A Misunderstood Fundamental: Developmentally Appropriate Strategies for Letter Formation in Preschool

By Kristi Cheyney-Collante, Vivian Gonsalves, Shaunté Duggins & Julie Bader

Miss Carmin, an experienced preschool teacher, has just created a new emergent writing center in her classroom. Her students represent an array of different backgrounds and abilities, as she is the lead teacher in a diverse and inclusive setting. A facilitator in the county's recent workshop series shared that explicit letter formation instruction is not developmentally appropriate for her young students. In fact, she was told not to use handwriting practice sheets or lined paper, and to refrain from pushing children to write "correctly." In response to instructions from her school director, Miss Carmin created a center where her students can explore writing at a pace that is comfortable for them and that aligns with their interests. During writing exploration in this new center, Miss Carmin has noticed some children holding the crayons in their fists, writing from right to left, backwards, or using all capital letters. Her director says she does not think this is a problem since "they're just preschoolers," and that they have plenty of years to "get it straight" in school. However, Miss Carmin began her career teaching kindergarten and she remembers how difficult it was to break children of these habits. Now she's not sure what to do! Should she teach them how to correctly form letters? Should she devote instructional time to this activity? If so, how can she help ALL of her students, including those who struggle, achieve this goal in a developmentally appropriate way?

Writing is an important part of learning across all content areas of school (Graham & Harris, 2011). Even very young children experience the symbols of written language all around them. Soon they begin to notice that written symbols stand for people, ideas, things, or events, and attempt their own marks (Aram & Levin, 2011). However, though language is a foundational human trait, reading and writing are not naturally occurring processes. These are learned skills that children acquire through explicit teaching, modeling, and meaningful practice in addition to exposure to literacy in their homes and schools (Neuman et al., 2000).

When children learn to form letters incorrectly at a young age, they are more likely to experience difficulties in written expression throughout their schooling (e.g. Fancher et al., 2018). However, while many teachers provide a plethora of writing materials for students in preschool classrooms, research suggests that teachers are far less likely to use these materials with students throughout the day or to offer explicit guidance and scaffolding around writing (Gerde et al., 2012). Despite decades of research, there remains considerable disagreement in the educational community as to the merits of a natural view (where children "catch" the conventions of writing and spelling during informal school and home experiences) versus more explicit instructional strategies (e.g. Berninger, 2019).

Fortunately, naturalistic and explicit instructional strategies need not be seen as mutually exclusive (Gerde et al., 2012). Many talented teachers have refined their approaches to providing systematic and explicit instruction without compromising developmentally appropriate practices, play, exploration, and a whole-child philosophy. This article first explores critical research addressing the development of letter formation for children prior to kindergarten, and then highlights two strategies to skillfully guide children in acquiring age-appropriate letter formation habits in developmentally appropriate ways.

"They're Only Four. Who Cares About Handwriting?"

Writing is an important skill used for broad reaching academic and non-academic tasks. Older students use writing to organize and explore information, share with peers, and refine ideas. Writing is also used to communicate non-academic thoughts, feelings, and opinions. However, many children struggle to learn to write (Graham & Harris, 2011). The writing process requires students to integrate a complex system of skills that interact across many domains. Skilled writers not only employ all of the skills required for fluent comprehension in reading, but also an entire system of fine motor and higher order thinking and problem-solving skills (Gentry & Graham, 2010).

Educational philosophers as far back as Rousseau's "Unfoldment Theory" of the 18th century (Tracey & Morrow, 2012) have promoted the idea of waiting to teach writing until after children learn to read. However, a preponderance of literature points to the difficulties that can arise if this approach is taken, as well as the potential benefits of early and developmentally appropriate emergent writing experiences. Language, literacy, reading, and writing emergence begin at birth and continue throughout formal schooling (e.g. Tolchinsky, 2014; Whitehurst & Lonigan, 2001). According to the joint position statement from The National Association for the Education of Young Children (NAEYC)

and the International Reading Association (IRA): "Failing to give children literacy experiences until they are in school can severely limit the reading *and writing* levels they ultimately attain," (emphasis added; Neuman et al., 2000, p. 3). All adults interested in ensuring a high quality of life for young children should care, not only that effective writing strategies are addressed, but that they are addressed early, responsibly, and with considerable attention directed towards individual children's needs.

Research Tells Us Where to Begin: It's All in A Name

Planning emergent writing experiences can be a challenge for teachers who have received conflicting messages from workshops, fluctuating standards, and well-meaning but similarly confused administrators. Fortunately, research has provided us not only with many reasons to engage students in developmentally appropriate writing, but also a road map of how.

Letter formation begins with experimentation (Tolchinsky, 2014). Typically developing children progress from the stage of drawing squiggles, which they do not associate as representations of speech, to a stage of drawing actual letters or letter-like forms (Cabell, Tortorelli, & Gerde, 2013). At this point, the teacher usually begins to see the child experimenting with writing letters found in their name, particularly the first letter. With continued and purposeful exposure to meaningful letters, children soon make an important shift: they begin to associate written letters and words with speech. These are important first steps along the path to fluent reading and writing (Dinehart, 2015).

A child's name is a good place to begin teaching the alphabetic principle, which is the fundamental understanding that letters and sounds come together to make words (Adams, 1990; Tolchinsky, 2014). "Names constitute the first clearly meaningful text, resistant to being forgotten and stable in pronunciation," (Tolchinsky, 2014, p. 150). The National Early Literacy Panel (NELP; Lonigan & Shanahan, 2009) reports that name writing plays a role in proficient spelling. Name writing ability at kindergarten entrance offers a window into a child's overall literacy development and is a foundation for other literacy skills (e.g. Puranik et al., 2011). Moreover, a child's ability to write their name is dependent on their print knowledge and letter writing skills. These skills are interconnected. Though current, systematic research into preschoolers' name writing is sparse (Puranik et al., 2011), most experts suggest name writing as a starting point for writing instruction (e.g. Berninger, 2019).

Teachers can use a child's natural curiosity about their name for more than just letter identification. A child's name is also a great place to begin proper letter formation. Talented teachers do this in an abundance of creative, and interconnected ways (Guo et al., 2012). Literacy rich classrooms are filled with environmental print that teachers reference often and that is meaningful to children (Neumann et al., 2011). Literacy rich classrooms also provide children with opportunities to play with and practice writing letters during regular classroom routines and rituals such as co-writing the morning message, taking menu orders in the dramatic play area, creating class books, or drafting and sending letters to friends in a classroom post office. Calling attention to children's names in their preschool environment is particularly helpful: labeling students' cubbies with their names, identifying their art projects and work samples, and adding their names to the classroom word wall (Guo et al., 2012).

Beyond these embedded strategies, teachers can and should introduce letter formation as an explicit skill once children show a readiness for instruction. The key to any name writing activity is that it must be *guided*. Children do not automatically know how to hold a pencil or where to begin writing a letter without an adult or more capable peer there to scaffold their attempts. Fortunately, when teachers are there to purposefully guide writing experimentation, they are able to both assess children's readiness for formal letter formation instruction and teach these new skills explicitly. Plus, taking this approach will help prevent children from learning incorrect letter formation habits that will be difficult to change once they enter Kindergarten.

Setting the Stage with "Rainbow Writing" (A Pre-Writing Activity)

Though very few high-quality studies have investigated specific writing instructional techniques, many experts agree that young children should have ample opportunities to strengthen all of the competencies that will contribute to fluent written expression in school (e.g. Edmister et al., 2013). While simultaneously calling attention to children's names displayed in the classroom, teachers can set the stage for name writing by first offering opportunities for children to become increasingly more comfortable with the motoric movements involved in writing (Huffman & Fortenberry, 2011). Long before the pre-kindergarten year, children as young as two and three can begin to internalize the motoric movements they will eventually use in fluent handwriting. In addition to the fine motor skills reinforced in common preschool activities (e.g. grasping, cutting, molding, tearing, pinching, lacing, etc.), motoric movements that reinforce left to right directionality can be helpful in building a firm foundation.

Figure 1
"Rainbow Writing": A Pre-Writing Activity

Photo used courtesy of K. Cheyney-Collante

Figure 2
Hand Over Hand Modeling

Photo used courtesy of K. Cheyney-Collante

Figure 3
Peer Scaffolding of Rainbow Writing

Photo used courtesy of K. Cheyney-Collante

One strategy for practicing these movements is "Rainbow Writing" (see *Figure 1*).

To perform this activity, a teacher posts large paper on the wall and then coaches the child to use a chunky piece of colored chalk to draw big rainbow shapes (half-circles). The child is directed to start on the left and move to the right, then remove the chalk from the paper, and go back to the left to begin again. Multiple colors are used in the same process to create a rainbow. Lifting the chalk will usually feel unnatural in the beginning and the teacher will need to coach the child, hand over hand. This process should reinforce left-to-right directionality. The teacher stands behind the child to help him/her complete each stroke (as displayed in *Figure 2*), hand over hand. Repetition will help children internalize the large muscle movement. Once the movements become natural, teachers can play music with a strong, steady beat at a slow to moderate tempo (a walking pace), and have children complete each stroke in time to the beat.

While children enjoy the activity, teachers should carefully attend to each child and watch for signs that they are struggling. These students will need extra time practicing these large, left to right motor patterns. Children that have difficulty can get extra time practicing the "Rainbow Writing" motor pattern with paint on an easel, or water and brushes on the wall at playground time. The authors suggest that teachers think of this extra time as "cozy up" time. Keeping sessions fun and intimate will be more effective than setting a tone of seriousness or intensity (Graham & Harris, 2011).

As children become skilled at using these movements while standing up, the teacher can then introduce the same procedure while students are sitting at a table. Most children will need support in transitioning, and some more than others. Those that seem frustrated at this stage may need more practice standing up. Teachers should keep in mind that the goal is that children are given plenty of opportunities to experience large and small muscle group movements (e.g. left-to-right directionality, while holding a writing utensil that fits their hand, etc.), before they are expected to transfer these skills to the exceedingly integrated motor movements involved in forming letters. It is important to note that his should never be forced on children.

Teachers need not be alone in their efforts to scaffold children in this activity, as some children will be able to scaffold peers. Those that are more advanced can help those that are just beginning to practice this skill (*Figure 3*).

Teachers can make sure a child does not feel slighted when receiving extra help from a peer by simply reversing roles of tutor and tutee later in the day. The focus is on scaffolding their learning. In the example of the children represented in figure 3, during recess the teacher asked the child that received help in Rainbow Writing to teach his friend how to turn a cartwheel. Teachers will need to mindfully plan how to assist children in alternating roles of tutor and tutee.

File Folder Sign–In (A Name Writing Activity)

More experienced preschoolers will ideally have had lots of excellent exposure to meaningful print as well as the motoric practice needed for a smooth transition into letter formation. Additionally, daily routines, such as attendance procedures where children "sign-in," provide an excellent opportunity to capitalize on the personal nature of a child's name. The recurring nature of a daily sign-in also allows teachers to regularly watch for readiness for letter formation instruction and ensures it won't get left out in the midst of busy days. The following outlines the process of using a file folder sign-in.

First, the teacher makes a file folder with each child's picture and name on the front (*Figure 4*). The inside should have a teacher written example of the child's name at the top but also provide a space for children to copy their name on their own once they become ready. One method involves using the two-line approach (*Figure 5*) for both the teacher-written example and the place where children will eventually write their name independently. Teachers should provide them with at least three two-lined spaces where they will eventually practice.

Figure 4
File Folder Sign-In (Front Cover)

Photo used courtesy of K. Cheyney-Collante

Figure 5
File Folder Sign-In (Inside Practice Area)

Photo used courtesy of K. Cheyney-Collante

In *Figure 5*, the teacher color coded the bottom line in bright orange and used a red dot to indicate where the child should place the writing utensil to begin each letter. As teachers experiment with these types of supports, they generally will find that each child differs in the amount and type of scaffolding needed. The folders should be laminated so they can be re-used every day. Children can decorate the front to add a special personalized touch.

The first day the folder is introduced, we suggest that teachers work with children individually or in small groups at various times throughout the day. Though it may take a week or so to introduce the folders to everyone, the teacher will be better able to assess each child's readiness with this gradual release. The teacher draws the student's attention to the child's picture, name, and front cover illustrations. She then invites them to open the folder and write their name with a dry erase marker in a color they choose. Specific directions are avoided here so that the teacher can carefully observe the child's independent endeavors. In the very beginning stages, children's attempt to write their names may not resemble the teacher's sample. They may draw scribbles. They may or may not try to write on the lines provided or directly over the teacher-written example. The teacher stays close to students and gives them positive and specific feedback.

For example, the teacher may say, "You wrote a squiggle that went up like this, then down like that. Good for you! You're getting ready to write your name." Once everyone has been introduced to the procedure, the teacher can include it as a regular part of the morning routine.

Next, the teacher watches over the coming weeks or months to see when individual children begin to approximate the letters of their name. The teacher can then begin to coach the student in proper letter formation. At this point, the teacher directly calls the child's attention to the example at the top and invites them to trace it with a bright colored dry erase marker. For instance, she might say: "You are growing up so fast! It looks like you're ready to learn to write your name. From now on when you get your folder, take a marker and trace the letters of your name, just like this." She then models for them, hand over hand, exactly how to do it: (1) how to hold the marker; (2) where to put their other hand to hold the folder; and (3) exactly where to start and end on each letter. Typically, most children need the red colored dot (both on the name example and on the two-line practice areas) to reinforce where to start. After they have traced their name they can try to copy it in the spaces provided below the example.

For those that need extra support, teachers may also use a permanent black marker to include dotted lines on the first two-line space they've provided. Because teachers will be carefully watching the entire class during this activity, a few little supports like this will make it much easier to spread a teacher's guidance among all students since they are progressing at different rates. The teacher should continue to guide them as individually as possible.

Even with these explicit instructional strategies, teachers still need to embed additional name writing and letter formation experiences throughout the day. The folders can be kept available for later play and practice in the Writing Center. As children exhibit readiness, teachers can encourage them to write their name as often as possible but continue to be there to guide their efforts. Teachers will notice and praise as they see children correctly forming letters. When the teacher notices incorrect form, she can gently guide children back on track, again, hand over hand. In such instances, the teacher might say, "You're working so hard on writing your name. Here, try it over these dotted lines to make it easier. Good for you! You're doing it! Try it again right now on your own for practice."

Many teachers are concerned about how and when to use lines, guiding dots, and other support strategies, as different handwriting programs suggest different procedures. Whatever specific tools teachers use, make sure to follow the child's lead by continually assessing where they fall in the expected developmental progression and provide the necessary scaffold. Curricula that emphasize a one-size-fits-all approach should be avoided. The

goal is automaticity for all children, particularly those that might have risk factors in reading and writing acquisition. Therefore, any support tools a teacher uses should let the child's development set the pace but should also provide a structure where learning ineffective letter formation habits are avoided.

Tips for Teacher-Created Activities

Teachers can create many different types of name-writing activities similar to the ones that have been explored in this article. Here are some helpful tips that should be considered before deciding to adopt a new strategy or to modify an old one. With these guidelines in place, there are innumerable ways to begin the letter formation process through name writing.

Watch for readiness. The best time to begin letter formation activities with children is when they show a readiness to do so, and not before. Sometime around a child's third birthday teachers should observe very closely for signs of experimentation with forming letters. Assess children by observing them in a naturalistic environment first, perhaps during unstructured work-play time when writing materials are provided.

Begin at the child's level. A child that is still learning to hold a crayon may need extra fine motor experiences before a teacher begins a name writing protocol. Conversely, there is no need to require a proficient name writer to continue practicing their name over and over without a real purpose. The teacher can, however, guide them in writing their name at useful times throughout the day, and then eventually in writing words in meaningful contexts.

Remain at the child's pace. Pushing a child to conform to adult expectations of timing when s/he is unready will be futile. However, teachers can celebrate these individual differences. A struggling child has actually presented the teacher with an opportunity to slow down the pace and devote special attention to one child that needs support.

Plan ahead. Teachers should include guided, explicit letter formation activities in lesson plans several days a week. It is also important to think ahead about how to embed experimentation, play, and practice throughout the day. This can be as simple as remembering to allow children to write their own name on art projects and other learning artifacts once they show readiness do so, or working with colleagues to rotate materials for emergent writing within centers.

Mistakes are opportunities to learn. All new skills need to be scaffolded. Mistakes are where the real learning happens *if teachers are there to provide immediate, supportive feedback.* Teachers can help children adopt the word "oops" and use it liberally so that they feel safe to attempt the new and difficult skills of writing.

Encourage children, especially those who struggle, with behavior specific praise. Showering children's attempts with praise is critical, particularly if the praise is immediate (at the moment the child is engaged in practicing the skill) and descriptive (noticing without opinion or judgment). For example, the teacher might say, "I notice you started that big letter 'O' right here at the top. That's exactly right. You did it!" Notice, the emphasis is on what the child did, not simply the teacher's approval of it ("YOU did it!" versus "I like the way you…"). This type of feedback, in and of itself, is a form of explicit instruction. Moreover, developing writers will be compelled to persevere when behavior specific praise acknowledges effort and process in addition to results.

Concluding Thoughts

Guided early writing experiences are critical in establishing a solid foundation for young learners, particularly for children who have not had the types of early experiences that map onto the literacies expected in formal schooling. In the opening scenario, Miss Carmin questioned how she would address correct letter formation without compromising developmentally appropriate practices and a child-centered philosophy. This article elaborated on how this goal can be accomplished. Though effective early writing instruction requires thoughtful planning and careful monitoring of students' progress, the activities and guidelines outlined here are appropriate for use with young learners of all backgrounds and abilities. Lao-Tzu, an ancient Chinese philosopher, is credited with saying, "A journey of a thousand miles begins with a single step." Teachers like Miss Carmin can start small, knowing that daily guiding children along the path to fluent writing holds innumerable rewards.

Kristi Cheyney-Collante, PhD, is a Clinical Assistant Professor of Special Education at the University of Florida. Her work focuses on early language and literacy development, and preschool to Kindergarten transitions, with a focus on teaching and learning in under resourced communities.

Vivian Gonsalves, PhD, is a Clinical Assistant Professor in the School of Special Education, School Psychology and Early Childhood Studies at the University of Florida. Her research focuses on early literacy development, teacher education, mentoring, and reading instruction and remediation.

Shaunté Duggins, Ph.D., is a Teacher Educator and Manager of Literacy Initiatives at the University of Florida Lastinger Center for Learning. Shaunté received her bachelor's in Early Childhood Education and taught young children in an inclusive high-poverty elementary school. Her research includes literacy instruction, teacher education, and professional development, particularly in high-poverty settings.

Julie Bader is currently a doctoral candidate at The University of Florida, College of Education School of Special Education, School Psychology and Early Childhood Studies. Julie's research interests include early literacy intervention and teacher education.

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