

# Chapter 20

## Reading by Listening: Access to Books in Audio Format for College Students with Print Disabilities

**Marni Gail Jones**  
*Dickinson College, USA*

**Christopher L. Schwilk**  
*Shippensburg University, USA*

**David F. Bateman**  
*Shippensburg University, USA*

### ABSTRACT

*Advances in technology have produced a variety of ways for students with a print disability to access written material through audio format: from Recording for the Blind and Dyslexic's pre-recorded books to text-to-speech technology, such as Kurzweil's screen reader. This chapter will describe the need for books in alternate formats, how they can be used, who the end users are, the pros and cons of various formats, where to access information about the technology available, sample products, and tips for their use. Note: The authors are not promoting or endorsing any specific technology, and received no reimbursement nor are affiliated with any of the products mentioned in this chapter.*

### INTRODUCTION

For many students, college is difficult. For students with print disabilities, either visual or learning disabilities, success in college can seem almost impossible. Luckily, there have been major advances in adaptive and assistive technologies that

enable students with print disabilities to not only go to college, but also to be successful.

In this chapter, the rapidly growing field of assistive technology (sometimes called AT) for students with print disabilities is highlighted, briefly summarizing its history, benefits, and the rights of students with print disabilities. Additionally, we offer guidance for disability services personnel on how to access this technology, and provide readers with definitions of key terms as

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well as examples of the technology presently available, both for purchase and at no cost. It is important to note that since this field is growing so rapidly, a comprehensive review of available assistive technologies would be outdated in a very short time. Nonetheless, it is our intention to raise awareness of the myriad of *reading by listening* options for today's college students with print disabilities.

## BACKGROUND

### What is a Print Disability?

An individual is deemed to have a print disability if he or she cannot effectively read print because of a visual, physical, perceptual, developmental, cognitive, or learning disability (Wolfe & Lee, 2007). This means that a person with a print disability may have a visual impairment or a reading disability, or perhaps be unable to hold a book. A print disability is legally defined by the Higher Education Opportunity Act as “a student with a disability who experiences barriers to accessing instructional material in non-specialized formats” (Title 20 USCA § 1140k).

All students with print disabilities experience the same barrier—inaccessible materials—when the primary learning resource in their core curriculum is a printed textbook. Students who are unable to see the words on a page, hold a book or turn its pages, or who are unable to decode the text or comprehend the syntax that supports the written word may each experience a range of challenges, and they may each require various supports to extract meaning from the printed information; but the barrier for each is the same.

### What is the Prevalence of College Students with Print Disabilities?

In the United States, there are 22 million people who are unable to read ordinary print. Of these,

7.7 million have a visual impairment and thus cannot see print, and 14.3 million possess a learning or cognitive disability that prevents them from being able to read effectively (U.S. Census Bureau, 2001).

The exact number of college students with print disabilities is not known, though an estimated 428,280 students with disabilities were enrolled in colleges in the United States in 1997-1998; almost half of whom were diagnosed as learning disabled (Skinner & Lindstrom, 2003). The National Center for Educational Statistics reported in 2006 that the number of students with disabilities in higher education doubled in a decade. According to the National Council on Disability (2003), nearly 10% of all undergraduate students enrolled in post-secondary institutions in the United States reported having disabilities, and of those, 11% had a learning disability or an attention deficit disorder.

Students with learning disabilities continue to be the majority of students receiving support through postsecondary disability services offices (Gilson, Dymond, Chadsey, & Yu Fang Hsu, 2007). Most of those students seeking accommodations for learning disabilities have reading disabilities (Hallahan, Kaufman, & Pullen, 2009). Although the literature about college students' use of assistive technologies is accumulating, the majority of writing and research in this field has focused on K-12 interventions (Male, 2003; Ulman, 2005).

### What Purpose does Assistive Technology Serve for College Students with Print Disabilities?

Many individuals who do not have print disabilities enjoy the benefits of audio format technology that enables them to listen to books while driving, exercising, mowing the grass, or riding on a train. However, for individuals with print disabilities, the use of audio material is not merely a leisure time convenience.

If not for assistive technology that converts text to sound, the only way individuals who are

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