

Strategies to Support Students with Disabilities in an Online Environment

Supporting students impacted by disabilities in online programs initially appears to be a daunting task. There are many technical, legal, logistical, instructional, and educational considerations that need to be made for effective programs and supports to occur. However, for many students impacted by disabilities, the online learning environment might be an opportunity for them to attend to the academics and supports required for educational achievement through targeted educational opportunities, projects, and supports that online learning offers. Online learning opportunities often are quite effective for students who demonstrate a wide range of needs. Many prefer the low stress and impact of reduced face-to-face interactions while being able to focus more intentionally on the content.

There are considerable issues that need to be addressed before launching into the provision of services that are specifically designed to meet the individualized educational needs of students eligible for special education programs and services. This document provides a broad level of support to encourage appropriate development of programs and services for students eligible for special education services. However, this is not an exhaustive coverage of all issues. Discussions with appropriate staff within the district need to be held to identify existing and future supports for effective online learning options built around each student's individual learning needs.

Providing online instruction – an approach that recognizes that each child comes with unique strengths and weaknesses – represents an opportunity to break away from commonly-held mindsets that view students with disabilities from a deficit perspective that often fails to recognize the exceptional strengths these students also possess. All students, not just students with disabilities, benefit from specialized supports and services to differentiate instruction within online programs.

Specific Learning Disability

- Allow students to slow down the rate or pace of content provided. This provides students opportunities to review content they might have missed due to speed of presentation or the complexity of the content.
- Realize there is a great deal of variance in the academic performance of students identified as having specific learning disabilities. This variance requires educators to be extremely specific in their approach to meeting academic needs based upon individual student academic need.
- Align text with the depth of cognitive load. This helps students with reading deficits deal with the complexity of text and ensure that materials provided in instruction are written at the level needed to meet academic goals and objectives.
- Provide students opportunities to demonstrate competency of the content by using alternative methods for assignments. Have multiple ways to assess course content and provide students options for task and assignment completion.
- Understand that real time chat sessions and lectures might need to be augmented or personalized in online learning environments because some students may not be able to understand accurately what is being shared due to the speed of the verbal or written content.
- Encourage group study supports outside the main instructional setting. Providing and encouraging student peer groups helps students process content and practice skills away from class. While this may be easier to accomplish in a blended setting, teachers will need to assist online learners in forming peer study and/or support groups.
- Provide an exam format in the student's most successful modality or response format. Online learning offers multiple ways for instructors to support differentiated student output, using software and apps, for student work product, as well as assessments.
- Schedule virtual one-on-one "office hours" or tutorials. While the low stress and impact of reduced face-to-face interactions may make it easier to focus more intentionally on the content, the loss of physical proximity could contribute to confusion about performance for all concerned, and virtual office hours are one way of monitoring progress and maintaining student engagement in the learning process.

Other Health Impairment

- Understand the impact that the student's condition has on their stamina, patience, and ability to interact with others in the environment. Students that are emotionally or physically stressed may not have the ability to process content at the moment, and the use of recorded content either for instruction or student assignments might allow them to participate more fully in the program. Although online learning environments might be a less stressful situation, with more relaxed social interactions, at times, these settings can cause a great deal of stress on the student experiencing the impact of their health impairments.
- Educational programs, even those delivered in online learning formats, often require students to attend to long periods of content or activity. For students with Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD) it might be important for them to have instructional content or activities broken into smaller segments, thus allowing them to focus on the objectives in a way that does not cause undue stress or anxiety.
- At times, students with other health impairments are unable to meet deadlines for completing assignments or maintain the pacing of instructional projects with peer groups. If this happens, the teacher will need to assist with the need to extend time to complete assignments and projects. Medical conditions and the progression of disease or injury affects students differently. Recognize these situations when putting together units of instruction and personalizing instruction for these students.
- When planning instruction for these students, teachers should provide an appropriate level of adult or peer supports necessary to help assist the student to better understand initial content, to practice or rehearse instructional strategies, or to appropriately assess educational functioning.

Emotional Disturbance

- Recognize that all students eligible for services are different. Some students might exhibit extreme behaviors that disrupt the learning process, while others might exhibit behaviors that are very withdrawn and isolated. This might be difficult to identify in your interactions with the students in online learning settings. Working closely with your student and gathering feedback from parents will help to identify how the student presents themselves. Opportunities for virtual face-to-face interactions may provide ideas for ways to effectively support behaviors in the virtual environment.
- Make expectations clear and be very consistent in order to provide a structured environment. It is important to provide structure into your program. Provide a written set of expectations and routines. Provide students with the opportunity to share their frustrations and concerns with learning in an online environment and allow students to suggest solutions that may make learning more effective and meaningful for them.
- Provide the students with self-monitoring resources, such as check lists, rubrics, or planning guides. This helps them visually scaffold expectations and provides cognitive supports when affective challenges present themselves. Using multimedia examples that focus on the expected work and behaviors is a good way to assist students' understanding, and practice good online learning academic and social behaviors.
- Be proactive in your schedule and pacing of content to ensure that unstructured time and activities have clear parameters and expectations for personal, as well as interpersonal behavior. Proactively providing clear examples of acceptable behavior is a good way to support expectations for social interactions. Digital citizenship and acceptable use policies provide supports when dealing with expected student behaviors in online learning environments.
- Realize that students might need to be gradually introduced and explicitly taught to meaningfully engage in some instructional formats or delivery systems due to specific aspects of their disability. For example, group work might need to be supported by an adult until the student is able to demonstrate the ability to work productively with others on tasks.
- Encourage students to engage in the identification and labeling of their own internal emotional states, and to share those in an appropriate way with the instructional staff and during virtual counseling sessions. Allowing the students to address issues before they become problems is particularly important to establish and maintain accepting and supportive learning environments.

Autism

- Be ready to support students to help them understand the nuances of social interactions. They will likely need support dealing with any misunderstanding of meaning or intent of interactions with others. In an online environment, teachers will need to monitor discussion boards closely and carefully compose communications with the student, whether it be email or comments on assignments. The case manager can be especially important in helping the student understand and address challenging situations.
- Put requests or directions in writing. Since students with autism tend to be very visual, making instructions and directions as specific as possible helps alleviate any misunderstandings.
- Remember that online learning environments can often be complex learning environments, depending upon the technologies and multitasking of activities that occur. Provide students with enough support to help them direct or redirect their attention to the most important ideas within the instructional moment. The case manager provides support of this nature through resources and strategies for time management and study habit development.
- Students with autism often have difficulty with change. Establish a system that provides students enough notice about change in expectations or schedules, since students with autism often tend to be very rule bound and like to have routines established and followed. It is best practice to establish a schedule for virtual face to face interactions, meetings, check-ins, daily expectations, and so forth. Providing students and families with a shared calendar or visual reminders is helpful to maintain effective communication and meaningful interactions.
- Know the issues students with autism may have with sensory input. Ensure the multimedia that you use in online learning instruction are not going to have a negative impact on the instruction due to sights or sounds that impede processing of content. Maintain frequent communication with parents so that they have the opportunity to provide feedback regarding issues that students may be experiencing with the online presentation of materials and social interactions with peers.
- Remember that students with autism may have a distorted understanding of their abilities. They might overplay their cognitive strengths and underplay their areas of educational need. Be aware of this potential situation when providing feedback and correction to the student.
- Communicate frequently with parents to get a better understanding of how verbal social interactions might affect the student, especially during times of stress. Students with autism often are very concrete and literal in their understanding of conversations, and things such as smiles, metaphors, idioms, inflection, or intonation might be lost.
- Include the student, to the greatest extent possible, in planning for instruction. This provides an opportunity to discuss what must be done to meet the student's needs.

Traumatic Brain Injury

- It is important to realize that the student has acquired this injury because of a traumatic event. Emotional issues in dealing with the acceptance of his or her condition might get in the way of cognitive ability. Make sure to provide assistance with any affective or behavioral manifestations that might occur due to the effects of the injury. Pay close attention to student displays of anger, depression, or withdrawal from the academic work, or the people within the setting and reach out to your administrator for additional support.
- The area of the brain that has experienced the trauma will have a dramatic impact on the needs and the abilities of the student in the online learning environment. To support this, provide content that allows students to experience their content in the modalities they are most capable of using, and minimize the use of content in the modalities they have the most difficulty with.
- When you design the instruction, make sure that you consider content using visuals, auditory files, texts, and multimedia content.
- During instruction, focus instructional materials in the student's least affected modality, while still providing instruction in the modalities that are affected by the injury. This multisensory approach to instruction helps the student receive content and information in multiple channels.
- During your virtual face to face interactions and check-ups, or during direct instruction, provide the students with the opportunity to restate back to you what it is covered in class and for the requirements for activities.

Speech/Language Impairment

For students with receptive speech and language impairments:

- Reduce auditory and visual distractions within the online learning environment. Extra stimuli in the learning environment can confuse and interfere with the student's ability to attend to instruction, listen to comments, follow directions, and respond appropriately to interactions.
- Provide cues to students so they can distinguish when instruction has begun, so they can better focus on the interactions during that segment of the course.
- Provide visuals and concrete examples during instruction. These provide supports for when the verbal components of the instruction have been completed.
- Make sure that your speech can be heard and understood by the student. Speak slowly and clearly, at a reasonable pace, and provide opportunities for questioning.

For students with expressive speech and language impairments:

- Provide students opportunities to demonstrate competency of the content by using alternative methods for assignments. Have multiple ways to assess course content and provide students options for task and assignment completion.
- Provide students extra time to respond when they ask or answer questions.
- Realize that students might have difficulty participating in discussions or group work due to their difficulties with articulation, fluency, or voice.
- Consider using written discussion boards as an alternative to group work for those students who have difficulty with speaking in groups
- For any student with speech and language impairments, offer one-on-one virtual "office hours" or tutorials. Virtual office hours are one way of monitoring progress and to ensure that students are able to access educational opportunities in an online environment.

Physical Impairment

- Make sure that all learning environments, including the student's educational space in the home, are physically accessible and not mobility-limited.
- Make considerations for students who use wheelchairs, walkers, prosthetics, or other mobility aids and structure the learning environments to support the adaptive equipment.
- Understand how the physical issues related to their impairment affects students' stamina for educational programming.
- Take the time to understand the complexities that the student will experience when using assistive technology aids, devices, programs, and machines.
- Be cognizant of the impact that limited physical mobility, both gross and fine motor activity, might have on the student's ability to fully participate in online activities with their peers.
- When teaching or providing content, pace your instruction at a speed that supports the physical limitations of the student in the online learning environment.
- Provide copies of all notes, lectures, and handouts to assist with note taking in class. Have other students provide copies of their notes for use by the student with physical disabilities.
- Realize that the student might have difficulty with both expressive and receptive aspects of learning. Depending upon the impact that the impairment has upon the student, they might have difficulty actively participating in group activities, group discussions, or in direct virtual social situations.

Visual Impairment

- Include the team members responsible for providing students with visual impairments the necessary supports for appropriate programming. Make sure that the system is compatible for all online learning instruction and activities. Double check the impact that any new programmatic instructional elements add to the course content.
- Provide the students proactively with the training necessary for them to feel comfortable with assistive technology systems so they are competent users of those supports.
- Provide the student screen readers and supports when appropriate to meet their level of visual needs in online learning environments.
- Work proactively and in advance with instructional designers and program support staff so that course design is consistent, visual clutter is reduced on the pages, contrast of texts and colors is maximized, the use of frames on the page is limited, and proper heading structures are used for content.
- Realize that students with vision loss might have difficulty seeing the entire screen or instructional content. Often, they learn in a linear fashion since they only receive information from specific parts of the screen.
- Take the time during instruction to summarize the content that is covered in text form, highlighting the main features that you would like the students to focus on or that form the basis of the content being read.

Hearing Impairment

- Take the time to provide students with the training necessary for them to feel comfortable with assistive technology systems so they are competent users of those supports within the online learning environments. Have staff, faculty, parents, as well as students receive training on these supports to provide a basis of understanding for program assessment and evaluation.
- Augment instruction through written/visual materials. Instructional staff should also ensure that there are written supports for the virtual social interactions that occur within the online environment.
- Ensure that the auditory aspects of the instructional environment are compatible with any student with hearing aids or cochlear implants. Work with student support specialists to “test drive” support systems that are in place to ensure that student has meaningful access to curriculum content and activities that are offered in the online setting.
- Ensure that the acoustics of both the student’s learning environments, as well as that of the teacher, have been checked for their instructional effectiveness. Attend especially to the background noise that might result when other students participate auditorily. Remind all students of the dos and don’ts related to the need to minimize background noise when speaking benefits all students but is especially important for students with hearing impairments.
- Remember that students who are deaf or hard of hearing often use visual cues and are tuned in to the lips and face of the speaker for cues. Ensure that all participants in the online learning environment face the video camera and speak in a way that supports the visual needs of the students.
- Use appropriate lighting to support the student’s ability to gain visual information, thus making better sense of the educational and social expectations within the online environment.
- Be aware that providing visually busy content to students with hearing impairments may cause confusion and create misunderstandings of content that could be difficult to remediate.
- Ensure that the visuals used to support instruction in online or blended learning settings focus on the key instructional goals, objectives, and elements.

Intellectual Disabilities

- Provide repetition of content using multiple modalities when providing instruction. Most educational materials written capitalize on the wide variety of multimedia capabilities afforded by the online environments to help demonstrate content concepts.
- Take the steps necessary to assess student understanding of content in appropriate ways. Written reports may not allow students to provide the breadth or depth of their understanding in a way that a verbal presentation might. Additionally, online learning environments provide students with cognitive impairments the opportunity to use differentiated output through technological tools.
- New or novel situations may cause confusion and have an impact on educational performance. Realize that students may have issues with adaptive behavior. Take the time to explain changes in instructional routines and use this as an opportunity to pre-teach content. Providing instructional videos or screen shots of the specific behaviors that are expected in the online learning environment will assist in the development of new skills. Communicate the changes to parent so they can provide support and answer questions the student may have.
- Be explicit in letting the students know what is expected of them for educational performance. Provide examples from past student work projects so that students with cognitive impairments have a better understanding of the features they must attend to.
- When appropriate, let students work with peers or teachers so they have another perspective on the academic content. Using the chat, discussion board, or video conferencing features that are part of the online environment will allow students the opportunity to socially interact with peers or teachers as they collaboratively work through the assignment.

Multiple Disabilities

- Collaborate with student's educational team
- Adapt materials
- Provide audio and/or visual notes for student where appropriate
- Promote appropriate virtual peer interactions
- Focus on activities that can be engaged in by all students
- Differentiate instruction based on individual student needs
- Integrate different skills within the curriculum
- Prioritize goals
- Be familiar with IEP objectives