How Do Students With Seizure Disorders Access Online Distance Education?

Students with seizure disorders may have little or no difficulty accessing traditional classroom education. However, students may experience severe seizures involving loss of consciousness and involuntary movements, or may experience what appears to be a lapse of consciousness. After a seizure, a student may experience a number of symptoms, such as confusion, fatigue, muscle weakness, headache, or pain. Additionally, students taking medication to control seizures may experience side effects like drowsiness or blurred vision.

As a result, students with disabilities may choose to access online distance education rather than traditional classroom education. But instructors should be aware that the design of their online learning courses could result in seizures for people with certain types of disabilities.

Photosensitive Epilepsy

According to the Epilepsy Foundation of America, over 100,000 people have a condition known as photosensitive epilepsy. For individuals with this condition, flashing light between the frequency of 2 - 55 Hertz (Hz) is most likely to induce seizure. A Hz is defined as "one cycle per second;" thus, 2 Hz is twice a second and 55 Hz is fifty-five times a second.

Instructors that have flashing images in their online courses should remove them or disable their ability to flash. If you do NOT have photosensitive epilepsy, examples of flickering images can be viewed at the National Center for Accessible Media (NCAM) website at: ncam.wgbh.org/richmedia/flicker_demo.html

Accomodations

- Specific accommodations for individuals who experience photosensitive epilepsy include:
  - Providing information in an alternative audio format.
  - Avoiding, removing or turning off animations, blinking text, offensive color patterns and/or certain audio frequencies.
  - But, if elements that flicker are used, they should change at a frequency of less than twice a second (2 Hz) or greater than 55 times a second (55 Hz).
  - Offering flicker free monitors (LVCD display or flat screen), a glare guard and/or non-glare glasses for on-site labs or classes.
  - Allowing several breaks to be taken if students are expected to intake visual information for a prolonged time.