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Print Navigators

When my (coauthor Tanya Wright's) daughter was 7 months old, I noticed something interesting when she would sit on my lap as I read familiar books. Before I would turn each page, my daughter would lean way over to her right, sometimes almost toppling off my lap in the process.

> "Brown Bear, Brown Bear, What do you see? I see a red bird looking at me." (*Leans.*)
>
> "Red Bird, Red Bird, What do you see? I see a yellow duck looking at me." (*Leans.*)

I eventually figured out that even though she couldn't physically turn pages yet, she understood where to look to see the next page of a book. She was leaning to the right to see what came next as I turned the page. Of course, I quickly grabbed the video camera to capture this very first (and very funny) evidence that my infant knew something about how print works!

While many believe learning about reading and writing begins in elementary school, in reality children learn a lot before elementary school that builds the foundation for later literacy learning. For example, in the years before elementary school, children may learn

- The purpose of a book is for reading
- How to hold the book
- How to turn the pages

- Where to start reading
- How reading proceeds (in English, from left to right and top to bottom on a page)
- That the print on a page tells us the words to say
- And much more!

That knowledge is called *print concepts* (also referred to as *concepts of print*, *concepts about print*, and *print awareness*). In this chapter, we explain what print concepts are, why they are so important, and how you can develop them every day with the children in your care.

KEY PRACTICES

Knowing and Showing

The key practice of **Knowing** is a starting point for supporting children's development as print navigators. Knowing how children learn print concepts informs everything teachers do to support this area of development. **Showing**, another key practice, is the active response to Knowing.

Knowing

Print concepts are fundamental understandings about how print works. Children need to develop these understandings to lay the foundation for reading and writing (National Early Literacy Panel 2008). It might seem natural to you now, as a longtime reader and writer, but print concepts are not natural to young children. Children's understandings of print concepts grow through interactions with print, as adults or older children around them read books and point out print in the environment. Children first develop general understandings about how print works and then move to more specific understandings about print related to letters and words.

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Print Concepts

Print concepts include understanding the following:

1. Print represents language.
2. Print is organized in a specific way.
3. Print is made up of symbols that represent parts of language.

Print represents language. Print is what we read and write for a variety of purposes. When you read the word *bird* to a toddler, they don't think of it as a word at all but rather as a flying animal. In the early childhood years, children first learn that *bird* is the word we use in oral language to refer to some flying animals. Children then begin to realize that words we say aloud, like *bird*, can also be written down. This is part of beginning to understand print concepts.

Developing these insights takes time. Toddlers and preschoolers typically focus on pictures in books rather than print, in part because the pictures mean something to them and the print may not yet have meaning. If young children look at the print at all, often it is because the print is embedded in the illustrations—for example, *honey, mel*, or *miel* visible on a jar of honey (Justice, Pullen, & Pence 2008). As teachers read to children, they can draw children's attention to the print so that print becomes interesting and meaningful. Children begin to understand that both the print and illustrations provide the meaning of a text.

As children are exposed to different kinds of print in their environments (such as signs, maps, lists, and books), they begin to see that print can be used for many purposes. Children learn that people write for specific purposes—to inform, entertain, or persuade. Even very young children love to be authors, and you can see their understandings about print concepts through their early writing attempts. (See Chapter 4 for more about young children's early writing.)

Print is organized in a specific way. Depending on the language (such as English or Arabic), print is organized in specific ways. We read words on a page in a particular direction. In some named languages, such as English, Portuguese, and Spanish, for example, we read from left to right and from the top to the bottom on a page (more about directionality in other languages later in this chapter). Reading text in any language requires a language-specific understanding of the directionality of print in that language.

Directionality of print will not match children's understandings outside of a print context. For example, consider how we get from point A to point B when walking:

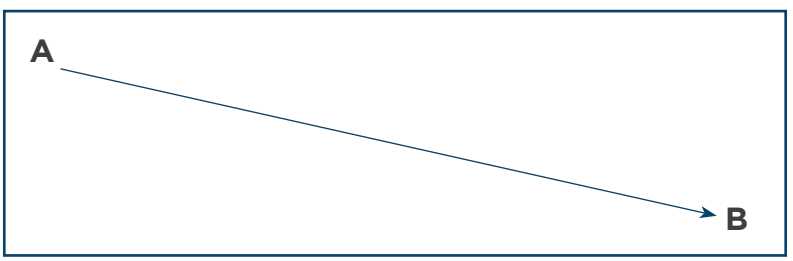


Figure 2.1. This is how a person would walk from A to B.

You would walk in a single, straight diagonal line. But consider how you get from point A to point B when reading print (see Figure 2.2).

Figure 2.2. When reading, you get from A to B very differently than when walking.

In addition, when readers get to the end of one line of print, they don't turn around and go back the other way on the next line, like a zigzag. Rather, when readers get to the end of one line, they pick up and start back at the beginning of the next line. This is called the *return sweep*, and it takes young children some time to understand that this is how we read print in languages like English, Portuguese, and Spanish.

Understanding print concepts also includes knowledge of how books are organized. Books have a "right side up," as well as a front and a back. There's a place in a text where we start reading. This place is typically not the copyright page, for example. It is often the page actually labeled with a numeral 1. Where we start reading may vary by the type of book and the situation. For some informational books, we might start by checking the index to find the information we need or looking at the table of contents by choosing a page to start reading.

Print is made up of symbols that represent parts of language. In English and many other languages, groups of letters make up words. An understanding that print is made up of symbols that represent parts of language is an important print concept. In addition to understanding the more general insights of print—that it represents language and carries meaning—young children begin to learn about letters (at least in alphabetic languages, such as English and Spanish) and words.

Children learn that the orientation of symbols matters a lot in print. The orientation of a symbol relates to how it is positioned on the page. The importance of orientation is something that must be learned. In most aspects of our lives, an object is an object no matter how you orient it. A teddy bear is still a teddy bear, for example, whether we turn it upside down or on its side. In contrast, with letters, the orientation of a letter can entirely change its identity:

Figure 2.3. The orientation of a letter can change its identity.

These letters are the same shape, but orienting them differently changes what they mean. This is why you might see preschoolers write with letters oriented in different ways—backward or upside down. They are still learning this concept of print.

Another important print concept is that letters represent sounds. For example, the letter *n* makes the sound you hear at the beginning of the word: *no*—/n/. (In this book, when we talk about a sound, rather than a letter, we will place slash marks before and after the letter or letters that represent a sound.) The understanding that letters systematically represent sounds in spoken language is called the *alphabetic principle*. As they become print navigators, children learn that when letters are combined in a particular sequence, they represent individual words. They also learn that the sequence of letters is very important. For the word *top*, the sequence of letters is t-o-p; the word does not say *top* if we write p-o-t because the sounds that the letters represent are in a different order. (See Chapter 3 for more on sound–letter relationships.)

Print, like speech, is divided into words. Printed words do not change between readings of the same text. If we read and reread a favorite storybook, the words on the page and the words we say as we read aloud will always stay the same. In the early preschool years, children may begin to point along as they "read" familiar books or other texts. Show children that a word you are saying aloud is represented by one written word on the page by demonstrating how to point to each word as you read aloud. Children probably won't yet be able to point accurately, but they can develop their understanding of how print works by watching, listening, and applying what they're learning. Later, as children begin to try to decode words, they will know that a space on the page and a pause in speech signals when one word ends and another begins. This understanding enables children to attend to the beginning and end of a word and to learn that words have a first letter, a last letter, and a middle letter or letters. Understanding these print concepts is critical for figuring out the sounds those letters represent when decoding text. (This is discussed in more detail in Chapter 3.)

Print Concepts to Teach

Important print concepts for children to learn in early childhood include the following:

- Print carries meaning and represents language. It is what we read and write.
- Print is written by people called *authors.*
- Print can be used for many purposes, such as to inform, entertain, and persuade.
- Print can be found in many places, such as on some signs, on maps, and in books.
- Print follows a particular direction (called *directionality*).
- Books have a right side up and a front and a back.
- There is a right side up for print, and the orientation of letters matters.
- There's a place in a text where we start reading.
- Letters represent sounds (in English and other alphabetic languages).
- Letters make up words (in English and other alphabetic languages).
- Words don't usually change between readings.
- In print, we signal a new word by having a space with no markings. This understanding is called *concept of word.*
- Words have a beginning and an end.

Concepts of Pictures

In addition to learning about print, children learn concepts about how pictures work in text.

- **Concept of action.** Even though pictures are still, they can represent movement. For example, a picture of someone kicking a soccer ball represents the movement of the kicker and the ball.
- **Concept of intentionality.** Authors and/or illustrators choose or create pictures to accomplish a purpose, such as to make a reader laugh.
- **Concept of permanence.** Pictures in printed texts are permanent and do not change.
- **Concept of relevance.** Pictures and written text are related. If you've seen a young child draw a picture that doesn't go with the written words, you've seen a child who hasn't yet learned this concept.
- **Concept of representation.** Pictures represent objects, but they aren't the actual objects. For example, you can't actually drink a picture of a bottle of juice.
- **Concept of partiality.** Not everything in written text must be represented in the pictures. For example, two events might be described in a page of a story, but only one of them may be shown in the picture.
- **Concept of extension.** Some pictures provide information that is not in the printed words. For example, illustrations and graphics (such as diagrams) in informational texts for young children may show details that are not included in the text.
- **Concept of importance.** Some information in a picture may be more important than other information. You'll find that young children sometimes focus on a detail in a picture and need help to notice the picture's main idea.

Adapted, by permission, from N.K. Duke, R.R. Norman, K.L. Roberts, N.M. Martin, J.A. Knight, P.M. Morsink, & S.L. Calkins, "Beyond Concepts of Print: Development of Concepts of Graphics in Text, Pre-K to Grade 3," *Research in the Teaching of English* 48 (November 2013), 175–203.

Concepts of pictures are similar to concepts of print. Both are essential knowledge that help children navigate and understand books and other types of text.

Showing

Talking about the print in books is an important way to teach children about print. During read alouds, teachers can support learning by intentionally pointing to and discussing features of print with children. This technique is called *print referencing* (Justice & Sofka 2010).

Print Referencing During Read Alouds

Drawing children's attention to print is a powerful way to improve children's understanding that print conveys meaning. Print referencing also helps children learn about how print is organized and that print is made up of symbols (letters) that represent parts of language (words).

RESEARCH NOTE

The Impact of Print Referencing

Research with 4-year-olds shows that print referencing during read alouds can improve children's understandings about print in preschool and can have lasting effects on children's reading development (Justice et al. 2010; Piasta et al. 2012).

Many children's books are written and illustrated in ways that make the print particularly noticeable. These features make it easy to talk about the print with children. For example, the word *wiggle* might appear in a special font that makes it seem to wiggle across the page or text might appear in a speech bubble that shows what a character is saying (Zucker, Ward, & Justice 2009). Books with these kinds of features are called *print salient texts*. In these texts, the print and illustrations may be integrated in ways that enhance the text's message. These books are useful tools for print referencing because they make it easier for teachers to draw children's attention to concepts of print. Choosing print salient texts for read alouds is a teaching strategy that supports children's growth as print navigators.

Book	Print Salient Features
The Pigeon Wants a Puppy! by Mo Willems	Speech bubbles, visible sound (*aaaargh!*)
Growing Vegetable Soup, by Lois Ehlert	Environmental print in the illustrations (for example, labels of garden plants); text in bold or unique fonts
Chicka Chicka Boom Boom, by Bill Martin Jr. and John Archambault, illustrated by Lois Ehlert	Letters in isolation; changes in the print direction and color
Counting with Frida/Contando con Frida, by Patty Rodriguez and Ariana Stein, illustrated by Citlali Reyes	The same words written in English and Spanish; numbers written as numerals and as words
Little Blue Truck, by Alice Schertle, illustrated by Jill McElmurry	Visible sound (*oink, beep, bump*); changes in print direction and color
Secret Pizza Party, by Adam Rubin, illustrated by Daniel Salmieri	Environmental print in the illustrations (such as Uncle Mark's pizza sign)
Truck, by Donald Crews	Environmental print in the illustrations; text in bold or unique fonts
Jump! by Tatsuhide Matsuoka	The word *boing* depicted in different ways as specific animals jump; repetition of the word *jump*
Homemade Love, by bell hooks, illustrated by Shane W. Evans	Print of different sizes, print curved and linear; varied placement of print on the page

Table 2.1. Print Salient Texts

Approaches to Print Referencing

Teachers can engage children in conversations about print while reading aloud with the following techniques (Zucker et al. 2009):

1. **Pointing and tracking print.** Teachers point to specific words or track a finger under specific text while reading. Tracking is especially effective when there are a few words on a page.
2. **Making comments that reference print.** Teachers comment while reading aloud, such as "I start reading here" or "This is the letter *b*. I see three *b*'s on the page."
3. **Asking questions or making requests.** Teachers invite responses from children by asking questions, such as "Can you find the letter *k* on this page?," "Where do I start reading?," or "Can you spy the word *pizza* on this page?"

These approaches can be combined. For example, a teacher might combine pointing and asking ("Is this the letter *k*?" or "Do I start reading here or here?"). Teachers can also combine all three strategies into one interaction by asking, "Where do I start reading on the page?" After a child answers, the teacher can point and say, "Yes, I start reading here."

TEACHING TIP

Develop a Foundation for Reading

When print referencing, the goal is not yet to teach children to decode words. Rather, it is to develop a foundation for reading by helping children become familiar with print concepts. The goal is to help children discover that print is meaningful, that print is organized in specific ways, and that print is made of symbols that represent language (Justice & Sofka 2010).

Instructional Targets for Print Referencing During Read Alouds

When teachers read aloud to children, they can engage children in print using instructional targets that can be organized into four broader categories (Justice & Sofka 2010):

› **Print meaning**

- Print carries meaning. Example: Point to text while you read.
- Print is different from illustrations. Example: Point out text that is part of illustrations, such as speech bubbles.

- **Book and print organization**
  - Arrangement of print (in English, left to right, top to bottom). Example: Tell children, "When I read, I start here."
  - Book organization (title page, author, pages turn from left to right). Example: Narrate your actions, "Now it's time to turn the page."
- **Letters**
  - Letters have distinct shapes and names.
  - Letters have different forms.
  - Letters map to sounds.
- **Words**
  - Words are different from letters.
  - Words are different from each other.
  - Letters make up words.
  - Written words map to spoken words.

When to Reference Print

To help children make discoveries about print, teachers can regularly engage in print referencing during read alouds. But you don't have to do it every time you read. Also, you don't need to stop on every page to talk about print. We recommend that you stop every few pages during a read aloud. Focus on one preplanned print concept per reading (such as pointing out the letters that spell a particular, meaningful word). You may want to reread the same book three or four times focusing on different print concepts each time.

Listening to a read aloud should be a pleasurable experience for children. In addition to print referencing, make sure to still discuss the meaning of the book. It's important not to let the focus on print concepts limit children's overall understanding of the meaning of the text and their delight in stories and information books.

Print Referencing in the Environment

In addition to read alouds, teachers can draw children's attention to the authentic print in their environments. In a print-rich classroom, there may be printed signs, schedules, labels, and so on. Teachers can use impromptu moments to draw children's attention to both general and specific features of print. These exchanges may be short, as little as a few seconds long.

For example, during a dramatic play scenario involving a restaurant, a teacher might have the following conversation with children:

> **Teacher:** Let's figure out what this part of the menu says. (*Points to two consecutive words on the menu.*)
>
> **Child 1 and Child 2:** *T!*
>
> **Child 3:** *S!*
>
> **Child 2:** Tyrese!
>
> **Teacher:** There's the letter *t*, like *Tyrese*, and that word is /t/: /t/ *taco.*
>
> **Child 2 and Child 3:** Taco!
>
> **Teacher:** And there's the letter *s*. That word is *salad*: /ssss/ *salad.* Let's read it together. (*Tracks print from left to right.*)
>
> **Teacher and children:** *Taco salad.*
>
> **Teacher:** I want to order a taco salad, please!

In this short exchange, the teacher drew attention to how print in English is read from left to right on a page as well as the sounds represented by specific letters. By engaging children in the conversation, the teacher encouraged the children to pay attention to the print on the page, modeling using terms like *letter* and *word*.

Opportunities for print referencing can happen throughout the day. Be alert to opportunities to show children how print works, especially with texts that are personally meaningful to them.

KEY PRACTICES

Designing and Including

Designing as a key practice includes the intentional planning and preparation of the classroom, schedule, and materials to provide a rich variety of learning experiences. **Including** is a key practice essential to welcoming every child to the learning experience, ensuring equal access to learning, and fostering respectful and affirming relationships.

Designing

As you design experiences to support young children's development of print concepts, you can begin by thinking about ways to use print to connect children's home practices and community experiences with early childhood classrooms. One important strategy is encouraging children to

look for print in their homes and bring in the objects with print that they find or photos or drawings of objects with print. Examples might include

- Groceries (e.g., a cereal box, the wrapper on a bottle)
- Mail (e.g., letters, advertisements)
- Household equipment (e.g., a TV remote, a coffee maker, a measuring spoon)
- Phones (e.g., adults read news and send texts and emails on phones)
- TV (e.g., print on the screen during the football game or when adults watch the news)
- Texts adults in the home have written (e.g., errands list, recipes)
- Other texts adults read (e.g., books, magazines, brochures, screens, directions)

Early childhood educators can encourage children and their families to look for print in their communities, outdoors, and in public places. You can also take children on a neighborhood walk to hunt for print. You might find

- Traffic signs
- Signs on stores
- Labels (for example, in the pharmacy you might notice that labels tell the names of different kinds of medicine and how much they cost)
- Maps at the subway or bus stop
- Billboards
- Logos on people's clothing
- Menus in restaurants

When teachers create opportunities for children to notice and discuss print they find in their homes and communities, this builds an understanding of how and why we use print. These practices demonstrate that print is important in the real world and not just for school.

Provide Authentic Print Materials

Make connections between the print children see outside of school and opportunities to use print in the early learning setting by including authentic print materials in the classroom, such as order forms, maps, and signs. Provide these materials in centers, and encourage children to engage with print across the day. As children play with these materials, you can help them to notice the print. For example, if children are pretending to make brownies with an empty box of brownie mix, you might say, "This box has directions for how to make the brownies right here on the back. Let's read them together so we can see what to do."

TECHNOLOGY TIP

Technology and Print Concepts

You may have seen a popular YouTube video called "A Magazine Is an iPad That Does Not Work" (www.youtube.com/watch?v=aXV-yaFmQNk). A 1-year-old tries to get a magazine to respond like an iPad by tapping, swiping, and so on. This video illustrates an important point: technologies are making print concepts more complex. For example, the concept that words don't change—a book says the same thing every time we open it—is generally true. But this isn't necessarily true for online texts, which may be revised at any time, as in a weather site. Educators need to be aware of the ways new technologies might influence young children's developing understandings of print. At the same time, you can support children as they learn about books and other types of printed text that are still important in an academic or school environment. Children need to learn about all of the types of print that they experience in their lives, including learning about how print works in new technologies.

Including

To support children's development as print navigators, teachers must ensure every child is included in the learning process. It is important to remember that print concepts are different across named languages. Here are some examples:

- While English is read from left to right, Arabic and Hebrew are read from right to left. The symbols used to represent sounds in Arabic and Hebrew alphabets also look different from the symbols *(a, b, c)* used in English.
- In some languages, words are not made up of letters. For example, in Chinese, words are made of one or more characters, which correspond to whole syllables and, usually, to a meaning that can be combined with the meaning of characters and markings.
- The alphabet letters in Spanish look similar to the letters in English, but the letters represent different sounds in each language. For example, *j* makes the sound at the beginning of the English word *jam* in English and the sound at the beginning of the English word *ham* in Spanish (written *jamón*).

The idea that print concepts differ across named languages means that children growing up in multilingual families may learn print concepts at home that are different from the print concepts learned at school. As such, it is important for teachers to recognize and support the diversity of children's efforts to use and represent language in print as opposed to assuming that children's communicative attempts—both orally and in writing—are wrong.

Affirming Children's Home Languages

Early childhood educators should learn about children's home language practices and their literacy experiences so that they can include the ideas about print that children engage in and bring from home in classroom learning and conversations. As NAEYC's "Developmentally Appropriate Practice" position statement notes, "Educators strive to make sure that each child hears and sees their home language, culture, and family experience reflected in the daily interactions, activities, and materials in the early learning setting" (NAEYC 2020, 17). Invite families to share books or documents in languages they use at home. Children are excited and interested to learn about the ways words are represented in print across the languages written and spoken by friends' families in their classrooms and also around the world.

KEY PRACTICES

Engaging and Explaining

Engaging children with print is a key practice that happens throughout the day during planned activities, daily routines, and play. Through the key teaching practice of **Explaining**, teachers provide important support for learning print concepts.

Engaging

Print is all around us. In our daily lives, we encounter all kinds of print—signs, menus, labels, forms, books, and articles, just to name a few. Young children are exposed to this print too, but they need educators' help to learn that this print has meaning. In the early learning setting, teachers can create print-rich environments in which children regularly interact with print.

Books, Books Everywhere!

Young children benefit from having access to many books throughout the day. Infants benefit from books they can touch and play with. Toddlers are beginning to understand that a book is something that can be read aloud; they will begin to ask an adult or older child to read books to them. Preschoolers become interested in different kinds of stories and texts. Variety is important. Make sure that children have access to books that are stories as well as books that are *informational*, conveying information about the world or teaching us how to do something. It is also important to make sure that children see themselves and their experiences reflected in the books in the classroom. If your space is limited, rotating books over time is a good way to ensure diversity. Rotating the books that you display is also a good idea, as children are drawn to books that are displayed.

Include books in which the text provides the words to favorite songs and rhymes. This helps children learn to associate written words in a book with the words to a familiar song. For example, a child who is already familiar with the song "He's Got the Whole World in His Hands," a traditional African American spiritual, may be able to sing along to Kadir Nelson's picture book *He's Got the Whole World in His Hands*. By drawing attention to the print associated with the words the child is singing, the teacher helps the child understand the relationship between spoken (or sung) words and the words in print.

Creating classroom books is another strategy for engaging children with print. Children are often motivated to engage with class books that they have created with their friends. For example, in a preschool classroom, a teacher might facilitate the authoring of a picture book about the sounds that children hear at bedtime. Given the prompt, "When I go to bed, I hear . . ." the teacher can ask the children to "document" what they hear when they go to bed. Voice-to-text technology can help children "write" the words for each page in the class book. The answers can be multilingual and multimodal. For example, one child might say they hear "dulces sueños, mi amor," another hears "sleep tight," and another child might hear "wen-wen-wen" (the sound of a New York City ambulance). The process of creating a book together helps children to see themselves as authors and to associate written text with their own oral language.

Print on Display

Displays in the classroom are a powerful way to invite children to engage with print. These displays can be presented on walls, bulletin boards, display panels, or on other surfaces. The text might include children's writing attempts, messages for the children, and children's names. Rotate or change these displays regularly and in ways that are meaningful to children. If everything is routinely labeled in the classroom (for example, *chair, table, bathroom*), children might become so accustomed to seeing the labels that they stop paying attention. On the other hand, labels can become more meaningful when children are involved in creating the pictures and words on them. Add labels to the classroom as needed and when they are actually used. For example, at cleanup time when a child is confused about where to put a toy, invite that child to help create a label for a bin so that all the children know where to put specific toys when they clean up.

Engage with Print During Play

Young children benefit from opportunities to engage with print during play. Making print materials available as children play is one way to encourage children to explore these possibilities. This might include making reading materials (magazines, books) and writing materials (paper, markers, pencils) readily available to children during all types of play.

It is also helpful to provide print materials that are specifically aligned to the play center or area. For example, place texts about different types of structures to build right where children typically build with blocks. Books with images of apartment buildings, bridges, houses, and arches as well as books about building construction can give children ideas about new structures to build and how to build them. Show children how these materials can be used. For example, you might say, "Let's look at these books about bridges to learn more about what they look like and how to make them. Maybe this will give you some ideas for how to make your bridge."

Which literacy items belong in which play center? Think about the literacy activities that children are likely to do in that center. For example, for the dramatic play area, think about what print materials would typically be in the setting that is the focus of the dramatic play theme. Here are some examples:

- **Restaurant:** menus, cookbooks, notepads for taking orders
- **Doctor's office:** eye chart with letters, sign-in for patients, books and posters about the human body (such as a book about bones), prescription pad, forms to complete
- **Store:** labels or stickers for creating price tags, items with writing on them (such as a cereal box), catalogs, papers for making receipts
- **Theater:** large pages for making signs about the show, small blank books to make playbills, printed out scripts
- **Travel:** maps, brochures from different locations, blank journals (to draw what you see)
- **Garden:** seed packets, plant catalogs, books with images of gardens, labels for plants
- **Museum:** signs, a map of the building and exhibits, placards for each item in the museum

Often businesses and other organizations in the community are willing to donate materials for your play areas. Many teachers store the materials by dramatic play theme so they are available for the next time. Teachers play an important role in facilitating play and showing children how the print materials can be used. Note the suggestion later in this chapter about how to observe children interacting with materials and see the knowledge of print concepts that they are developing.

Explaining

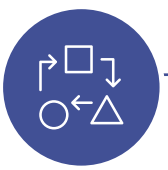
Young children may not pay attention to print because it is not yet meaningful to them. To learn more about how print works, adults need to illustrate, engage with, and explain these ideas to children. This can happen in early childhood settings whenever print is used across the day. Many toddlers will begin to notice print when you point it out. You can explain and show how print works when reading and writing (see the discussion of print referencing earlier in this chapter). Teachers can also explain how print works at other times of the day.

Explanations About Print

Here are some examples of the types of explanations that help young children to understand more about print concepts.

- **As children arrive in the morning:** "Good morning, Mia. Let's put your jacket in your cubby. Can you help me find your cubby? It's the one with your name on it. Let's look for the *M* at the beginning of your name. There it is! (*Points to the name, points to the* M.) There is the *M*. It spells the sound /mmm/ for *Mmmia*. Let's put your jacket in the cubby with your name so that we can find it easily when it's time to play outside."
- **To help with routines:** "That sign says *STOP*. Don't forget to hang the stop sign on the door when you are going to the bathroom. That lets others know to stop and wait until you are finished before they take a turn in the bathroom."

- **When infants and toddlers are playing with or looking at books:** "Let's turn the book so that you can read the story. Now if you turn the page like this (*Turns page.*), you can see the next page."
- **When using print in your own work:** "Thanks for reminding me about the puzzles. I'm going to write a note for myself to help me remember to put out the puzzles first thing tomorrow morning. I am writing the word *puzzles*. Can you help me to pin the note that says *puzzles* to the bulletin board so it is the first thing I see tomorrow morning?"
- **During play:** "I notice that your building is not finished yet. Would you like to write a message to let friends know that you do not want them to clean it up? Let's work together to make a sign."
- **During meals and snacks:** "We are having strawberry yogurt today. I can tell because the word *strawberry* is written right here on the package. It's good to read the package so we can tell exactly what is inside."
- **Whenever you write a message or scribe children's words:** "When I write a word, I leave a space on either side of the letters in the word. That's how we know it is just one word."



TRANSITIONS

Use Transitions to Teach Print Concepts

Print helps support transitioning in early childhood spaces.

Signing in. Younger children can show that they are present by finding their name and moving it to a "Here" column to show that they have arrived. Older children can sign in by writing their names. Signing in or checking in upon arrival replicates a common use of print in real-life settings.

Knowing where to get and return shared items. Using pictures and images to show where things are kept in the classroom can help children find what they need and help make clean up easier. Including a space on the shelf that says *markers*, coupled with an image, will help children to know where to put the tub of markers.

Making choices. Children can use print to sign up for activities or to make choices in the classroom. If there is room for four children at a time in the block area, children can move their name card to a board that lists that center. After the spots are filled, other children know that they need to make a different choice.

Taking turns. Charts or other types of print can help children know when it will be their turn. This might include a classroom responsibilities or opportunities chart, ways for tracking who gets to choose the song to sing or book to read, and also visual ways to track that each child gets a turn to share work and ideas.

The more you explain print concepts to young children, the more they will understand that print is important and useful in their own lives. These kinds of explanations will help children notice print, understand how it works, and begin to use it as part of their own lives.

KEY PRACTICES

Observing and Responding

Observing children is a key practice that informs our understanding of children's language learning—where they are now in their development and what they are ready to learn next. What we learn through observation will guide us in effectively **Responding** to children in ways that support learning.

Observing

Observing is one way to look for evidence of children's growth as print navigators. You can see how their understanding of print concepts develops in their use of print, their attempts at writing, and how they engage with print during play. As children engage in activities across the day, use anecdotal notes to document their literacy development. Anecdotal notes are a way for teachers to concisely record their observations of children's literacy development—their behaviors, skills, interests, performance, and more.

	Age	Milestones in Print Concepts
Infants	Birth–12 months	• Older infants look at images in texts when educators point. • Older infants may manipulate soft books and board books to turn pages. • Older infants may attempt to manipulate digital texts (tapping or swiping a tablet screen).
Toddlers	1–3 years	• Holds book/text and pretends to read. • Pretends to write (using scribbles or marks on the page). • Looks at images in text and describes/narrates. • Can find the front of the book, open it, and turn to the next page. • Notices environmental print (for example, points out a street sign during a walk). • Recognizes previously read texts by their cover and images. • Interested in print/images on digital devices (for example, pretends to text on an adult's phone or likes pressing keys on keyboard).

Table 2.2. Milestones in Print Concepts

	Age	Milestones in Print Concepts
Preschoolers	3–5 years	• Recognizes and names some letters and other symbols (numbers, common signs) in text. • Describes and discusses images in text. • Shows understanding that books always say the same thing on the same page (recites memorized texts, saying the correct words on the correct page or corrects adults if they misread a word that the child has memorized). • Can show the difference between a letter and a word. • Understands what a word looks like in text (can point to a word). • Attempts to read words. • Attempts to write words using letter-like symbols or real letters. • Writing attempts align with the type of text (for example, the child might ask to make a card that is folded or to staple multiple papers together to make a "book"). • Wants adults to write dictated words (asks adult to write "I am playing with Elliot" below a picture drawn by the child). • Writes with estimated spelling (such as writing *R*, *RN*, or *RAN* for *rain*). (Estimated spelling will be addressed in more detail in Chapter 3.)

Table 2.2. Milestones in Print Concepts (continued)

Responding

Young children regularly interact with print in environments that are filled with books, labels, signs, and other texts. After observing how children interact with print, teachers can respond to and help them take the next step in their understanding of how print works. These responsive interactions need not take long but, when finely tuned to children's needs, provide powerful supports for learning.

Remember that the goal at this phase of development is not for children to read or write conventionally or form letters precisely. In early childhood, children are building a strong foundation for later literacy learning that will lead to a lifelong love of reading and writing. As teachers, we can respond to children in ways that help them gain an understanding of how print works and become print navigators.

When you observe the child . . .	You may respond by . . .
Infants	
Looking at an illustration in a book.	Pointing to the illustration while talking about what that illustration shows.
Holding a board book.	Helping the infant to hold a book right side up.
Manipulating pages in a book.	Demonstrating while reading. "We turn the page like this."

Table 2.3. Observing and Responding

When you observe the child . . .	You may respond by . . .
Toddlers	
Finding the front of the book, opening it, and turning to the next page.	Expanding the child's print knowledge. "I start reading here on the page." (*Points.*)
Noticing environmental print (such as a stop sign).	Drawing attention to the word. "That sign says the word *STOP.* It tells drivers to stop and look around before they keep driving" or "This says the word *lunch* because this is where we put our lunch boxes."
Writing with scribbles or marks that are separate from a drawing.	Validating this important milestone of understanding that print is separate from pictures. "Tell me about your writing." (*Points to the marks.*)
Preschoolers	
Naming specific letters in a text.	Elaborating on what the child has said, for example: "Yes, that's an *m*. It stands for the first sound in this word: *mmmacaroni!*"
Writing with seemingly random letters.	Remembering that these letters are likely not random because they are usually familiar letters in the child's name that the child has seen repeated over and over. Many preschoolers are not yet connecting the letters they write with the sounds they are trying to say. Help the child to see that letters and sounds connect by displaying the child's or a friend's name and drawing attention to the beginning letter and sound in the name.
Writing with estimated spelling. For example, writing *B* for *bat*.	Validating this important understanding that spoken words and sounds can be written down. Help them to hear other sounds in words by stretching out the word and repeating sounds as needed (more about that in the next chapter). For example, you could say *baaaattttt*, with the focus on the final sound of the word, encouraging them to add a *T* to write *BT* for *bat*.

Table 2.3. Observing and Responding (continued)

Moving Forward

Learning how print works is one of the major accomplishments of early childhood. You foster children's understandings of how print works when you

- **Know** how print concepts are learned and recognize that these conventions may differ in certain ways. Also know that children can become proficient and can benefit from engaging with multiple sets of print conventions.
- **Show** children how print works by pointing out and explicitly explaining print concepts during read alouds and throughout the day.

- **Design** learning experiences that include authentic print materials in centers and a variety of books and texts.
- **Include** the conventions of the written language(s) children are exposed to in their home and child care or preschool setting.
- **Engage** and invite children and families to share and discuss print from their homes and communities, bringing print artifacts to the care setting or sharing photos of those artifacts.
- **Explain** and discuss print throughout the day, such as when on walks and other field trips with children (reading the *open* sign on a store and discussing the letter *o* or the letter *a* in *abierto*).
- **Observe** children's emerging understandings about how print works and support them in extending those understandings.
- **Respond** to children in ways that support their developing understanding of print concepts.

The birth-to-5 years are an ideal time for children to learn how print works. Young children can delight in interacting with a print salient book during a read aloud. Children can feel capable when they use print to identify their block structure or to convey their love for a family member. Learning how print works in the early years will also help formal reading and writing instruction in elementary school make much more sense to children. In doing so, early childhood educators are supporting children to become powerful print navigators.

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