

Supporting Low Vision Students in Higher Education

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In America, everyone is entitled to pursue a higher education; however, students with visual impairments or low vision— defined as a “visual impairment that cannot be fully corrected with glasses, contact lenses, medication, or surgery” (Ferreira et al., 2021, p. 189) and “a visual acuity of 20/70 or less” (Khimani et al., 2021, p. 1), face many barriers to achieving academic success. According to University of Minnesota Research Associate Paul Baepler (2023), “The American Health Association (2002) surveyed over 70,000 students to assess the health of college students in the United States, and 3.5% reported themselves to be blind or to have low vision” (p. 102). Additionally, Baepler (2023) noted that “many students, particularly those with medium or low vision, may not disclose their disability in college and prefer to hide this facet of their identity” which further compounds the challenges faced in academic, physical and social environments (p. 109).

Higher education institutions embody the values of society, where perception influences thoughts and behaviors, which can indirectly create barriers and challenges for low vision or visually impaired students, a cultural subgroup. When considering these challenges, it is important for colleges and universities to examine their part in creating inclusive environments and assisting with the development of the whole student. As these institutions move toward being more inclusive, it is important to ensure that all students have equitable access to resources. This paper will explore challenges that low vision students face, the importance of support, and the role of higher education institutions in future practice, policy, and research designed to promote diversity, equity, and inclusion.

The Importance of Inclusion

To ensure equitable access to resources, higher education institutions must promote inclusive environments that support all students, including those with visual impairments or low vision. In 1990, Congress passed the Americans with Disabilities Act (ADA) to provide legal protections for people with disabilities, which was amended in 2008 to reinforce existing protections under Section 504 of the Rehabilitation Act of 1973. As stated by authors Anqi Wu and Arijit Sengupta and in accordance with the United States Department of Justice Civil Rights Division, “Section 504 of the Rehabilitation Act of Education (EEOC 1973) specifically provided one of the first civil rights legislation to guarantee equal access for students with disabilities to higher education institutions that receive federal financial assistance,” which includes both public and private institutions (Wu & Sengupta, 2023, 1).

For example, a university may offer reading material in alternative formats like large print textbooks, Braille, or other digital formats through platforms like Blackboard instead of traditional textbooks written in small font to low vision or visually impaired students. These alternative formats create content accessibility and an inclusive environment for the students.

As a result, the act requires that all colleges and universities provide the resources and accommodations necessary to students with disabilities, including those with low vision or vision impairments, as they are needed for the students to fully participate in an academic environment.

Barriers that Low Vision Face in Higher Education

Low vision students face many barriers in higher education as it is often viewed as an invisible disability. These barriers make it challenging to truly achieve academic success. The following subsections will discuss barriers in academics, technology, social and physical environments, and the importance of support.

Academic and Technology Barriers

Barriers to academic success for low vision students are most noticeable in the classroom setting, where they may encounter challenges in accessing the materials and equipment necessary. Many courses taught at the higher education level are of lecture format where the professor or instructor gives an oral presentation of subject-related topics and often uses visual aids like PowerPoints to support the lecture. For example, in the research study, “Reducing barriers for inclusion of students with visual impairments in the universities: Focus on educational and psychological Needs,” Lucas Kija and Batista Mgumba (2025) found that many classroom settings were not conducive to active learning for low vision students as “lecturers (70%-90%) used pictures, projectors, power points, and blackboards (visual material)” (p. 299). The widespread use of these aids stifles the participation of low vision students, as their disability prevents them from seeing the materials presented.

Additionally in the study, “Barriers to inclusive higher education in Thailand: voices of blind students,” where one of the blind research participants reported being frustrated because “Lecturers always talk too quickly to digest the content. My non-disabled friends understand better than I do because they can read the PowerPoint presentation while listening” (Bualar, 2018, p. 473). This statement demonstrates how low vision or visually impaired students struggle with divided attention. Situations like this are further complicated when the accommodations are inadequate for the learning environment. For instance, Lehrer-Stein and Berger (2023) stated in their research about inclusion for disabled students in higher education that a visually impaired graduate student at American University “was unable to take a sociology course because the University did not provide her an in-person transcriber for real-time captioning” (p. 131).

Furthermore, low vision students also face technological barriers as some universities may lack the most current technology and software. Students with low vision rely heavily on technological devices like screen readers, e-books, smart pens, voice recognition software and other equipment to assist them with academics, however, some may cause extra work on the student's part to keep up academically. For example, Miyauchi and Paul (2020) noted in their study, "Perceptions of students with visual impairments on inclusive education: A narrative meta-analysis," that "some technological equipment was too large to carry or required too much time to assemble, causing them to lose invaluable instruction time" (p. 19). Therefore, the equipment is not used, which limits the student's academic engagement.

Physical Barriers

In addition to academic and technological barriers, low vision students face challenges associated with the physical environments of higher education institutions. These barriers can be challenges in the classroom setup, lighting, signage, access to the building, building configuration, and campus grounds. Most low vision students go through orientation and mobility training with an O&M specialist, a trusted friend, or a family member at the beginning of the semester to familiarize themselves with walking paths, building configuration, and classroom layouts as they need to make a mental map of things. However, they often find themselves unable to orient or navigate spaces such as classrooms "when tables and chairs are moved between classes or students change seats or an instructor moves about the classroom" (Baepler, 2023, p. 105). Low vision students, in general, find adapting to change difficult, and having to do so negatively impacts their academic experience.

Social Barriers

Lastly, the general makeup of higher education institutions is representative of societal values and perceptions which indirectly create social barriers for low vision or visually impaired students. To illustrate the stigma associated with low vision or visually impaired students, Amin et al. (2021), noted the frustration of Mimi, a 27-year-old graduate student who is visually impaired whose response about her sighted peers stated that “sometimes there are some that underestimate my ability to do something” (p. 739). This quote shows the lack of awareness about her disability among her peers. Perceptions and behaviors exhibited by those at higher education institutions lead to students feeling isolated and excluded from the learning environment.

Future Practice, Policy and Research

In regards to future practice, policy and research, inclusive environments in higher education, in recent years, have been more favorable for low vision or visually impaired students as well as all students with disabilities. Higher education institutions should continue to implement policy to ensure that all aspects of the learning environment are accessible to low vision students. More research is needed to focus on the academic experience of the whole student as it relates to low vision and visually impaired students. The universities should continue to train faculty, promote disability awareness, and continue research to identify technologies and strategies that will promote positive academic engagements for low vision and visually impaired students to incorporate campus wide.

Conclusion

Low vision or visually impaired students face academic, technological, physical, and social barriers in higher education institutions. With appropriate accommodations, support, and

promotion of more inclusive environments by utilizing advances in technology, open communication to address the needs and personnel training, these barriers can be mitigated.

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