIM) — Are your materials accessible?
- Google Chrome as Assistive Technology
- Browser Based Assistive Technology
- EReader Apps
- Accessibility in a Bring Your Own Device Environment
- Jigs and Gadgets: DIY Assistive Technology
- Accessibility tools in Microsoft Word and PowerPoint
- Alternative Access to Mobile Devices⁴

No change in 2016

1. Minnesota Department of Education. (2015). Online Learning Providers. Retrieved from <http://education.state.mn.us/MDE/StuSuc/EnrollChoice/Online/OnlineLearningProviders/004409>.
 2. Minnesota Learning Commons. (2015). About Us. Retrieved from <https://mnlearningcommons.us/app/custom/about>.
 3. Minnesota Learning Commons. (2015). Open Education Resources Project. Retrieved from https://mnlearningcommons.us/app/custom/project/Open_Education_Resources.
 4. Minnesota Department of Education. (2014-2015). Special Education Webinars. Retrieved from http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=057904&RevisionSelectionMethod=latestReleased&Rendition=primary.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Unclear
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Unclear
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Mississippi

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

The Mississippi Virtual Public School (MVPS) is the primary online learning option for Mississippi students.¹ It is not a fully online program, but a supplemental program to brick-and-mortar education. MVPS is run by a private provider, Connections Academy.² Some district online programs are also available in Mississippi, but there are no virtual charter schools in the state.³

Mississippi does not have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

Mississippi has a professional development calendar posted, but COLSD reviewers were unable to locate resources or programs in the area of online, blended, or digital learning for students with disabilities.⁴

No changes in 2016

1. Mississippi Department of Education. (2016). Mississippi Virtual Public School. Retrieved from <http://www.mde.k12.ms.us/PN/VPS>.

2. Mississippi Virtual Public School. (2016). Retrieved from <http://www.connectionsacademy.com/mississippi-school/home.aspx>.

3. Keeping Pace. (2013). Mississippi. Retrieved from <http://www.kpk12.com/states/mississippi/>.

4. Mississippi Department of Education. (2016). MDE Calendar. Retrieved from <https://districtaccess.mde.k12.ms.us/Lists/MDE%20PD%20Calendar/calendar.aspx>.

* - State officials disagree with the Center's findings on this question.



Missouri

The Missouri Virtual Instruction Program is a state sponsored school that offers 150 different online courses.¹ Missouri also has part-time and full-time online options for Missouri students in other schools such as the Missouri Department of Education Online MU High School.²

Missouri does not have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

The Missouri Department of Education offers professional development that focuses on technology use in the classroom. The Tech-n-Tools for Math workshop gives teachers the opportunity to learn about blended learning in the classroom through the use of digital tools.³ The workshop aligns with Missouri Teacher Standards and covers classroom management techniques, the use of instructional materials, and technology and media tools.

COLSD reviewers were unable to find professional development in the areas of online, blended, or digital learning and students with disabilities.

1. Missouri Department of Education. (2014). Guidance and Counseling Services Digest, 12(1). Retrieved from <https://dese.mo.gov/sites/default/files/guid-digest-school-year-2014-15.pdf>.
 2. Missouri K-12 Online. (2014). Program Options. Retrieved from http://mizzouk12online.missouri.edu/?page_id=1177.
 3. Frontline Education. (2016). Tech-n-Tools for Math (Grades 3-5). Retrieved from https://www.mylearningplan.com/WebReg/catalog.asp?D=11005&M=&Term=tech-n-tools&btn_View=Search&StartDate=06%2F23%2F2016&EndDate=11%2F30%2F2017&Page=1.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Montana

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

The Montana Digital Academy (MTDA) is a state-funded, tuition-free statewide program, with supplemental courses available to students. No fully online options are offered.¹ The MTDA is the only online program that offers statewide online learning services.²

Montana does not have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

COLSD reviewers were unable to locate professional development in the area of online, blended, or digital learning for students with disabilities.

* - State officials disagree with the Center's findings on this question.

1. OnlineSchools.com. (n.d.). Montana Digital Academy Report Card. Retrieved from <http://www.onlineschools.com/report-cards/montana-digital-academy>.
 2. Keeping Pace. (2013). Montana. Retrieved from <http://www.kpk12.com/states/montana/>.



Nebraska

Online schools operate in Nebraska but none are sponsored by the state or by a local district, and none are fully online.¹ Nebraska learners can find online programs, such as the University of Nebraska High School, which operates under the University of Nebraska Online Worldwide, but these are not considered public schools.² Currently Nebraska does not have initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

COLSD reviewers were unable to identify professional development courses posted online for Nebraska, but a statewide initiative called BlendEd is available through the Nebraska Department of Education (NDE) and The Educational Service Unit Coordinating Council. BlendEd includes the following components:

- Learning Object Repository (LOR)
- Learning Management System (LMS)
- Federated Directory System (single sign-on)
- Statewide Professional Development System (PD)
- Evaluation Components³

These offerings do not appear to address the instructional needs of students with disabilities.

1. Dobrovolny, J., Edwards, D., Friend, B., & Harrington, C. (2015). Keeping Pace with K12 Digital Learning. The Evergreen Education Group. Retrieved from <http://www.kpk12.com/>.
 2. University of Nebraska High School. (2016). Retrieved from <http://high-school.nebraska.edu/About-UNHS/Why-UNHS/University-Based.aspx>.
 3. Nebraska ESU Coordinating Council. (2015). What is Blended Learning. Retrieved from <http://www.esucc.org/BLENDED>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Nevada

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Nevada has many fully online school and several supplemental programs. Nevada does not have a state sponsored school.¹

Nevada does not have an initial teacher license or endorsement in online, blended, and digital learning.

COLSD reviewers were unable to locate professional development on the Nevada Department of Education website.

No change in 2016

* - State officials disagree with the Center's findings on this question.

1. Keeping Pace. (2013). Nevada. Retrieved from <http://www.kpk12.com/states/nevada/>.



New Hampshire

“The only online school currently approved by the New Hampshire Department of Education is Virtual Learning Academy (VLACS) in Exeter, NH.”¹ VLACS offers full-time online learning options that are open to out-of-state as well as in-state students.²

New Hampshire does not require online teachers to obtain initial teaching certification or endorsement in the area of online, blended, or digital information.

Some professional development options are posted on the New Hampshire Department of Education’s website, but COLSD reviewers were unable to identify professional development or resources to support online, blended, or digital learning initiatives, or to support instruction for students with disabilities.³

No change in 2016

1. New Hampshire Department of Education. (2016). Approved Charter Schools. Retrieved from www.education.nh.gov/instruction/school_improve/charter/approved.htm.

2. Keeping Pace. (2013). New Hampshire. Retrieved from <http://www.kpk12.com/states/new-hampshire/>.

3. New Hampshire Department of Education. (2012). Technical Assistance and Professional Development. Retrieved from http://education.nh.gov/instruction/integrated/technical_assistance_professional_development.htm.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence*
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Unclear*
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	Unclear

* - State officials disagree with the Center’s findings on this question.



New Jersey

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Nothing Found
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Unclear

There are several full- and part-time online schools in New Jersey. Newark provides a fully online experience, but students are allowed to participate only if they reside within the school district boundary.¹ New Jersey does not have a state sponsored online school.

New Jersey does not have an initial teacher license or endorsement in online, blended, or digital learning.

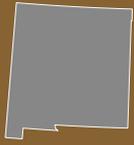
COLSD reviewers were unable to find trainings posted on the State of New Jersey Department of Education website.²

No change in 2016

* - State officials disagree with the Center's findings on this question.

1. K12. (2016). All Participating Schools in New Jersey. Retrieved from <http://www.k12.com/participating-schools.html?state=new-jersey>.

2. State of New Jersey Department of Education. (2014). Special Education. Retrieved from <http://www.state.nj.us/education/specialed/>.



New Mexico

Innovative Digital Education and Learning New Mexico (IDEAL-New Mexico) is the state-sponsored school offering a platform for online and blended learning options.¹ New Mexico schools can partner with IDEAL-New Mexico take advantage of the statewide learning management system.²

Teachers interested in becoming an eTeacher for IDEAL-New Mexico must have three years of teaching experience at the secondary level, a content area endorsement, and online learning experience.³

Applicants must apply for IDEAL-New Mexico eTeacher training which includes face-to-face training as well as the completion of an online course.⁴

New Mexico does not currently have an initial teaching licensure and/or endorsement in the area of online, blended, or digital learning.

COLSD reviewers were unable to locate professional development posted online.

No change in 2016

1. Ideal New Mexico. (2016). Retrieved from <http://idealnewmexico.org/>.
 2. Ideal New Mexico. (2016). Retrieved from <http://idealnewmexico.org/>.
 3. Ideal New Mexico. (2016). Become an eTeacher. Retrieved from <http://idealnewmexico.org/educators/become-an-e-teacher/>.
 4. Ideal New Mexico. (2016). Become an eTeacher. Retrieved from <http://idealnewmexico.org/educators/become-an-e-teacher/>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



New York

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

New York state policy allows students to take online credits, but COLSD could not find fully online schools.¹ There is not a state-sponsored virtual school, although NYSED launched a statewide virtual learning network in order to support online learning.²

New York does not have requirements for additional teacher licensure or endorsements in online, blended, or digital learning environments.³

There are professional development opportunities available through the New York State Department of Education website, but it is unclear if there are resources available for online, digital, or blended learning environments or for students with disabilities in these settings.⁴

No changes in 20116

* - State officials disagree with the Center's findings on this question.

1. New York State Department of Education. (2016). Technology. Retrieved from <http://www.p12.nysed.gov/technology/Online/online.html>.

2. New York State Department of Education. (2016). Online and Blended Learning in New York State. Retrieved from <http://www.p12.nysed.gov/technology/Online/online.html>.

3. New York State Department of Education. (2016). Teaching Certification. Retrieved from <http://www.highered.nysed.gov/tcert/certificate/perm.html>.

4. New York State Department of Education. (n.d.). Engage New York. Retrieved from <https://www.engageny.org/tle-library>.



North Carolina

North Carolina Virtual Public School (NCVPS) is the second largest state-sponsored online school in the U.S.¹ NCVPS offers North Carolina students online course options and a series of other services designed to help students move toward postsecondary goals.² In addition, two virtual charter schools opened in North Carolina for the 2015-2016 school year.

The North Carolina State Board of Education (NC SBOE) requires teachers to meet the following criteria to teach at NCVPS:

NC Standard Professional II (SPII) teaching license in specific content area

NCVPS teacher applicants should also be prepared to demonstrate the following:

Excellent computer skills

Quality interactions with students in online environment

Adhere to regular office hours³

North Carolina currently does not have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

There are professional development courses available pertaining to technology in the classroom such as "Assessing Digital Tools" and "Flipped Classroom."⁴ These modules provide information to teachers on implementing digital tools in the classroom and the importance of teaching students to use technology to learn. COLSD researchers were unable to find professional development relating to students with disabilities in online, digital, or blended learning environments.

1. North Carolina Virtual Public School. (2016). Getting to Know NCVPS. Retrieved from <http://ncvps.org/directors-welcome>.

2. North Carolina Virtual Public School. (2016). Retrieved from <http://www.ncvps.org/>.

3. North Carolina Virtual Public School. (2016). Teaching and Learning. Retrieved from <http://www.ncvps.org/index.php/teach-for-ncvps/>.

4. North Carolina Department of Public Instruction. (2016). Assessing Digital Tools. Retrieved from <http://www.rt3nc.org/>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Unclear
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Unclear
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Unclear

* - State officials disagree with the Center's findings on this question.



North Dakota

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Unclear
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

The North Dakota Center for Distance Education (NDCDE) is a state-sponsored school that provides online education to students grades 6-12.¹ The NDCDE also provides instructional support for online educational settings.

COLSD reviewers were unable to find evidence of an initial licensure or endorsement in the area of online, blended, or digital learning. However, North Dakota does require online teachers' certification for teachers working for NDCDE.²

The North Dakota Department of Education refers teachers to North Dakota State University (NDSU) Distance Education and Continuing Education for professional development. There are a number of classes for online, blended, and digital learning made available through NDSU, but nothing specifically for online, blended, or digital learning and students with disabilities.³

No change in 2016

* - State officials disagree with the Center's findings on this question.

1. North Dakota Center for Distance Education. (2015). Retrieved from <http://www.ndcde.org/Home.aspx>.
 2. Keeping Pace. (2014). An Annual Review of Policy and Practice. Retrieved from http://www.kpk12.com/wp-content/uploads/EEG_KP2014-fnl-lr.pdf.
 3. North Dakota State University Distance and Continuing Education. (n.d.). List of All Classes. Retrieved from <https://www.ndsu.edu/dce/classes/listing/>.



Ohio

The Ohio Department of Education offers fully online learning opportunities through through E-Community schools. Parents and students can view a list of Ohio online community schools and choose from statewide online schools or district-sponsored online community schools.¹

Ohio also offers access to an e-learning platform called ilearnOhio. This statewide platform is funded by the Ohio General Assembly.² The ilearnOhio e-learning platform includes a resource repository, learning management system, training and support, and many online course options.³ Ohio currently does not require initial teacher licensure and/or endorsement in the area of online, blended, or digital learning. In addition, COLSD reviewers were unable to find professional development opportunities posted on the Ohio Department of Education website.

No change in 2016

1. Ohio Department of Education. (n.d.). E-schools. Retrieved from <https://education.ohio.gov/Topics/Quality-School-Choice/Community-Schools/eSchools>.
 2. ilearn Ohio. (2016). Retrieved from <https://iqity-ohio.net>.
 3. ilearn Ohio. (2016). Retrieved from <https://iqity-ohio.net>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Oklahoma

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Oklahoma has several fully online schools,¹ including the Oklahoma Supplemental Online Course Program (OSOCP), established by the Oklahoma Department of Education.² Oklahoma teachers working in the online learning environment are not required to hold an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning. COLSD researchers were unable to find professional development in the areas of online, blended, or digital learning.

As states move forward in their commitment to consider online, blended, and digital learning environments when making provisions for students with disabilities, a need exists to address issues, such as accessibility to educational materials and accommodations, in the new learning environment. Oklahoma's recently revised guide on accessible educational materials³ and the the 2014 special education accommodations guide⁴ are examples of how these provisions can be articulated and utilized by stakeholders.

1. OnlineSchools.com. (n.d.). Oklahoma. Retrieved from <http://www.online-schools.com/high-school/oklahoma>.
2. Oklahoma Statewide Virtual Charter School Board. (2016). Supplemental Online Courses. Retrieved from <https://okvirtualcharter.ok.gov/courses/>.
3. Oklahoma State Department of Education Special Education Services. (2014). Technical Assistance Document Oklahoma Procedures for Providing Accessible Educational Materials (AEM). Retrieved from <http://sde.ok.gov/sde/sites/ok.gov.sde/files/documents/files/AEM%20TA%20document%203.12.15.pdf>.
4. Oklahoma Department of Education. (2014). Oklahoma Special Education Handbook. Retrieved from http://ok.gov/sde/sites/ok.gov.sde/files/documents/files/Oklahoma%20Special%20Education%20Handbook_0.pdf.

* - State officials disagree with the Center's findings on this question.



Oregon

The state-sponsored Oregon Academy of Online Learning, a revamp of the Oregon Virtual School District, is not a comprehensive online school or school district. Instead, it offers a variety of courses and resources to school districts. In addition to the online courses, districts also have access to online course content that they can use to provide locally taught online or blended learning offerings. Resources are available from such sources as Florida Virtual School and the National Repository of Online Courses and include other resources from subject matter experts such as NASA and Khan Academy. Additional resources and course offerings will continue to be added to expand and enhance the program.

Oregon does not have an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.¹

The Oregon Department of Education offers professional development trainings through Oregon’s Educator Network, although no specific trainings were found that were based in online, digital, or blended learning environments.² COLSD reviewers were unable to locate professional development in online, blended, or digital learning for students with disabilities. However, Oregon’s Educator Network acts as a resource for teachers to share information, and there is a group called “Creating Access to Students with Disabilities by Design.”³ The group shares information between teachers but is not considered state professional development.

1. Oregon Department of Education. (n.d.). Teacher Standards and Practices Commission License Guide. Retrieved from <http://orvsd.org/about-orvsd>.
 2. Oregon Educator Network. (2016). Retrieved from <https://www.oregonednet.org/>.
 3. Oregon Educator Network. (2016). Creating Access to Students with Disabilities by Design. Retrieved from <https://www.oregonednet.org/groups/creating-access-students-disabilities-design>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear*
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



Pennsylvania

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Unclear
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Yes with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Yes with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence*

The Pennsylvania Department of Education does not sponsor an online school, but currently recognizes 14 cyber charter schools across the state.¹ Pennsylvania Cyber Charter School (PA Cyber) is one example of a charter school that provides supplemental online learning for grades K-12 and serves a significant number of learners not only in Pennsylvania but also across the nation.²

Pennsylvania recognizes a professional teaching endorsement in online instruction for grades PK-12 that equips teachers with digital instructional design skills, computerized assessments training, and teaching strategies working in the online environment in alignment with iNACOL standards.³

COLSD reviewers found limited professional development opportunities posted on the Pennsylvania Department of Education website, and were unable to locate professional development linked to digital learning and students with disabilities.

No change in 2016

1. Pennsylvania Department of Education. (n.d.). Cyber Charter Schools. Retrieved from <http://www.education.pa.gov/K-12/Charter%20Schools/Pages/default.aspx#tab-1>.
2. PACyber: The Pennsylvania Cyber Charter School. (2016). Retrieved from <http://www.pacyber.org/>.
3. Commonwealth of Pennsylvania Enterprise Portal. (2016). Retrieved from http://www.portal.state.pa.us/portal/portal/server.pt/document/1421666/the_framework_for_online_instruction_program_endorsement_guidelines_pdf.

* - State officials disagree with the Center's findings on this question.



Rhode Island

Rhode Island does not have a state-sponsored school; however, there are some fully online options available through external providers such as K12 Inc.¹

Rhode Island instructors who provide online credit-bearing coursework must meet one of the following criteria: “a) K-12 teachers providing online instruction directly to students in an online environment shall be content certified in the state from which they are providing the online content; or b) K-12 site-based teachers who are responsible for supervising students participating in credit-bearing online coursework that is not provided directly by an online instructor shall have appropriate Rhode Island content certification; or c) Instructors providing instruction for dual enrollment courses, which are identified as credit-bearing courses, shall be appropriately qualified from an accredited post secondary institution.”²

Rhode Island does not have an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning.

The Rhode Island Digital Consortium provides a number of professional development opportunities in the area of digital learning, including a Google Summer Institute, URI—Summer Institute in Digital Literacy, and Innovation Powered by Technology conference: Accelerating Personalization.³

COLSD reviewers were unable to locate professional development content specific to the online learning environment and students with disabilities.

1. K12. (2016). Participating Schools in Rhode Island. Retrieved from <http://www.k12.com/participating-schools.html?state=rhode-island>.

2. Rhode Island Department of Education. (2012). State of Rhode Island Regulations of the Board of Regents Governing Virtual Learning Education in Rhode Island. Retrieved from <http://sos.ri.gov/documents/archives/reg-docs/released/pdf/DESE/6874.pdf>.

3. Rhode Island Department of Education. (2016). Rhode Island Digital Consortium. Retrieved from <http://www.ride.ri.gov/StudentsFamilies/EducationPrograms/VirtualLearning/DigitalLearningConsortium.aspx>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence*
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence*
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



South Carolina

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Yes with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

South Carolina has several fully online schools as well as the South Carolina Virtual School Program (Virtual SC) that is sponsored by the South Carolina Department of Education.¹

South Carolina offers an Online Teaching endorsement that prepares teachers to teach in an online environment.² It is one of the few states that integrates skills in an online environment with students with disabilities. The endorsement credential offers an elective course, Enhancing Online Course Design for Students with Disabilities, as part of the endorsement.³

The eLearning South Carolina website has several professional development courses that support teachers in online, blended, and digital learning. Some examples of professional development topics include: Cell Phones as Learning Tools, Collaboration in the Digital Classroom, Facebook for Educators, and Finding the Best Educational Resources on the Web.⁴ There is no available professional development pertaining to students with disabilities in online, blended, or digital learning settings.

* - State officials disagree with the Center's findings on this question.

1. Virtual SC. (2014). Retrieved from <https://virtualsc.org/>.
2. South Carolina Department of Education. (2015). S.C. Public Education Guidelines. Retrieved from <http://ed.sc.gov/educators/certification/certification-forms/forms/certification-guidelines/>.
3. South Carolina Department of Education. (2015). S.C. Public Education Guidelines. Retrieved from <http://ed.sc.gov/educators/certification/certification-forms/forms/certification-guidelines/>.
4. South Carolina Department of Education. (2016). eLearning South Carolina. Retrieved from http://www.elearningscpd.com/portal/?page_id=132.



South Dakota

The South Dakota Department of Education approves all courses offered through the South Dakota Virtual School.¹ Students from South Dakota also have a fully online option through Black Hills Online Learning Community—with approval from their district.²

South Dakota does not currently have an initial teacher licensure or endorsement in the area of online, blended, or digital learning.

COLSD reviewers were unable to find professional development resources that included online, blended, and digital learning and students with disabilities.

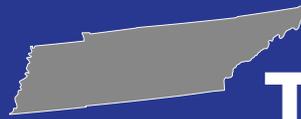
No change in 2016

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

1. South Dakota Virtual School. (2016). Retrieved from <https://sdvs.k12.sd.us/>.

2. K12. (2016). All Participating Schools in South Dakota. Retrieved from <http://www.k12.com/participating-schools.html?state=south-dakota>.

* - State officials disagree with the Center's findings on this question.



Tennessee

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Tennessee does not have a state sponsored virtual school but does have several fully online options for students.¹ The state has an office of personalized learning that works to develop and strengthen online, blended, and digital learning models in school districts throughout the state.²

Tennessee does not currently have an initial teacher licensure or endorsement in online, blended, or digital learning.

The Tennessee Department of Education provides professional development opportunities through PBS Learning Media.³ The PBS modules are built for Tennessee teachers and include the following topics:

- Will Online Courses Replace Classrooms?
- Be Kind Online
- Online Chat Begins at Home
- Teaching and Learning in the Digital Age⁴

No change in 2016

* - State officials disagree with the Center's findings on this question.

1. Tennessee Virtual Academy. (2016). Retrieved from <http://tnva.k12.com/>.
2. Tennessee Department of Education. (n.d.). Personalized Learning. Retrieved from <http://tn.gov/education/topic/personalized-learning>.
3. Tennessee PBS Learning Media. (2016). Retrieved from http://tn.pb-slearningmedia.org/search/?q=online+learning&selected_facets=.
4. Tennessee PBS Learning Media. (2016). Retrieved from http://tn.pb-slearningmedia.org/search/?q=online+learning&selected_facets=.



Texas

Texas offers fully online options through the Texas Virtual School Network (TxVSN). This state-sponsored entity is under the leadership of the commissioner of education and approves all TxVSN courses, professional development for online teachers, and has fiscal responsibility for the network.¹

“Prior to teaching a course through the Texas Virtual School Network (TxVSN), online teachers must be: Texas certified in the course subject area and grade level taught, and have successfully completed approved professional development.”²

Teachers also may be required to complete an approved professional development course. Approved courses listed include: Beginning Online Teachers and Beginning and Experienced Online Teachers, both of which are offered by a number of providers.³ Additional professional development includes topics that support ways to make online courses accessible to students with disabilities. Course topics include Legal Reasons to Support Accessibility, Basic Web Design Techniques, and Video Captioning.

No change in 2016

1. Texas Education Agency. (2016). Texas Virtual School Network. Retrieved from http://tea.texas.gov/index2.aspx?id=4840&menu_id=2147483665.

2. Texas Education Agency. (2016). Texas Virtual School Network. Retrieved from http://tea.texas.gov/index2.aspx?id=4840&menu_id=2147483665.

3. Texas Education Agency. (2016). Continuing Professional Education. Retrieved from <http://txvsn.org/professional-development/>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



Utah

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Unclear
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

Utah has a state virtual school (the Utah Electronic High School), four statewide fully online charter schools, and many districts offering online courses via the Statewide Online Education Program (SOEP), which is among the first and best-known course choice programs in the country.¹ Electronic High School for Utah provides supplemental courses at no cost to students and offers open-entry/open-exit classes.²

Utah offers an alternative route to licensure that includes a specific licensure for teachers interested in online settings, known as an "Alternate Route to Licensure." The requirement licensure does not mention teaching students with disabilities.³

Utah provides professional development through the Utah Professional Development Network (UPDN). The UPDN site provides teachers with materials, video-based coaching, webinars, and other forms of professional development.⁴ Although COLSD reviewers were unable to find professional development for teachers working in digital learning environments, a page within the site provides resources and learning opportunities in Universal Design for Learning (UDL). The UDL models provide teachers working in all learning environments with principles that can increase access and support for students with disabilities.⁵

* - State officials disagree with the Center's findings on this question.

1. Keeping Pace. (2013). Utah. Retrieved from <http://www.kpk12.com/states/utah/>.

2. Utah Electronic High School. (2016). Retrieved from <https://share.ehs.uen.org>.

3. Utah Department of Education. (2015). Alternate Route to Licensure "10 Points to Remember." Retrieved from <http://www.schools.utah.gov/charterschools/Training/Directors-Meetings/2015-Directors-Meetings/September-2015/ARL-Handout-10-Points-to-Remember.aspx>.

4. Utah Professional Development Network. (2016). Retrieved from <http://www.updnetwork.org/cms/index.php>.

5. Utah Professional Development Network. (2016). Universal Design for Learning (UDL). Retrieved from <http://www.updnetwork.org/cms/index.php/resources-by-topic/universal-design-for-learning-udl>.



Vermont

The Vermont Virtual Learning Cooperative (VTVLC) is a state-sponsored entity that facilitates online courses for students.¹ VTVLC offers a full-time enrollment option for Vermont high school students.²

Vermont requires online teachers to obtain the Online Teaching Specialist (OTS) endorsement in order to be considered qualified to teach online courses.³

VTVLC offers professional development through the Intel® Teach Program. Training for Vermont teachers includes topics that “engage students with digital learning, including digital content, Web 2.0, social networking, and online tools and resources.”⁴

In addition, the Northeast Online Teaching Institute (NEOTI) in Springfield, VT provides a collaborative partnership with VTVLC that supports training and certification of new online teachers.⁵ The NEOTI’s Certificate in Online Teaching is designed for experienced K-12 teachers or teachers currently going through an approved teacher preparation program. Program participants are taught how to use a variety of tools in order to better facilitate online courses, including how to provide additional supports and accommodations to students.⁶

1. Vermont Virtual Learning Cooperative. (2016). Retrieved from <http://www.vtvlc.org/>.

2. Vermont Virtual Learning Cooperative. (2016). Full-Flex Pathway. Retrieved from <http://www.vtvlc.org/full-flex/>.

3. Vermont Virtual Learning Cooperative. (2015). Online & Blended Learning Conference. Retrieved from <http://pd.vtvlc.org/>.

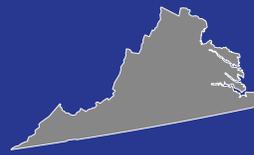
4. Northeast Online Teaching Institute. (n.d.). Retrieved from <http://neoti.vtvlc.org>.

5. Northeast Online Teaching Institute. (n.d.). Retrieved from <http://neoti.vtvlc.org/ciot/>.

6. Northeast Online Teaching Institute. (n.d.). Retrieved from <http://neoti.vtvlc.org>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Yes with Evidence
Does the state’s IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child’s IEP meetings?	No with Evidence

* - State officials disagree with the Center’s findings on this question.



Virginia

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear*
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Unclear
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.

Virtual Virginia (VVA) is a program of the Virginia Department of Education and offers online courses targeted at world languages, core academics, elective courses, and advanced placement classes.¹ Virginia has additional online options (both full- and part-time) offered through online education vendors such as K12.²

Virginia does not currently have an initial teaching licensure and/or endorsement in the area of online, blended, or digital learning.

The Virginia Department of Education website provides trainings for teachers in online learning environments. Training courses include: Planning and Implementing Online Courses for Students, Online Course Design, Teaching Students in Online Courses, Teaching Students in Blended Classrooms, Advanced Online Teaching Skills and Techniques, and Mentoring Virtual School Students.³

COLSD reviewers were unable to locate trainings for online, blended, and digital learning and students with disabilities.

No change in 2016

1. Virtual Virginia. (n.d.). About Us. Retrieved from <http://www.virtualvirginia.org/aboutus/index.html>.

2. K12. (2016). All Participating Schools in Virginia. Retrieved from <http://www.k12.com/participating-schools.html?state=virginia>.

3. Virginia Department of Education. (2016). Professional Development. Retrieved from http://www.doe.virginia.gov/support/technology/professional_dev/online_teachers.shtml.



Washington

Washington has several full and part-time online learning options.¹ The Office of Superintendent of Public Instruction's (OSPI) Digital Learning Department (DLD) is a state-led initiative that approves providers and also offers online courses to districts.²

Washington does not currently have an initial licensure or endorsement for online, blended, or digital learning.

The Digital Learning Department of the Washington Department of Education posts professional development opportunities and assistance for teachers.

The Office of Superintendent of Public Instruction provides professional development opportunities in collaboration with several stakeholders—including Microsoft—that include topics such as Digital Information Literacy, Digital Tools for Personalized and Blended Learning, 21st Century Teacher Toolbox, and Don't Panic: Managing Devices in the Classroom.³ There are also several links to Open Educational Resources (OER) that teachers can take advantage of and that include OER quality rubrics, reading and video materials, and webinars related to the use and advantages of OER.⁴ In addition, approved subject matter materials such as Algebra and English are available.⁵

1. Keeping Pace. (2013). Washington. Retrieved from <http://www.kpk12.com/states/washington/>.

2. Digital Learning Department. (2016). Online and Alternative Learning (State of Washington). Retrieved from <http://digitallearning.k12.wa.us/>.

3. Washington Department of Education. (2016). Shape the Future Professional Learning Opportunity. Retrieved from <http://www.k12.wa.us/EdTech/ShapeTheFuture.aspx>.

4. Digital Learning Department. (2016). OER Resources (State of Washington). Retrieved from <http://digitallearning.k12.wa.us/oer/resources.php>.

5. Digital Learning Department. (2016). OER Library (State of Washington). Retrieved from <http://digitallearning.k12.wa.us/oer/library/resources/27>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Yes with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



West Virginia

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Yes with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence*
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	No with Evidence*
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence*
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence*

The West Virginia Virtual School (WVVS) provides online courses in order to offer additional course options to West Virginia students.¹ WVVS is supported by the West Virginia Department of Education and provides approximately 270 different courses.² There are no fully online options available.

West Virginia does not currently offer an initial teacher licensure and/or endorsement in the area of online, blended, or digital learning. However, The West Virginia Department of Education provides a number of professional development opportunities that include:

- 21st Century Instruction with Project Based Learning
- Designing a Virtual Field Trip
- Developing and Implementing WebQuests
- Digital Story -Telling ³

* - State officials disagree with the Center's findings on this question.

1. West Virginia Department of Education. (2016). West Virginia Virtual School. Retrieved from <http://virtualschool.k12.wv.us/vschool/index.html>.
 1. Keeping Pace. (2013). West Virginia. Retrieved from <http://www.kpk12.com/states/west-virginia/>.
 1. West Virginia Department of Education. (2016). e-Learning for Educators. Retrieved from <http://wvde.state.wv.us/elearning/catalog.php>.



Wisconsin

Wisconsin has 32 fully online charter schools and three schools proposed for academic year 2015-2016.¹ Wisconsin Virtual School (WVS) is Wisconsin's state sponsored school that provides supplemental online courses to middle and high school students.² In addition, the Wisconsin eSchool Network partners with districts to give access to digital learning resources and best practices guidance for online and digital instruction among other services.³ These two entities, in conjunction with the Department of Public Instruction, make up the Wisconsin Digital Learning Collaborative which works on behalf of more than 230 districts to provide support and guidance.⁴

Wisconsin does not currently have an initial teacher licensure or endorsement for online, blended, or digital learning.

The Wisconsin eSchool Network provides professional development options in online learning, including the following topics:

- Teaching in an Online Learning Model
- Teaching in a Blended Learning Model Online
- Facilitation: Taming the World of Online Learning
- Advanced Strategies for Online or Blended Instruction
- Teaching Strategies in a Digital Environment⁵

No changes in 2016

1. Wisconsin Department of Public Instruction. (2014-2015). Virtual Charter Schools. Retrieved from http://sms.dpi.wi.gov/sites/default/files/imce/sms/pdf/cs_2015_VirtualSchs.pdf.

2. Wisconsin Virtual School. (n.d.). Retrieved from <http://www.wisconsin-virtualschool.org/>.

3. Wisconsin eSchool Network. (2016). About Wen. Retrieved from <http://www.wisconsineschool.org/why-wen/about-wen/>.

4. Wisconsin Virtual School. (n.d.). Wisconsin Digital Learning Collaborative. Retrieved from <http://www.wisconsinvirtualschool.org/wdlchome.cfm>.

5. Wisconsin eSchool Network. (2016). Training & Professional Development. Retrieved from <http://www.wisconsineschool.org/resources/professional-learning/>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Yes with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Unclear*
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.



Wyoming

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Unclear
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Yes with Evidence
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Unclear
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.

Wyoming provides virtual learning support and guidance to the state through the Wyoming Switchboard Network (WSN).¹ The WSN approves distance education providers and lists partnering providers on the network. Wyoming does not have a state virtual school.

Wyoming does not have an initial teacher license or endorsement for online, blended, or digital learning.

COLSD reviewers were able to locate one professional development course in the area of blended learning on the Wyoming Department of Education website: Blended and Balanced Instruction: A Starter Toolkit to Embed Direct Instruction Performance Tasks with Authentic Projects.² However, COLSD reviewers were unable to find any other trainings pertaining to online, blended, or digital learning and students with disabilities.

No change in 2016

1. Wyoming Department of Education. (2016). Distance Education. Retrieved from <https://edu.wyoming.gov/in-the-classroom/technology/distance-ed/>.

2. Wyoming Department of Education. (2016). Professional Development Opportunities. Retrieved from <http://edu.wyoming.gov/educators/pd/>.

District of Columbia

There is one fully online school in the District of Columbia for elementary students, CAPCS, which is powered by K12.¹ There are no state sponsored virtual schools.²

Washington, D.C. does not require teachers to have additional licensure to teach in online, blended, or digital learning environments.³

The District of Columbia Public Schools stated that they have increased spending on professional development opportunities, but COLSD was unable to locate specific examples of professional development on the District of Columbia Public Schools website.

“Our primary method of teacher support is through job-embedded professional development, which is one of the six elements of the Effective Schools Framework. To support our teachers, DCPS has 150 school-based Instructional Coaches, a position we added in the 2008-2009 school year. As integral members of school teams, coaches work to support teachers with planning, delivery and using student level data to inform instructional decisions to continuously improve teacher effectiveness. Coaches are non-evaluative. In addition to utilizing Instructional Coaches for job-embedded professional development, we also offer support to schools through a variety of other means, including workshops and training modules. Finally, we offer induction and mentoring to support the unique needs of our beginning teachers.”⁴

No change in 2016

1. Friendship Public Charter School Online. (2016). Retrieved from <http://fpcso.k12.com/>.

2. Keeping Pace. (2013). Washington, D.C. Retrieved from <http://www.kpk12.com/states/washington-dc/>

3. District of Columbia. (2014). Educator Licensure and Accreditation. Retrieved from http://osse.dc.gov/sites/default/files/dc/sites/osse/publication/attachments/Educator%20Testing%20Flyer_11%202014_0.pdf.

4. District of Columbia Public Schools. (n.d.). Professional Development. Retrieved from <http://dcps.dc.gov/page/teacher-professional-development>.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Unclear
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Yes with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

* - State officials disagree with the Center's findings on this question.

American Samoa

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Nothing Found
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Nothing Found
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Nothing Found
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Nothing Found
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Nothing Found
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Nothing Found

No fully online schools or state sponsored virtual schools were found in the American Samoa.

There was nothing found on additional licensure or endorsements for teachers in online, digital, or blended learning settings.¹

There are no professional development opportunities posted online.²

* - State officials disagree with the Center's findings on this question.

1. American Samoa Department of Education. (n.d.). Teacher Quality. Retrieved from <http://www.doe.as/District/Department/27-TEACHER-QUALITY/2857-Untitled.html>

2. American Samoa Department of Informational Technology Division.(n.d.). Retrieved from <http://www.doe.as/District/Department/18-Information-Technology-Division/Portal/Professional-Development>

Guam

After a search of the Guam Department of Education's website, COLSD reviewers were unable to locate evidence of online, blended, or digital learning. Staff also reviewed teacher certification requirements and found no indication of an initial certification or endorsement in online, blended, digital learning.

Only one professional development course, which was unrelated to digital learning, was listed on the Guam Department of Education's website. The University of Guam also had professional development for teachers listed, but the content did not include working with technology in the classroom.

No change in 2016

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Nothing Found

* - State officials disagree with the Center's findings on this question.

N. Mariana Islands

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	No with Evidence
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	No with Evidence
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	No with Evidence
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	No with Evidence
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	No with Evidence
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	No with Evidence
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	No with Evidence
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	No with Evidence

COLSD was unable to locate any fully online schools in the Northern Mariana Islands, but there was mention of the Instructional Technology Program that was formed to increase technology in the Public School System.¹

There are no additional requirements for teacher licensure or endorsements in online, learning, or digital learning environments.²

No professional development opportunities were found on the Commonwealth of the Northern Mariana Islands Department of Education website.³

* - State officials disagree with the Center's findings on this question.

1. Commonwealth of the Northern Mariana Islands. (2016). Retrieved from <https://www.cnmipss.org/online-courses/>

2. CNMI State Board of Education. (2016). Certification and Licensure Office. Retrieved from <https://www.cnmipss.org/wp-content/uploads/2013/10/Teachers-Certification-Brochure-9.24a.pdf?701305>

3. Northern Mariana Island. (2011). Summer Professional Development. Retrieved from <https://www.cnmipss.org/wp-content/uploads/2011/06/Updated-2011-Summer-PD-Schedule.pdf?90a493>

U.S. Virgin Islands

Limited school-sponsored online learning activity occurs in the US Virgin Islands. COLSD reviewers were unable to confirm that online learning opportunities were available for US Virgin Island students, based on a search of the department of education's website. However, the US Virgin Islands' Department of Education made the integration of technology in K-12 classrooms a priority in 2013. A two-year technology plan was drafted to address the growing need for technology skills and preparation for teachers. Currently, the professional development website is under construction, but a commitment to train teachers is clear in the statement provided by the technology plan:

"Provide school personnel (administrators, teachers etc) with sustained professional development in the use of technology to enhance teaching and learning in a measurable and cost-effective way."¹

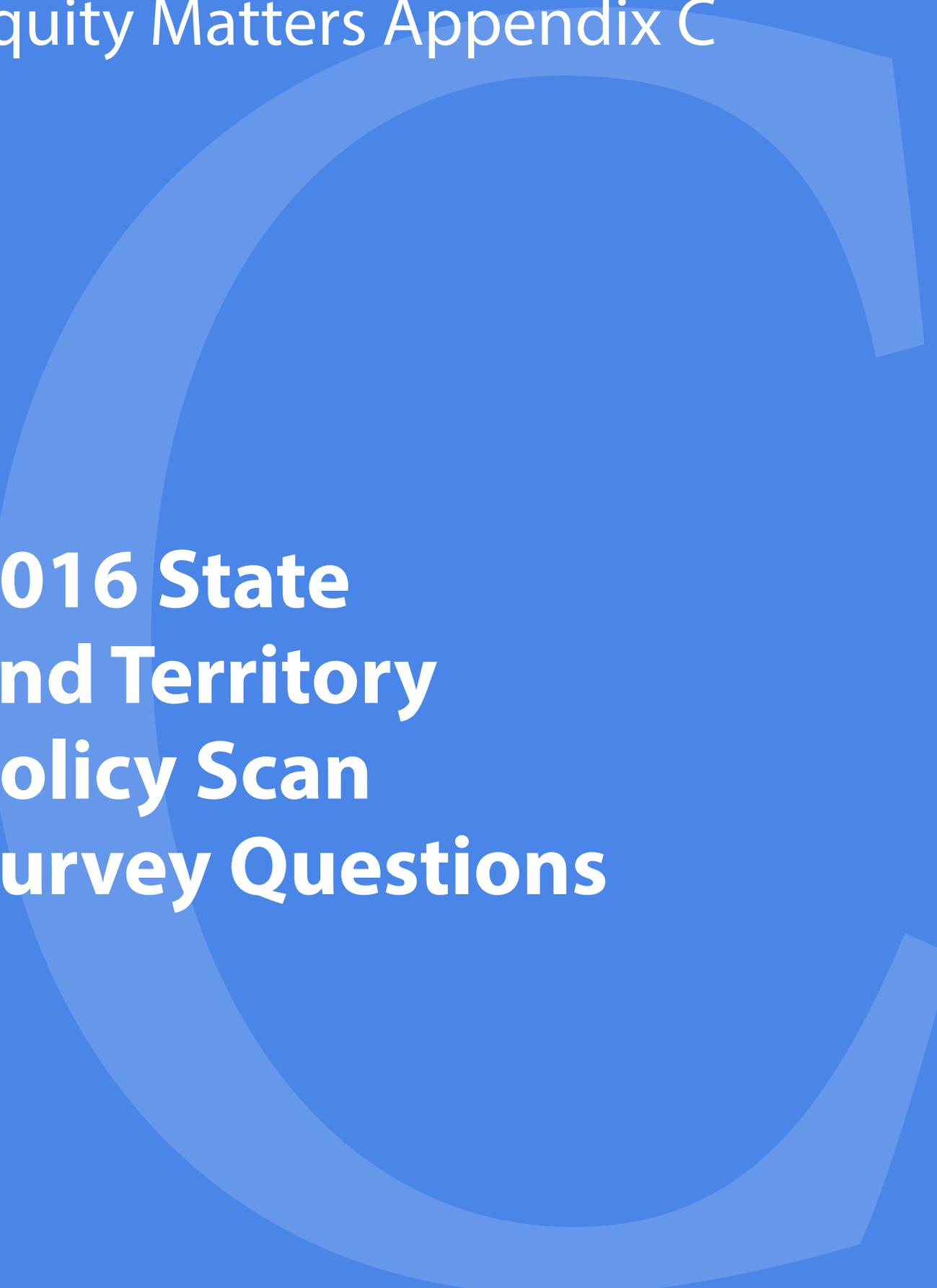
No change in 2016

1. Virgin Islands Department of Education. (2013-2015). Two Year Technology Plan. Retrieved from http://www.vide.vi/data/userfiles/file/VIDE_Technology_Plan%20_2013-2015.pdf.

Policy Questions	Results
Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?	Nothing Found
Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?	Nothing Found
Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?	Nothing Found
Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?	Nothing Found
Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?	Nothing Found
Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?	Nothing Found
Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	Nothing Found
Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	Nothing Found
Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	Nothing Found

* - State officials disagree with the Center's findings on this question.

Equity Matters Appendix C



2016 State and Territory Policy Scan Survey Questions

2016 STATE SCAN

This document contains the results of the Center on Online Learning and Students with Disabilities (COLSD) 2016 State Scan. In this development activity, COLSD staff reviewed summaries from the Center's stakeholder forums, the Center's own research findings, and additional published research and policy literature to identify topical areas and issues. The Scan includes 14 questions and seven sub-questions centering on students with disabilities and the online learning environment. The questions have been grouped into nine topical areas:

- **Online Education**
- **Teacher Preparedness**
- **Appropriateness of Learning Environment**
- **Identification of Learners with Disabilities**
- **IDEA-related Issues and Supporting Learners with Disabilities**
- **Accessibility**
- **Data and Data Privacy**
- **Parental Involvement**
- **Graduation Requirements**

Please review the survey results for accuracy and completeness. If there are misinterpretations or omissions that should be corrected, please click on the link provided in the accompanying email and advance to the appropriate question to make changes as noted in the actual live survey.

After you review the data, if there are no corrections (you agree with all answers), please respond "No changes" to the email. Please note, if we do not receive a response from you within two weeks of this email, this state scan information for your state will be published unchanged on the COLSD website and annual publication.

Response Scale for Multiple Choice Questions:

- **Nothing Found** - Necessary sources are not publically available.
- **No with Evidence** - All appropriate sources have been reviewed in order to confirm evidence does not exist.
- **Unclear** - There may be text that can be cited but is not consistent in all policy and guidance documents.
- **Yes with Evidence** - There is text that can be cited in order to confirm positive findings.

STATE POLICY SCAN: [State Name]

ONLINE EDUCATION		
	QUESTION	RESPONSE
1.	Does the state have fully online schools?	
	COLSD Search Notes	
1.1.*	Are there state sponsored supplemental/online learning opportunities? (e.g., run by, managed or delivered with state oversight)?	
	COLSD Search Notes	
*	What is the name of the state sponsored online school?	
TEACHER PREPAREDNESS		
2.	Does the state policy and/or guidance or requirements specify initial teacher licensure and/or endorsement in the area of online, blended, or digital learning?	
	COLSD Search Notes	
*	<i>Scan items not included in 2016 survey.</i>	
2.1.*	Does this policy and/or guidance or requirements in online, blended, or digital learning mention with students with disabilities?	
	COLSD Search Notes	
2.2.*	<i>Scan items not included in 2016 survey.</i>	
	COLSD Search Notes	
3.	<i>Scan items not included in 2016 survey.</i>	
	COLSD Search Notes	
3.1.*	Do the professional development and/or technical assistance initiatives include online, blended, or digital learning?	
	COLSD Search Notes	
3.2.*	Do these professional development and/or technical assistance initiatives in online, blended, or digital learning mention with students with disabilities?	
	COLSD Search Notes	
	Related and Noteworthy Items in Teacher Preparedness	

* Questions marked with an asterisk only appear to certain respondents, based upon answers to previous questions.

APPROPRIATENESS OF LEARNING ENVIRONMENT			
4.	Does the state have documentation that provides a review of the IEP needs for students with disabilities prior to enrollment in fully online, blended, or digital learning experience?		
	COLSD Search Notes		
*	Please specify the area of focus and any specific details:	Online	
		Blended	
		Digital Learning	
4.1*	Does the state's IEP guidance or related documentation include discussion of online learning for students with disabilities?		
	COLSD Search Notes		
5.	Does the state provide examples of appropriate accommodations in an online learning environment for SWDs?		
	COLSD Search Notes		
	Related and Noteworthy Items in Appropriateness of Learning Environment		
IDENTIFICATION OF LEARNERS WITH DISABILITIES			
6.	Does the state have suggested procedures or guidance for identifying online learners that may qualify for disability services (including special education or Section 504 accommodations)?		
	COLSD Search Notes		
	Related and Noteworthy Items in Identification of Learners with Disabilities		
PROVISION OF DISABILITY SUPPORT SERVICES			
7.	Does the state application or policy for a potential online provider of service reference regulations for serving SWDs?		
	COLSD Search Notes		
8.	Does the state have policy or guidance that articulates what entity bears the responsibility of providing for disabilities services (e.g., IDEA and 504) for SWDs enrolled in online courses?		
	COLSD Search Notes		

* Questions marked with an asterisk only appear to certain respondents, based upon answers to previous questions.

*	Please identify the entity(ies) that bear the responsibility of providing for disabilities services for SWDs enrolled in online courses (e.g., LEA, Online School, etc.)	
	COLSD Search Notes	
9.	Does the state have monitoring procedures in order to ensure that online schools and programs are in alignment with IDEA?	
	COLSD Search Notes	
10.	Does the state have documentation or technical assistance established to help districts, teachers, and parents identify support structures for SWDs in fully online, blended, and digital learning settings?	
	COLSD Search Notes	
	Related and Noteworthy Items in IDEA Related / Supporting Learners with Disabilities	
ACCESSIBILITY ISSUES		
11.	Does the state have guidance, documentation, regulation, or statutes that ensures online courses are accessible to and open to enrollment by students with disabilities?	
	COLSD Search Notes	
	Related and Noteworthy Items in Accessibility	
DATA AND DATA PRIVACY		
12.	Does the state have guidance, documentation, policy, or statutes that reflect how confidentiality/data privacy of records, for all students, should be managed in supplementary/ blended and full time digital learning environments?	Responses to these items were diverse and require more analysis. Given the publication deadline, these data will be analyzed later.
	COLSD Search Notes	
12.1*	Is there a policy or procedure for how data for students with disabilities should be managed?	Responses to these items were diverse and require more analysis. Given the publication deadline, these data will be analyzed later.
	COLSD Search Notes	
	Related and Noteworthy Items in Data & Data Privacy	

* Questions marked with an asterisk only appear to certain respondents, based upon answers to previous questions.

PARENTAL INVOLVEMENT		
13.	Does the state have guidance, documentation, or provisions for parents of SWDs in online courses to collaborate in the education of their children beyond participating in their child's IEP meetings?	
	COLSD Search Notes	
	Related and Noteworthy Items in Parental Involvement	
GRADUATION		
14.	If your state mandates an online course prior to graduation, are students with disabilities required to take a fully online or digital course prior to graduation?	
	COLSD Search Notes	
	Related and Noteworthy Items in Graduation Requirements	

* Questions marked with an asterisk only appear to certain respondents, based upon answers to previous questions.

Equity Matters Appendix D

Professional Development Opportunities for Online Educators Working with Diverse Learners

<p>Alabama Special Students in Regular Classrooms: Technology, Teaching, and Universal Design Workshop developed by EDC and CAST to introduce UDL and how to use these concepts in an online learning environment. Course designed to help teachers understand UDL, address diverse learning needs, explore software tools, and plan courses using UDL software. http://elearning.alsde.edu/</p> <p>Louisiana Chrome Web Store Accessibility You Can't Ignore Course reviews available resources through the Google Chrome Store that make online learning tools accessible for students with disabilities. www.solutionwhere.com/</p> <p>Rhode Island Chrome as AT! Course to provides information to teachers about how to use Google Chrome to make online features accessible. http://www.techaccess-ri.org/workshops/</p>	<p>Florida Exceptional Student Education in a Virtual World Professional development course from Florida Virtual School includes modules such as "Web 2.0 in the Virtual Classroom" and "Collaboration and Best Practices." http://www.flvsglobal.net/</p> <p>Maryland The "You" in UDL Video presentation about implementing UDL in online learning environments as a means to provide accessible material to all students, including students with disabilities. https://marylandlearninglinks.org/</p> <p>Texas Accessibility Basics Course on accessibility through the Texas Virtual School Network focusing on online learning settings. tutorials.txvsn.org/course/view</p> <p>Maryland JSE iPad Initiative Week-long course with ideas for teachers seeking to implement iPad use in the classroom. http://www.marylandpublicschools.org/</p>	<p>Georgia Access to the Digital Community Course includes information for teaching about providing accessible course material to all students in the digital learning setting.</p> <p>Teaching Online Open Learning (TOOL) #eteacherTOOL Lesson on presenting tools in the online classroom in ways that make them accessible to all. https://www.openteachertraining.org/</p> <p>Minnesota Accessibility in a Bring Your Own Device Environment Webinar with information for teachers learning how to create accessible online learning environments, where students used multiple and varied digital devices. http://education.state.mn.us/mdeprod/</p> <p>Vermont Online Teaching Specialist Endorsement Methods II Course provides strategies for students in online learning environments that require additional supports and accommodations. http://neoti.vtvlc.org/ciot/</p>
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Alabama Department of Education. (2016). eLearning Professional Development; Special Students in Regular Classrooms: Technology, Teaching and Universal Design. Retrieved from <http://elearning.alsde.edu/EDU4407pop.htm>.

Florida Virtual School. (2015). Global Development Catalog: Exceptional Student Education in a Virtual World. Retrieved from http://www.flvsglobal.net/wp-content/uploads/FLVS_Global_Professional_Development_Catalog.pdf.

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Georgia Virtual Learning. (2016). Teaching Online Open Learning (TOOL) #eteacherTOOL. Retrieved from <https://www.openteachertraining.org/blog/quest/create-4-1-3/>.

Louisiana Department of Education. (2016). Online Registration System. Retrieved from <http://www.solutionwhere.com/ldoe/cw/CourseByCateg.asp>.

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TechACCESS Rhode Island. (2016). Retrieved from <http://www.techaccess-ri.org/workshops/>.

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