

Center for Students with Disabilities

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Transitioning to Online Teaching



And Meeting Diverse Needs

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Introduction

To assist faculty in adapting their courses and promote accessibility for our students, the Center for Students with Disabilities (CSD) developed this guide, *Transitioning to Online Teaching and Meeting Diverse Learning Needs*, as a resource for faculty members preparing to teach online. It is divided into three sections:

- Applying Distance Education Pedagogy
- Using Technology to Promote Accessibility
- Planning Avenues for Student Support

The first section will examine online learning challenges and suggested solutions. Secondly, the guide will cover supplementing instruction with best practices to serve diverse sets of online students. Finally, the third section will review how professors can provide multiple resources to students to complement their online instruction.

Do you want additional resources for your students?

Check out these guides for students from our colleagues throughout the university!

[Student Success Guide](#)

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[Successful Online Learning Tips](#)

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Applying Distance Education Pedagogy

For the most part, teaching strategies in the traditional classroom tend to coincide with the online classroom. Furthermore, the benefits of an online classroom over the traditional classroom, like flexibility, positively impact most students' experiences and learning. However, for particular students, the online classroom may present learning challenges. The following research articles identify and address three of these challenges.

Incorporating Visual-Form Analytics

After a major assignment and/or exam, online students tend to experience anxiety due to the lack of interaction between themselves and the professor. For them, this concern stems from their lack of understanding the expectations outlined by the professor. In this scenario, the use of immediate feedback alleviates these concerns. Furthermore, in the long term, professors may provide learning analytics available from the data in D2L for each student. However, this data is often difficult to interpret. Learning analytics, specifically in visual-form, support students' reflection and guide them to successful self-regulated learning.^[1] For example, a professor could provide a line graph to illustrate a student's growth (or decline) over time.

Encouraging Student Engagement

In this guide, we define student engagement as the degree of attention, curiosity, and interest that students convey during the learning process. This definition also extends to their level of motivation to progress in their education. In general, online professors may find more difficulty in engaging students due to physical distance. However, it is crucial to consider how one should provide online content in order to ensure that students are engaging with this content as intended.^[2] For instance, professors may increase their presence online, promote active learning through discussion via forums, etc.

Incorporating Universal Design for Learning

Universal Design for Learning (UDL) is a framework to enhance and optimize learning for all students based on insights from psychology research. In general, there are three components online professors should consider^[3]: representation, engagement, and assessment. In regard to the first, UDL suggests representing information in more than one format. For example, although textbooks are primarily visual, professors provide hands-on examples to establish understanding. Addressing the second and the Why of teaching, this framework asks professors to identify various ways to motivate their students. In the context of online teaching, through surveys and voting, finding and teaching concepts that feel relevant to students' majors and interests is a good example of how professors can sustain student engagement. Finally, UDL recommends providing students with more than one way to demonstrate understanding. For instance, group projects may be paired with individual reports to ensure that students have the opportunity to interact with the concepts in both collaborative and independent settings.



Using Technology to Promote Accessibility

In Higher Education, it's necessary to ensure that all students have a reasonable chance to succeed. Furthermore, in Distance Education, that means supplementing instruction with practices that account for a diverse set of online students. Here, the definition of diversity includes disabilities, access to technology, and learning styles.

Supporting Students with Disabilities

Similar to professors in traditional classrooms, online professors can also develop proactive approaches to ensure that all students have a fair opportunity to learn. However, unlike a physical environment, creating an accessible online classroom requires more attention, diligence, and technical knowledge from the professor. That said, the two major accessibility components to include in online materials are Optical Character Recognition (OCR) capabilities for reading assignments and Voluntary Product Accessibility Templates (VPAT) for software-based activities.^[4] Optical Character Recognition enables students to use a screen-reading software to dictate the material; in most cases, a text-based PDF file will already have OCR capabilities (but this is not guaranteed for scan-based PDF files). Likewise, most softwares already include VPAT accessibility features, which means that, for the professor, it's as simple as checking that these features are enabled.

Supporting Students without Access to Technology

Although the vast majority of modern-day students have extensive experience in using technology, it's not a safe assumption that all students in a given course will be able to access course materials in the same way. That is, access to technology varies from student to student. The most common barrier to using technology is the lack of access to high-speed internet. To account for these students, professors should provide asynchronous instruction, such as a recording of the synchronous lecture. Furthermore, if possible, professors could enhance these students' experience by providing digital video content that includes multimedia components.^[5] For example, professors could incorporate PowerPoint slides and captions into their lecture videos.

Supporting Students with Various Learning Styles

Many professors already recognize that each student prefers different learning styles. In Education, learning styles indicate and cluster common ways that students learn. Every student employs a mix of techniques from different learning styles. With regards to online teaching, students that prefer kinesthetic and social learning styles tend to be the least satisfied with their online courses.^[6] To remediate this problem, professors could include physical demonstrations of concepts in their lecture and forums for students to discuss their ideas.



Planning Avenues for Student Support

Students, online or not, should always be able to seek support from multiple resources to supplement their education. In the context of Distance Education, this is what professors can do.

Establishing Online Office hours	Similar to establishing office hours in person and setting up synchronous lectures online, professors can use the technology available to meet students virtually. When students have an opportunity to discuss concepts with professors, it greatly enhances their educational experience.
Providing Contact information	To a reasonable degree, students should also have some method of contacting the professor. In most cases for online students, a phone number and/or email address would suffice.
Finding Additional Resources	Finally, professors should search and identify online course resources that supplement their instruction. For example, YouTube videos tend to be widely accessible and comprehensive for students.

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