Using Print in the Environment to Promote Early Writing

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Reference:
Abstract

Print in the environment is typically posted in early childhood classrooms. However, the print that exists is often not meaningful to children, and teachers rarely engage children in using the print. This is a missed opportunity to support children’s writing. This article presents research-based ideas for how to create and engage children with meaningful print in the environment. Ways for creating print that are related to children’s interests, aligned to current classroom content, and co-created with children are provided. Strategies for how to engage children with print in the environment are outlined.

Teaser Text

Print in the environment is a useful tool in supporting children’s writing and literacy development. This article provides teachers with strategies for creating and using meaningful print in the environment.

Pause and Ponder

- What is print in the environment? Why is it important?
- What makes print in the environment meaningful?
- How does the print in the environment of your classroom promote children’s writing?
- How could you ensure that children are engaging with print in the environment? What is your role in making sure that children use the print in the environment?
Using Print in the Environment to Promote Early Writing

Mr. Edwards (all names are pseudonyms) is organizing his classroom in preparation for a new school year. The furniture is arranged; the materials are organized. He is now in the process of creating a print-rich environment.

He knows that providing meaningful print in his classroom creates a print-rich environment. He has heard others define meaningful print as print that children can use and wonders how to make it work in his classroom. He begins by labeling learning centers and storage containers with pictures and words; this print will help children to navigate centers and to find and store classroom materials.

He labels children’s cubbies with a picture and name of the child; this will help children find their cubby and provide an opportunity for children to see their names in print. He adds two red stop signs to the classroom and playground doors; he will discuss with children that when they see these signs, they should stop and wait for an adult. These are all useful labels and Mr. Edwards will use the labels to draw children’s attention to print in the classroom.

Next, Mr. Edwards considers what other types of print he could include in his classroom. Hebrainstorms, “What type of print is usable to the children in my classroom? I need to know who is here each day, so I will create an attendance chart in which children find their name and post it on the chart to indicate they came to school. This will promote their autonomy too.” Also, “We regularly have discussions of how to wash our hands, so I will create a hand washing chart with pictures and text to help guide the hand washing process.”

Mr. Edwards continues this line of thinking as he considers specifically how children will use print in the classroom to promote their learning. The results of his brainstorming include a job chart with a space for children to write their name when they sign up, a step-by-step chart
reminding children how to put on a smock before playing at the water table, and a teacher-made poster with the title “Class Rules” intentionally left blank so he can co-create this list with the children in the first weeks of school. Mr. Edwards has prepared a print-rich environment with meaningful and functional print posted in his classroom. Further, he and the children will work together to create more print to add to the environment throughout the school year.

Like Mr. Edwards, most early childhood educators recognize the importance of print in their classrooms. This article articulates the importance of creating and using print in the classroom. Also, it provides research-based guidance for establishing an environment that is created and used by both teachers and children to promote children’s reading and writing skills.

What is Print in the Environment?

Print in the environment is the text that children see, create and interact with in their surroundings (Neumann, Hood, Ford, & Neumann, 2012). In the classroom, print in the environment includes any print that is posted around the classroom or available in printed resources. Meaningful print is useful and functional for children. For example, an attendance chart with spaces for children to sign in and a menu in the dramatic play area are examples of meaningful print. In addition, reading materials such as books and magazines provide children with meaningful print examples to support their writing.

The Importance of Print in the Environment

Children’s print knowledge and early writing skills, that is, how one connects oral and written language, are significant predictors of later literacy achievement (National Early Literacy Panel, 2009) and reading ability (Hammill, 2004). Theoretically, these skills are key components of emergent literacy (Whitehurst & Lonigan, 1998); they are interrelated and both develop
during early childhood. In fact, children who understand more about print and letters tend to write with a higher level of sophistication (Diamond, Gerde, & Powell, 2008).

Opportunities to support these skills early include (1) providing children with meaningful print in the environment and (2) intentionally engaging children in using this print in their play, both considered best practices in the field of early childhood education (Copple & Bredekamp, 2009). Environments rich in print can stimulate children’s literacy development (Morrow, 2005). Research demonstrates that young children in classrooms with more print have higher writing ability than children in classrooms with less print (Gerde, Bingham, & Pendergast, 2015). Considering the importance of print in the environment and the uneven access to print for economically disadvantaged children (Neuman & Celano, 2001), it is promising to note that recent observational research identified that 95% of preschool classrooms have print in the environment (Gerde et al., 2015).

Unfortunately, two limitations exist regarding the usefulness of this print for promoting children’s development: 1) often the print which exists in classrooms is not meaningful, and 2) when print exists it is rarely used by teachers or children in ways that promote writing.

**Limitation I: Classroom print is often not meaningful to children.** Often the print posted in early childhood classrooms lacks relevance or purpose. Thus, it is not acknowledged or used by teachers or children. Print in classrooms functions as wallpaper or decoration rather than as a curricular resource (Neuman, Copple, & Bredekamp, 2000). For example, labeling every chair, table, and pencil is a misuse of print. Meaningful labels have a function to help children navigate the classroom and access materials. What is needed in classrooms is to create print that is meaningful like the center labels, materials storage labels, and hand washing chart provided by Mr. Edwards above (Reutzel & Jones, 2013). Teachers should consider what print children can
use by asking questions like, “How can children gain information from this print? How can children use the print? How can children write on this print?”

The print posted in the classroom serves to support children’s writing development and thus, should model the print teachers want children to write. Use letter case appropriately. Lowercase letters should be used unless it is a proper noun like a child’s name, brand names (e.g., Legos), or in titles such as “Our Class Jobs”. Use an easy to read font and size so children can see it from a distance. Use accurate spelling. Whenever possible, print should be posted at children’s eye-level.

**Limitation II: Classroom print is often not used by teachers and/or children.** Despite teachers’ significant investment of time and energy in providing a print-rich environment (Gerde et al., 2015), the print is not often used to intentionally promote reading and writing. Recent observational research of sixty-eight classrooms across three US states demonstrates that while 95% of preschool classrooms provide print in their environments, print is rarely referenced (Gerde et al., 2015). In this study, less than five percent of teachers used the print they provided to support children’s writing.

This research highlights a valuable missed opportunity for teachers because young children do not look at print unless their attention is intentionally drawn to it. In a study examining how much time children spend looking at print during storybook reading, it was found that children primarily look at the book’s illustrations and spend only 3-7% of their time looking at the book’s text (Evans & Saint-Aubin, 2005). Actively engaging children in looking at print is critical.

Importantly, research has shown that when teachers draw children’s attention to print in books or around the classroom and utilize this print, young children develop language and
literacy skills (Neumann et al., 2012). For example, teachers can draw attention to print by pointing to the reception sign in the class veterinarian’s office and saying, “This says ‘Reception, sign in’. This means I need to write my name here so the veterinarian will know I am here with my pet turtle.” In order to overcome the limitations described above, the next sections articulate research-based strategies for creating meaningful print and engaging children with the print in the environment to promote children’s writing.

**Creating Meaningful Print for the Classroom Environment**

**Meaningful Print is Related to Children’s Interests**

Children are more likely to engage with print that is related to their interests (Neumann et al., 2012). For example, if children have taken an interest in constructing towns in the block area, a teacher can create block labels with pictures of common town landmarks such as a park, a grocery store, and homes. Using pictures from the child’s own community can make this experience even more meaningful as children identify the library, grocery, and shops they see everyday. It is important to take pictures of the signage on these buildings or write the word labeling the building so children can use the print. The print becomes even more meaningful when teachers provide extra pictures, paper, and crayons for children to create their own labels for their constructions (see Figure 1).

Posting children’s names in multiple locations around the classroom is a recommended practice (Kirk & Clark, 2005). Children are highly interested in themselves and name labels can be used in many productive ways throughout the classroom. For example, child names can be used for classroom organization such as an attendance chart, to label children’s personal space such as cubbies or mailboxes, or to recognize contributions such as listing a child’s name next to their response on a chart. See Table 1 for a list of meaningful places to post children’s names.
Meaningful Print is Aligned with Current Classroom Content

Print that is aligned with a classroom’s current content or theme can provide meaningful uses for children (Gerde, Bingham, & Wasik, 2012). For example, in a study of spring, the teacher and children may create a concept map listing the evidence of spring they have observed and what they want to learn about spring (see Figure 2). The concept map is then posted in the classroom and should be referred to during future discussions of spring. A reading of *The Very Hungry Caterpillar*, by Eric Carle can become the platform for children to circle their selections from a list of foods the caterpillar ate and to write their names next to the food that they think the caterpillar enjoyed most. Current classroom lessons can become meaningful opportunities for children to write by engaging with print in the environment.

Meaningful Print is Co-Created with Children

Co-constructing meaningful print engages the child in the writing process and promotes shared responsibility for the print in the environment (Reutzel & Jones, 2013). Children might participate by composing, drawing, or writing parts of the document. Teachers participate by providing materials, writing children’s words, or scaffolding children’s writing.

For example, after a musician visits the classroom, the teacher can facilitate the creation of a thank-you note. The teacher can ask children their ideas about how to thank the musician and what they enjoyed most about the visit. After the teacher transcribes the children’s composed messages on chart paper, each child can sign his or her name and add additional comments.

Teachers and children can create many types of print together including labels for toys, signs for learning centers, lists, books, charts or graphs. This co-created print becomes meaningful when it is posted in the classroom or included in the class library for children’s reference. When print is created with children, it encourages their use of the print in the future.
For example, when children participate in creating class-made books, children often choose these books during a free reading time.

   Teachers can encourage children to refer to the co-created work when they are writing. For example, in the science area two children create graphs in their science journals of seeds they sorted. The teacher scaffolds by drawing children’s attention to the labels of a graph they co-created last week, which is now posted on the wall near the science area.

**Meaningful Print is Referred to Often**

   In order for print to be meaningful, it should be used by teachers and children. Simply having print in the classroom does not benefit children (Neumann et al., 2012); instead, the print should be used. A posted morning message does not have meaning until it is read and discussed with children. A poster of rules becomes meaningful when the teacher refers back to it during a discussion of rules. An attendance chart is only useful if teachers refer back to it during their discussion of who is present or absent. A posted schedule is meaningful when teachers refer to parts of the day, and encourage children to mark off which parts of the schedule have been completed (see Figure 3). It also deepens children’s involvement and interest in the process of writing. Integrating writing and print into other classroom routines ensures children interact with the print often.

   It is important to recall that merely having print in the environment is not sufficient (Neumann et al., 2012). Therefore, it is necessary to also consider how to engage children with print. The following guidelines can be used to engage children with print in the environment.

**Guidelines for Engaging Children with Print in the Environment**

**Point to Print**
Pointing to print as you read it draws children’s eyes to the text. This strategy helps children recognize that print has meaning and can be read, an important component of print knowledge (Neuman et al., 2000). Pointing to print is essential because young children do not look at print unless an adult points to it and draws the child’s attention to it (Evans & Saint-Aubin, 2005).

For example, during clean up a teacher can point to a storage bin label and say, “This label says scissors. I will put away the scissors in this bin labeled scissors.” When guiding a child’s behavior, teachers can point to the text on the rules sign as she reads, “Our third classroom rule says, ‘Use quiet voices.’” During class book readings, teachers can point to the text as they read each word. Intervention studies engaging adults in print referencing have resulted in significant increases in children’s literacy development (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009). Pointing to words helps children understand that we read the print and not the pictures.

**Use Think Aloud to Explain the Use of Print**

The teaching practice of thinking aloud is verbally describing one’s own behaviors or thinking so children can understand what and why a teacher is doing something. When teachers think aloud they are making the thinking process public by externalizing what we want children to think or do internally. This teaching strategy helps children to understand how to approach print and the writing process and how and why the teacher made particular decisions while writing. For example, the teacher may say, “I know I can find doll clothes in this box because it is labeled doll clothes (points to the words).” This process clearly articulates why or how something is done, helping children to understand such reasoning in a concrete way.
Think Aloud often begins with I think, I notice, I decided, etc. For example, when writing a morning message, the teacher might demonstrate the author’s thought process for selecting words. “I am thinking about which word to use to describe the artwork we saw on our trip to the museum last week. I am trying to decide; should we use colorful or beautiful?” Thinking aloud helps teachers to explain new ideas to children as they write or use print. When introducing print to a child who is drawing, a teacher can show the child a children’s book and say, “I notice that our books have illustrations and print to tell a story. Your writing has illustrations, can you include print too to help tell your story?”

To draw children’s attention to a purpose for writing, a teacher might say, “I think I should write a message to myself to remember your idea. The message says, ‘Jamie wants more time with gears next week.’” When describing a new genre to children a teacher might say, “Today we are making a list of your ideas for a new class book. I am writing each idea on a new line so it makes a list.”

**Use Print as a Resource to Introduce Letter Names, Sounds, and Forms**

Print knowledge and writing instruction should include supports for identifying letter names, sounds, forms and opportunities to write letters (Jones & Reutzel, 2012). The posted print in the classroom can contribute to print and writing instruction when teachers use the print as a model for letter introduction and instruction. When children ask how to spell a word or form a letter, teachers can direct children’s attention to the classroom print as a visual model for support.

To introduce a new letter to children, teachers can use a chart the class previously made of “Our Favorite Foods” and invite 4-5 children to each use a pointer to point to a letter ‘P’ they find on the chart. A white board with marker can be included to promote children to write the
letter or words. While writing a label for a flower graph, teachers can point out that the word sunflower begins with the letter ‘S’. When children are putting away toys, teachers can mention that the toy bin labeled ‘cars’ starts with the letter ‘C’.

To draw attention to letter sounds, during book reading, the teacher may point to a word, read it and, ask the children to identify the sound they hear at the beginning. When writing on the attendance chart, teachers can discuss how the letters in the child’s name correspond to sounds and ask children to identify similarities between the sounds in their name and the names of peers.

Print in the environment is extremely useful for drawing attention to the form of a letter as it provides a visual model of the shape. When helping a child write his name, point out that the letter ‘T’ contains a line that goes straight down, as well as a line that goes from left to right. You can also talk to children about how letters are similar by directing a child to make a ‘W’ and asking the child what other letters contain lines.

**Post Child Generated Print**

Use children’s writing attempts to strengthen the presence of print in the classroom. Posting children’s writing in and around the classroom helps to celebrate the writing process, reinforces to children that writing has a purpose, to communicate a message, prompts children to reflect on and talk about their previous work, and provides a meaningful group of words to write (Gerde et al., 2012). It may encourage children to create more print as they use and see others use their print in a meaningful way.

Child writing should be posted where it can be used. For example, post a hand washing chart near the sink. Post a child-made sign for putting on a smock where the smocks are stored. If a child creates a list of healthy foods, post it in the science or snack area. Encouraging children to
use the print or explain to others what the print means reinforces to children that their writing is meaningful and can be read.

**Create Print that is Culturally Relevant**

Establishing a culturally responsive classroom is paramount to promoting the engagement of diverse children and families in learning (Derman-Sparks & Edwards, 2010). Involving children and families in the creation of classroom print can enhance the cultural responsiveness of the classroom by including family ideas and experiences. Children will be enthusiastic to share with peers about the print from their homes. Engaging families in creating print for the classroom is one opportunity to authentically display print in multiple languages and enhance family involvement. In fact, family support of children’s writing is related to children’s literacy development (Skibbe, Bindman, Hindman, Aram, & Morrison, 2013).

Teachers can encourage family participation in building the print environment by asking families to bring to school empty food boxes/cans the families enjoy at home. Boxes with labels will provide pictures of food and examples of print that are commonly found in homes. Housing these materials in the dramatic play space will create a kitchen or restaurant as diverse as the children. Children will recognize the foods from home and learn about foods their peers eat at home.

Teachers can elicit family support to create a welcome sign for children for the entrance of the classroom (see Figure 4). Each family can write a welcome greeting in their home language. During group time, teachers can ask children to vote on which language they want to use to greet the class today, and draw children’s attention to these options on the classroom door to help each child decide.
Teachers can engage families in creating a family book or poster. Provide each family with paper or a poster to display pictures and write about their family. Bind these together and house it in the class library. Help children talk about their family pages or poster during group time. Encourage families to visit the classroom and talk to children about what they have included. This will allow families to share about their home culture, home languages, and ways they share their life together.

**Provide Opportunities to Use Print Throughout the Day**

Research indicates that children need multiple opportunities to engage with print each day to promote print knowledge and writing (Neuman & Roskos, 2005). Begin by imbedding writing opportunities into routines such as encouraging children to write their name to sign in and including children in writing the morning message. Then, consider how children can write and use print throughout their daily experiences. Class-made instructional charts (e.g., steps to prepare for snack, how to store art for drying) provide meaningful opportunities to use the print children and teachers have created. Teachers can directly engage children in purposefully looking at the print while the child selects a plate, fork, cup and napkin before finding a seat at the snack table. When the class is lining up at the door, the teacher can first draw children’s attention to the child-made stop sign on the door and ask a child what the sign means. Then, she can direct children to look at the job chart as she asks, “Let’s look at the job chart and see who is the line leader today.”

At the end of the school day, teachers can offer designated time for children to draw and write about their favorite part of the school day. Engaging children in reflection of their work or day is a meaningful experience and promoted by early childhood curricula (e.g., High Scope, Epstein & Hohmann, 2012). Offer children blank paper, crayons, and pencils to discuss and write
about their favorite activity, interaction, or thought of the day. Post children’s names on the wall or in a book so children can hang their reflections by their name or store their work on their own page in the class book. Encourage children to share reflections with peers or families. During arrival ask children to revisit their reflections as a way to consider what they might do that day. Families will enjoy reading these reflections.

**Children Can Write on Print in the Environment**

Providing opportunities for children to write on print in the environment supports both print concepts and writing. For example, a teacher can post a laminated sheet of paper with the title, “Today’s Menu” near the snack/meal area. A child can use a wet erase marker or crayon to write and draw which foods are on today’s menu. A laminated sign near the class pet might read, “Have I Been Fed? Yes, No”. A child can use a dry erase marker to circle ‘Yes’ after feeding the pet.

Waiting lists, laminated paper with the title, “Waiting List”, can be included in high traffic learning centers such as dramatic play, blocks, or the computer center. Including dry erase markers or crayons and encouraging interested children to sign up on the waiting list will let other children know they want a turn. Supporting children leaving the learning center to look at the waiting list chart to identify who they should invite to play next will help children use the chart. Encouraging children to cross off their name when they enter the center reinforces the use of writing.

Teachers can respect children’s work by permitting children to work on a project over several days. This might mean leaving a block structure or artwork out during clean up. In order to help children recognize that these materials should not be put away, teachers can provide laminated cards and red markers or crayons for children to create signs to post to save their work.
Initially, teachers might provide some example signs that read, “Save my work” or “Project Under Construction”. Children can sign their name on the card so teachers and children know who is creating the work. Later, teachers can provide blank laminated cards so children can write their own signs (see Figures 5 and 6).

**Brainstorm with Children about Creating New Print**

Print in the classroom should be dynamic. Print is part of the social context of the classroom created for and by its users (Barton, Hamilton, & Ivanic, 2000) and invites teachers and children to engage socially and cognitively with the classroom environment. It is important for children to be involved in the decision making process about what print they need to create to help them better navigate the classroom and their learning. For example, children may find the hot water in the sink to be worrisome and decide they would like to mark the faucets with hot and cold signs so they remember which to use (see Figure 7). As the weather turns colder children may decide to create a sign with pictures and labels reminding them about the order in which to put on their winter clothing for going outdoors (see Figure 8). Children may decide they need to label a new material introduced in the classroom. Children might welcome a new student by creating a welcome sign to post on the new child’s cubby.

Teachers can encourage children’s creation of these signs by engaging them in a brainstorming session of what new signs they might need. Alternatively, teachers can encourage children to generate these signs at the time when children identify a need for a sign. For example, during outdoor play, children might decide to play a stop-and-go game, but they need signs that read ‘stop’ and ‘go.’ These could be created from mini-chalkboards and sidewalk chalk on the playground.

**Conclusions**
When teachers actively encourage children to create and engage with meaningful print in the environment, children have opportunities to develop an understanding that print has meaning and to use their developing writing skills (Gerde et al., 2012; Neumann et al., 2012). Using the above guidelines can engage children in creating and using print in the classroom. This practice promotes writing and literacy in meaningful ways.

**Take Action!**

1) Consider the print in the environment you currently have in your classroom. Would you consider it meaningful? If so, what makes it meaningful? If not, what would help make it more meaningful?

2) Use the examples in this article to help you a) replace one non-meaningful print in your classroom or b) create one meaningful print in the environment for your classroom.

3) Plan a small-group lesson in which you engage children in co-creating one meaningful print item for your classroom.

4) Choose one guideline for engaging children with print in the environment that was mentioned in this article. Use the guideline while working with children. Reflect on how children responded to you using the guideline, and what you may do differently next time you use this guideline.
References


**More to Explore**


### Table 1
**Ten Meaningful Places to Post Children’s Names in the Classroom**

<table>
<thead>
<tr>
<th>Where to Post It</th>
<th>Create It</th>
<th>Use It</th>
</tr>
</thead>
</table>
| Cubbies                           | • Place names on children’s cubbies and coat hooks to help them identify their personal space.  
• Later, let children create their own cubby name signs.                                                                                       | • During arrival and dismissal, draw children’s attention to their names by pointing to their name as you read it, or pointing out letters and sounds in the children’s name. |
| Nametags for play centers         | • Encourage children to create their own nametags for play centers.  
• Put Velcro on the backs of the tags to allow children to move their nametags as they move from center to center.                                | • Point to the name on nametags a to draw children’s attention to the print.  
• You may say to a child waiting for a turn at the computer that you notice that James and Keyana are playing on the computer at the moment because you see their nametags. |
| Attendance chart                  | • Create a chart titled, “Attendance” with a picture of each child and space for writing.                                                                                                                   | • When children arrive, let them write their names or place a check next to their name on the attendance chart.  
• During morning meeting, make note of children who have checked their names, as well as children who are not be present. Encourage present children who did not sign in to do so as part of the attendance process. |
| Job Chart                          | • Create a chart titled, “Class Jobs” with a picture and word of each job and space for writing.                                                                                                           | • Children can write their names next to their classroom job.  
• When referencing class jobs, make sure to talk about children’s names and point to them. For example, when lining up to go outside, say that you are checking the job chart. While pointing to the job of line leader, say out loud the child’s name that is written next to the job. |
| Routine Chart                     | • Let children help you create routine charts.                                                                                                                                                           | • Create an arrival routine chart by listing steps like hang up backpacks, sign-in on the attendance chart, and wash hands.  
• Once it is posted, refer to it to keep children on-task; include child names so they can check off tasks.                                       |
| Class Family Book                 | • Encourage each child to create his own page representing his family.  
• Help children label family members.                                                                                                           | • When reading the book together, point to the names and markings on each page.  
• Ask children to read their own pages.                                                                                                         |
| Class made graph                  | • Prepare and label a graph with a title and column labels.                                                                                                                                              | • Let children record their favorite activity, vegetable, or book on the graph by making markings or writing their names on the graph.                                                               |
| Journal                           | • Label journals with child names.                                                                                                                                                                         | • Name labels identify journals and give children a place to record their own writing.  
• Keep your own and leave it out so children can see your writing too.                                                                           |
| Name cards in the writing center  | • Provide name cards in the writing center.                                                                                                                                                              | • Children use name cards to write notes and letters to peers.  
• Labeling mailboxes with children’s names can promote the use of writing letters and notes.                                                    |
**Reflection Chart**

- Create a space for children to post their daily reflections labeled with their names.
- At the end of the day, have children write about their favorite part of the day. Post it on the reflection chart.
- As children write, ask about their writing. Ask children to share with peers what they wrote.