

Braille Literacy and the Expanded Core Curriculum

What Is Braille?

Braille is a tactile literacy system used by people who are blind or visually impaired for reading and writing. Braille is comprised of individual six-dot configurations called “cells” that are combined to create words. The dots of braille cells are embossed, or raised, and are read by touch rather than eyesight. Braille is not a different language. Just like the print alphabet, it is a symbolic code used to write various languages such as English. Braille can also be used for writing mathematics, scientific and music notation, and computer code.

Why Is Braille Important?

Reading and writing are fundamental skills that contribute to a successful and independent adult life. Think about all the large and small ways you use print during the day: making a shopping list, taking a phone message, choosing a specific can of food from a shelf, reading a recipe, enjoying a book. How would you do these activities if you couldn't read and write? Braille allows people who are blind or visually impaired to read and write independently. Print and braille are equal: both are systems of symbols used to provide access to information without the need for a computer, batteries, or intervention by others.

While access to computers and online information is also available through synthesized speech, an advantage of braille is that, as with print, interacting with text enables the reader to learn a great deal about how language is constructed. For example, the reader learns how punctuation is used and the spelling of unfamiliar words. By using braille, readers can also learn how text is formatted, including where and how to place titles, subtitles, chapter headings, and other organizational features. Reading and exploring conventions of spelling, punctuation, and text layout are critical for developing good writing skills. As with print, encountering these features in braille reinforces literacy.

Why Do We Need to Promote Braille Instruction in the Expanded Core Curriculum (ECC)?

Braille reading and writing fall under the topic of [“compensatory skills”](#) in the ECC. These are critical strategies and techniques that improve students’ success in school. Compensatory skills also include concept development, and a full array of sensory efficiency skills including, but not limited to, speaking and listening.

While people with visual disabilities are fortunate that technology has increased options for access to information, technology hasn’t decreased the need for people to read. In fact, technology actually makes braille materials more available than ever. Software programs can now translate text into braille, and electronic embossers can print that text to paper. Portable electronic devices are now available that have a row of plastic pins that act as movable braille cells referred to as a refreshable braille display. These displays can be used to read text that would be shown on a computer screen.

For all of its importance, there are a number of obstacles that impede efforts to provide braille instruction to children who would benefit from this literacy medium. The first issue is the severe shortage of qualified [teachers of students with visual impairments \(TVIs\)](#). Fewer than half of the states in the U.S. have a teacher preparation program to train people to become TVIs. It is estimated that the combined annual graduation rate of these programs is less than 200 new teachers of students with visual impairments per year; a number that barely covers the annual attrition rates of TVIs retiring or leaving the field. Assuming that children can become literate braille readers when supported only by special education generalists and paraeducators, whose understanding of braille is limited to putting a text file through a braille-translation software package and pushing “emboss,” is comparable to assuming that fully-sighted children will learn to read print in classrooms where they are given textbooks but supported by illiterate teachers.

Another obstacle relates to a misunderstanding about the role of teachers of students with visual impairments in the education of children who are blind or visually impaired. TVIs are teachers. As such, they must assess students’ strengths and needs and also provide direct instruction in disability-specific compensatory skills. Instruction in literacy, especially [braille literacy](#), should be provided by a fully qualified teacher of students with visual impairments. Just like with children who read print, emergent braille readers need daily instruction in reading and writing in their primary literacy medium. In addition,

these same children need direct instruction and daily practice with Nemeth or the UEB code for mathematics, the use of tactile graphics, and the use of electronic braille devices. Braille instruction is not, and should not be, limited to “academic” students who are fully included in their general education programs. Braille is also appropriate for children who need functional literacy programs.

Sadly, in some places, there is also a misunderstanding about braille itself. Some people may have the mistaken impression that braille is an outmoded technique that has outlived its usefulness. “After all,” some may say, “with all this new technology available, why would a child need to learn braille?” As mentioned above, technology actually makes it easier for children to have access to braille materials. As with print readers who access information on computers, technology hasn’t taken away the need for children to read and write. Instead, it has increased the importance of strong literacy skills. If computers and other technology devices were all that students needed, why do we insist that children without visual disabilities continue to learn print? The question sounds absurd when stated that way, but the analogy is the same: **all children need to learn to read and write effectively**. Children who have full use of their vision use print; children who are blind or visually impaired use braille.

How Can We Support Braille Instruction in Schools?

We need to stand up for the rights of all students to be literate. We must advocate for teachers of students with visual impairments to have the necessary time and resources to provide adequate direct instruction in braille. For most students, this means daily instruction by a fully certified TVI who can develop and deliver the thorough literacy instruction that all children need to learn to read and write proficiently. If students in school who are not visually impaired receive daily instruction in their primary literacy medium—print—why should students who use braille receive any less?

To meet the need for adequate literacy instruction, we must support teacher preparation programs that train teachers of students with visual impairments. Without sufficient numbers of well-trained braille literate teachers, students with visual impairments will not develop literacy skills.

We must also provide adequate professional development for teachers of students with visual impairments who teach braille reading and writing to help them keep up with developments in both the general education and disability-

specific areas such as Common Core standards, new assessments, new materials, and new techniques. In addition, TVIs need access to information about research-based best practices in reading and literacy.

We can also support braille instruction in schools by continuing to focus on the availability of quality braille reading materials. We must ensure that accurate and complete braille textbooks are available so that all students, including those with visual impairments, have access to their textbooks at the beginning of the school year.

When textbooks have graphics and illustrations, we must ensure that the braille versions of these materials also have accurate and accessible corresponding tactile graphics.

As electronic and digital textbooks become more popular, we need to continue to ensure that students who are visually impaired have access to their textbooks, whether through visual, tactile, or auditory means. Electronic devices should allow students to read their digital textbooks in braille if this is their preferred literacy mode. Regardless of literacy media, electronic materials must also provide accurate audio descriptions of interactive graphics.

Finally, literary books on a variety of topics and in a variety of genres should be available for students who read braille. Just like with print readers, variety is critical to developing a love of reading. By providing access to interesting reading materials, we ensure children's love of reading, which is essential for them to develop literacy and become lifelong readers.

<https://familyconnect.org/education/expanded-core-curriculum/braille-literacy/>