Introduction:
Early Literacy for Children with Visual Impairments

What Is Literacy?

Literacy is defined as the ability to read and write—using written language to share information and ideas—at home, at school, in the workplace, and in the community.

Literacy is more than reading words on a page. It involves connecting written words to meaning. This requires an understanding of spoken language, as well as knowing how spoken language can be represented using written symbols—print letters or braille.

Literacy, in its most basic sense, is the ability to get meaning from symbols and communicate using symbols.¹

When Does Literacy Begin?

Children begin on the way to literacy from the day they are born. Professionals who study literacy describe it as a process, set in motion long before actual reading and writing take place.²

• A child “emerges” into literacy as she learns about language—both spoken and written.

• Her experiences help her understand the world around her and give meaning to words she learns.

• Literacy is nurtured by adults who model reading and writing and involve the child in using written language (print or braille) for many purposes.
• A child’s attitude towards literacy, shaped from birth by messages from caregivers, is an important part of becoming a reader. During the years before school, a foundation for literacy is built as a young child develops positive attitudes. These include a desire to read and the belief that “I can.”

Gradually, the child begins to imitate the reading and writing of those around her—scribble-writing messages, pretending to read from a familiar book. She notices and learns more and more about the sounds in words and their relationship to letters as she “bridges” into reading and writing.

What Is Early or Emergent Literacy?

Early literacy refers to the period from birth until the time a child begins to read and write. Knowledge, skills, and attitudes built during this time, leading to reading and writing, are called “emergent” or early literacy skills. Although the early literacy period often extends to kindergarten or first grade, it is not defined by age. An older child who faces challenges in learning to read will continue to build early literacy skills. She may begin to read and write later, using literacy for many purposes at school and at home. Or she may learn to read key, useful words to help her carry out daily activities—reading a shopping list, schedule, menu, and labels. It is not possible to know how far a child will travel along the road to literacy. However, all children can make progress and will benefit from the positive expectations and support of parents and teachers.

Opportunities to build early literacy skills are important for all children.
How Does a Child with a Visual Impairment Develop Literacy?

Both braille and print letters are symbols that represent spoken language, so it is not surprising that literacy is built upon a similar foundation for a child who will read braille and a child who will read print.6

Early literacy for every child is built upon learning and development in key areas.

• **Language**—the ability to speak and listen with understanding

• **Concepts**—understandings, formed through experience, that give meaning to language the child learns

• **Skills needed for learning through touch** (for a child who will read braille) or **through vision** (for a child who will read print)

• **Knowledge about written language**—awareness of how and why we use and value written language, tools used to create written language, as well as knowledge about its rules, including letters and letter-sounds

At times, the emphasis or way of learning will differ for a child with a **visual impairment**. A child who will read braille needs many opportunities to learn from firsthand experience since she cannot learn by observing others. She needs special support to develop her sense of touch and the ability to use her hands for learning and for literacy. Of critical importance, she must encounter and explore braille and the tools for writing in braille, just as a print-reading child requires print books and writing tools.7

For a child who has limited vision but will read print, making the fullest possible use of her vision will be a focus of instruction, enabling her to see and “unlock” the meaning of the print around her. She, too, should be encouraged to explore, using all her senses for learning. It will be important to provide
appropriate lighting and print material that is highly visible with good contrast. (Appendix A lists resources containing information about materials, special aids, and learning strategies to help you meet the needs of a child with impaired vision who will read print.)

Sometimes, the best literacy medium for a child—braille or print—may not be obvious, especially if a child’s degree of vision is unknown or changing. A teacher may recommend providing both braille and print materials until more information can be gathered. Skills for learning through both touch and vision will be essential. Some children learn to read both print and braille, using each for different purposes, throughout life.

A child who faces significant challenges in learning to read braille or print may be most successful using a symbol communication system. Symbol communication systems use either visual pictures or tactile symbols (textures, small objects, or raised lines) to communicate meaning. They allow a child to make choices, communicate needs, and share information about daily activities and routines. She will need to develop concepts and the skills for learning through touch (or sight). She, too, must learn that a symbol is something that stands for something else and communicates meaning.8

What is braille?

Braille is a system of symbols for reading and writing. Braille symbols are formed of small raised dots the reader feels beneath her fingertips. Every braille symbol has from one to six dots arranged in a shape or pattern that is two dots wide and three dots high.

More than 60 different braille symbols can be made by varying the number and position of dots within this basic shape.

There are two main forms of braille—uncontracted braille and contracted braille. Uncontracted braille provides a symbol for each alphabet letter, the numbers 1-10,
and for punctuation. Contracted braille provides additional symbols and combinations of symbols that stand for words and parts of words. Most braille books and materials are published in contracted braille, although recently, more materials in uncontracted braille are becoming available. Please refer to resources listed in Appendix A for more information about braille, its history, as well as materials for sighted persons who wish to learn braille. See Appendix B for a display of braille letters and numbers. The Early Literacy Experiences chapter discusses introducing a child to braille and basic skills for reading braille. Sources for children’s books in braille are provided in Appendix D.

What is a symbol communication system?

There are many forms of symbol communication systems. Their purpose is to make communication easier for a child who has difficulty with spoken language and/or difficulty using written language. The symbols may be highly individual but are linked to meaning for a particular child. Some use pictures or photos designed for a child with typical vision. A child with impaired vision may be able to use a system that uses simple line illustrations or photos with few details. Tactile symbol communication systems are designed for a nonverbal child who does not have enough vision to use a visual symbol system. A tactile system uses symbols that can be examined by touch. The tactile symbols chosen can be small objects, parts of objects, or textures. For example, a tab top from a soft drink container mounted on tag board can be used as a symbol for “soft drink.”

Through a gradual process of linking the thing (a soft drink) to its symbol (the tab top), the symbol gains meaning for the child. For a child who faces challenges in learning to read an alphabet-based system like braille or print, symbols can be used as a menu item, put on a shopping list, or signal snack time on a daily schedule. A child who has difficulty communicating can give the symbol to an adult to express her needs. Symbols are also labeled with the print or braille word. This allows a child who begins on her way to literacy using a symbol system to learn the written word. At some point, the written word may replace her need for the tactile or visual symbol. (For more information about tactile symbol communication systems and their use, please refer to resources listed in Appendix A.)
A critical early decision

As early as possible, a young child with a visual impairment should be carefully evaluated to determine if she will rely on her sense of touch for learning, or if she will use vision for a significant part of her learning. This is a critical early decision affecting her path to literacy. Tactile learners—learners who will use touch—will need exposure to braille and may also benefit from experience with symbols in a tactile communication system. A visual learner should receive support in experiencing print and, perhaps, pictures in a symbol communication system. Your child’s TVI (teacher of students with visual impairments) is trained to evaluate your child and partner with you and other professionals to perform a learning media assessment. This important assessment examines your child’s way of learning in a variety of situations. It involves careful consideration of many factors and close teamwork between parents and professionals. A child’s learning media assessment should be updated each year, particularly when she is young and her needs may be changing. Although this book does not discuss the assessment process, you will find further information in the resources listed in Appendix A.

Now that you are aware of some of the options for literacy, let’s briefly summarize ways in which key areas of learning contribute to literacy for a child with a visual impairment. These and many additional points will be covered in detail in the chapters that follow.

Language Development

Literacy begins with spoken language, becoming aware of the sounds of language, learning to listen and speak with understanding. A young child learns to communicate—first in cries and gestures, and later, using words. When caregivers respond to their child’s early attempts to communicate they nurture early language skills. A child learns language by talking with caregivers who know her well and can interpret her early words. As she grows older, conversations with adults help her form more complex sentences and learn new words. The vocabulary she builds, from her earliest years, helps her find meaning in words she reads. Throughout her early years, she also sharpens
her ability to hear the sounds within spoken words. Noticing rhyming words and words that begin with the same sound is a sign that she is developing phonemic awareness. When she begins to read, this awareness helps her link sounds to written letters.¹¹

To support a child’s early language development

- Use the sound of your voice and touch to get early communication started.
- Make the environment “message-friendly” by cutting out unnecessary noises and distractions.
- Take turns as you play and talk to your child. Back-and-forth interactions build important language skills.
- Pair language with experiences so the words she learns have real meaning. Have her explore a bird’s nest as she learns “nest” and show her where it hides in the tree.
- Give her words for the things that catch her interest and use descriptive language. “That kitty’s fur is so soft. . . She licked you with her scratchy tongue!”
- Engage the child in conversations that add new words to her vocabulary and improve her ability to speak and to listen.
- Sing songs, recite rhymes, and play with words to develop her awareness of the sounds within spoken words. “Hickory, dickory, dock, the mouse ran up the clock!”

(Please see the Language Leads to Literacy chapter for discussion of these and other activities supporting language learning.)
Concept Development

A child with a visual impairment must also build concepts to give meaning to the language she hears and speaks. Concepts are the understandings the child forms about all manner of things. Because she learns less by observing, this will take time. She will need many firsthand experiences to build concepts and learn related language. She needs to touch, hear, taste, and smell things in her environment as you name and describe what she is experiencing. A young child with a visual impairment needs opportunities to explore freely, within safe limits. She will also benefit from planned experiences guided by an adult—planting a seed and examining it at different stages as it grows, exploring the family car inside and out, visiting a farm and touching the nest where the hen lays her eggs. Networks of related concepts are important for all learning and for literacy.

To support concept development for a child with a visual impairment

• Make the most of early routines—eating, dressing, bathing. Their predictability supports learning concepts about common objects and events and gives her lots of opportunities to touch and handle things.

• Encourage active exploration—smelling the flowers in the backyard and digging in the mud beneath their roots, exploring the contents of the kitchen cupboard.

• Plan for complete experiences. She should learn about the sequence of things, where they come from and where they go. Show her how an apple that grows on a tree is purchased at the grocery, then transformed into the apple slices on her plate. Then put the peel and core into the compost or trash.

• As she touches and explore things, give her the words for what she is handling and experiencing. Name and use descriptive words—smooth, bumpy, round.

• Provide materials that can be compared and sorted—shapes, textures, and small common objects.

• Provide opportunities and props for pretend play and imagination, such as toy dishes, toy phones, dress-up clothes, and car keys.
• Provide a variety of common items and play materials that lend themselves to open-ended play, such as sand and water play, containers that nest and stack, or play dough.

• As she explores, help your child’s understanding of the world grow by giving her just enough support to “take the next step” on her own. If she is trying to fit a large item inside a too-small container, give her a larger container and see if she tries to fit the item inside.

(Please refer to the chapter, Concepts: Center Stage, for a discussion of concept development and activities to foster this development.)

Skills for Learning through Touch

All young children need to explore and learn about the objects, people, and events in their environment. This is even more critical for a child with a visual impairment. Strong, skillful hands and the ability to use them in a purposeful way are important for finding out about the world. Strong, skillful hands are also necessary for reading and writing braille. She will need to learn how to use two hands, together and separately, to explore objects, books, braille, tactile symbols, and braille writing materials. Encourage and give her opportunities to notice small differences in the texture, temperature, and shape of objects, and later, in braille words and letters. She will also need your help to learn how to search and explore in an organized way, using the best strategy for each situation. And to learn through touch, she must be able to fit together the pieces of information she gathers to form a more complete “picture.” Touch, as a means of learning, differs from vision in significant ways. It does not provide information about things at a distance, and it does not offer immediate information about a whole object unless that object fits within the child’s hand.
To support your child’s ability to learn through touch

Provide her with opportunities to explore and handle all sorts of things at home and in the environment, even when she is quite young.

• shake baby powder after a bath
• squeeze a bottle of lotion and rub it in
• splash and pour water in the bath or sink
• grip tightly while swinging, climbing on playground equipment, riding a tricycle
• pick flowers
• scoop with a spoon
• open jars with screw-on lids
• button a shirt
• search the contents of a box or drawer
• search for dropped objects on a tabletop or floor
• empty dishes from the dishwasher
• explore big objects like the slide at the playground or the family car
• explore small, detailed objects like the cereal in her bowl or acorns from a tree

Provide toys and other items that require her to use her fingers in a variety of ways.

• pull apart and push together locking blocks
• poke a finger into small openings
• put small items into a hole in a container
• wind up a toy or a music box
• twist small knobs
• press the keys of a toy piano, several at a time
• squeeze and mold clay

(Refer to the In Touch with Literacy and Learning chapter for more information about the skills needed for learning through touch.)

Knowledge about Written Language

A child with typical vision learns a great deal about what it means to read and write by watching family members and looking at printed words and symbols around her. A child with a visual impairment, however, does not see the print that surrounds her. She must be actively involved when others are reading and writing to learn what they do. She also needs opportunities to use written language for purposes that have meaning for her—making a shopping list with her favorite items, or writing messages to family members. If it is likely she will read braille, she must have many chances to explore materials in braille. She will need tools that allow her to “scribble” in braille—using a braillewriter (mechanical device for writing braille) or pointed tool to make braille-like dots. A child who is likely to use her vision for literacy needs print that is highly visible as well as crayons or markers for making marks.

In addition to experiences with print and braille used for everyday purposes, all children learn important early literacy skills by listening to read-aloud books and sharing and talking about these with adults. Reading aloud is one of the most important things caregivers can do to support early literacy skills. If the book contains braille, the child will be exposed to braille and begin to understand its purpose—critically important for a child who will someday read braille. A child with a visual impairment will enjoy reading from a wide variety of books—carefully chosen print books as well as
books that provide braille, **tactile pictures**, or books accompanied by a **story box** of items featured in the story. To be most effective, the adult reader should connect the story to the child’s own experiences, ask questions about the story, and encourage the child to respond. Through this type of **interactive reading**, the young child learns how to make sense of the story and may begin to act as a reader—joining in on parts she remembers and pretending to read the story on her own.  

**To develop your child’s knowledge about written language**

- Involve her in daily reading and writing activities, such as leaving messages for family members, writing a shopping list, and using a written recipe to bake cookies.

- Talk about your own reading and writing as you go about your day—signs, labels, the newspaper, instructions, your “to-do” list.

- Provide braille and/or print reading materials—storybooks, grocery lists, messages, recipes, a menu at her favorite restaurant.

- Read aloud to your child, asking questions, listening to her responses, and involving her in the story. Book sharing also gives her the opportunity to learn how to handle books, holding them right-side-up and turning pages as you read.

- Share a wide variety of books, including books in braille, books with tactile pictures, books with a story box, and appropriate print children’s books.

- Model hand movements for reading braille as her hands rest on top of your hands.
• Make your own books based on a story the child tells about a personal experience. Illustrate it with objects or tactile pictures she and you choose or create.

• As you read and at other times, call attention to rhyming words (*slide ride*), words with interesting sounds, and words that begin with the same sounds (*piece of pizza*).

• Provide materials for and encourage scribbling in braille and/or print—a braillewriter and tools for making raised dots and lines. Heavy black or colorful crayons and wide-tipped markers make visible lines for a child with **low vision**.

• Use tactile symbols and braille labels for practical purposes—to identify her favorite storybooks, CD of songs, or box of cereal.

• Tell and act out familiar stories.

• Visit the library and stay for story hour.

(Please see the Early Literacy Experiences chapter for a discussion of the many skills needed by a child on her way to literacy as well as experiences to build skills.)

**Knowledge and Skills for Bridging into Reading**

As your child’s experience with written language grows, she may become more curious about how the sounds within words are connected to braille or to print letters. Continue to use written language for everyday purposes, reading books aloud, making books, and encouraging her attempts to write and make marks. As you do, look for opportunities to comment on relationships between written words, letters, and letter-sounds. Answer her questions about how to form specific braille or print letters and words. Make your interactions fun and game-like.
Read-Aloud Reminders

Every child should have a read-aloud story time that

- is fun and enjoyable
- is shared with a reader who also enjoys the story
- occurs every day or at a regular time
- encourages participation —
  - holding toys related to the story
  - imitating animal sounds in the story
  - saying the repeated parts
- appeals to personal interests or creates new ones
- encourages talking about the story with the reader
- allows time for talking about new or interesting words in the story
- relates to familiar experiences or suggests new experiences to try
- fits the level of understanding and attention span
- opens the door to the fun of communicating in print and braille
- creates a desire to read

Read-aloud story time should be fun for the child and fun for the reader!
To support your child as she bridges into conventional reading and writing, continue the activities suggested in the previous list and . . .

- Encourage word play and substitute different beginning sounds in songs and rhymes—“Willaby, wallaby wustin, an elephant sat on Justin.” Make up tongue twisters that feature words beginning with the same sound—“Aunt Annie’s alligator ate applesauce”—and share a laugh.

- Share alphabet books and create alphabet boxes. Fill a container with household things that start with the same beginning sound (/b/—ball, book, banana, bear).

- Call attention to sounds within words and how they change as letters change—differences in rhyming words like fat and cat.

- Listen to and examine the similar rhyming endings of words in a story you are reading. Write words on a braillewriter or print them on paper to see how changing one or two letters makes a new word.

- Write down a story the child tells you about an experience she has had, add the words in braille, and read the story. Have her “read” it back to you.

- Encourage her to write the sounds she hears in words even if she does not spell them correctly. It helps her listen for the sounds in words and learn how they are related to braille symbols and print letters.

- Use braille or print labels around the house to identify items and give her the spellings for common words—chair, door, table.

(Please see the Bridging into Reading chapter for more information about helping a child make the transition into conventional reading and writing.)
Critical Importance of the Early Literacy Period

Literacy is a powerful tool. As researchers discover the many ways early learning contributes to literacy, professionals, policymakers, and parents have focused increased attention on early literacy. Children who have not formed a strong foundation of skills before entering kindergarten are at risk for later reading difficulties. Studies show that children who enter kindergarten with a limited vocabulary, little experience with conversation, inadequate concepts, and limited exposure to written language often remain behind throughout their school years.20

Early literacy skills are important for all children—whether a child will use braille or print for many purposes, for functional tasks in a particular setting, or will use a symbol communication system. In addition, the experiences that build early literacy skills provide valuable learning that reaches beyond reading and writing. Building language, concepts, the skills for learning through touch, reading aloud, and other experiences you provide help a child understand her world. They offer opportunities for her to build knowledge and confidence and provide occasions for sharing fun throughout your child’s earliest years.

Building a strong foundation for literacy is every child’s right and an important investment in each child’s future.
Notes


Dickinson & Tabors (Eds.). (2001). *Beginning language with literacy*.