



## **Mission and Goals**

### **The Challenge**

To date, online learning reaches millions of K-12 learners, with its continued growth inevitably leading to dramatic changes in the educational landscape. While online learning holds great promise, there is a paucity of research addressing the pedagogical implications for students with disabilities. Researchers urgently need to conduct investigations that demonstrate how online instruction should be designed and delivered to improve student outcomes.

The challenge of the Center is to address learner variability by conducting research to make online learning more accessible, engaging, and effective for students with disabilities, for whom traditional forms of education have been only moderately successful and the precipitous growth in online instruction threatens to exclude. To address these issues, the Center will assume a leadership role in conducting research and building a network of research collaborators representing a wide array of disciplines whose expertise impacts learner outcomes.

### **Our Mission**

To research how online learning can be made more accessible, engaging, and effective for K-12 learners with disabilities by investigating approaches that address learner variability within the range of conditions under which online learning occurs.

### **Our Goals**

- Identify and verify trends and issues related to the participation of students with disabilities in K-12 online learning in a range of forms and contexts (e.g., virtual schools, online courses, expository, interactive, etc.). Research topics will include accessibility and delivery of content, patterns of student participation, learning needs and supports, and emerging forms of online learning and their potential impact on accessibility and outcomes for students with disabilities.
- Identify and describe major potential positive outcomes and negative consequences of participation in online learning for students with disabilities, and analyze the available evidence on these outcomes and consequences. Positive outcomes may include a range of academic, social, career, and functional achievements associated with college- and career-readiness. Negative consequences may include reduced access to social or extra-curricular activities, a narrowed curriculum, a reduced alignment of instruction with academic standards, or the failure of instructional designs to be responsive to learner attributes.
- Identify and develop promising approaches for increasing the accessibility and potential effectiveness of online learning for students with disabilities. These approaches may involve designing accessibility and support features for online learning, providing supplementary off-line resources, individualizing online learning, identifying and addressing student learning

problems as soon as possible, and training students, teachers, tutors, parents, and others involved in online learning on ways to support student learning.

- Test the feasibility, usability, and potential effectiveness (or promise) of one or more key approaches using appropriate research designs such as quasi-experimental, single-subject, qualitative, and experimental research. This research will involve actually trying the approach(es) with the intended populations in authentic settings. The research will produce detailed descriptions of the approaches and their key components, evidence that the approaches can be successfully implemented in authentic settings, and evidence of the promise of the approaches for achieving their intended outcomes for students with disabilities.

### **Our Activities**

1. Carrying out high-quality research and development that will result in validated practices that inform the design and development of new approaches and innovations.
2. Establishing principles for the design, development, and validation of online instruction effective for all students, including K-12 learners with disabilities, via the application of learning analytics that take advantage of the inherent capabilities of online learning technologies to provide faster, more accurate, more informative assessment and progress monitoring, and impact learner outcomes.
3. Highlighting and amplifying existing resources that have been validated as promising and developing new online learning solutions that support K-12 learners with disabilities.
4. Developing a dynamic network of online learning stakeholders including but not limited to education agencies, business and industry, innovators, researchers, and parents for the purposes of validating and implementing online learning solutions that are appropriate and effective for K-12 learners with disabilities.
5. Informing stakeholders (SEAs, LEAs, developers, and others) on how to identify and implement high-quality online learning solutions that are effective for K-12 learners with disabilities.
6. Disseminating research findings and evidence-based principles for guiding the design, development, and use of online learning resources that address the needs of K-12 learners with disabilities.