Play Experiences and Preschoolers' Engagement in Early Writing

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ABSTRACT

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Pamela Callejas Aliaga

Children's early writing skills at preschool may mediate their future academic success. However, preschool activities solely support transcription despite being only one-half of the writing equation. Introducing a writing purpose can support composition, and one rooted in children's personal experiences may facilitate their engagement in meaningful writing. The present study used a picture of preschoolers' sociodramatic play experience as a contextual writing prompt to examine whether children's writing abilities and engagement in a writing process change depending on the context of the picture prompt. A sample of 18 preschoolers participated in a recorded sociodramatic play session, followed by a process-oriented writing session. In a fully within-subject design, preschoolers were asked to plan, write, and read from their text using three contextual prompts. Each prompt included a speech bubble and a different picture context (i.e., preschoolers' play session, other children's play, and a non-play picture). Children's text productions were coded for written text sophistication and oral text productivity. Children's time spent planning and writing were measures of their engagement in the writing process. Comparative analyses of repeated measures ANOVA showed that children's engagement in planning when prompted by the context of their sociodramatic play experience was significantly longer than the other picture prompts. The children also produced more oral text words and more advanced written forms. These findings support the development of writing tasks rooted in children's experiences to prompt early composition and transcription as integrated skills.

Dedication

To my husband, Andres Karam Gil,
whose love and care have helped me thrive since day one.

To my sons Santiago, Nicolas, and Sebastian,
who inspired me to keep learning
and kindled my love for early childhood education.

To my mother, Kenny Aliaga,
whose endless love has been the wind in my sails.

To my siblings, JJ and Patricia
who have supported every one of my ideas.

To Reuben Croll,
who has encouraged me to get this far.

To my supervisor, Dr Sandra Martin-Chang,
whose mentorship supported my strengths and never my weaknesses.

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Introduction

Early writing abilities emerge in preschool and are strongly related to children's future writing performance and later academic success (Cabell et al., 2021; Graham & Hebert, 2011; Quinn & Bingham, 2022). Children's writing ability depends on two complex skills: transcription and composition (Berninger et al., 2002; Juel et al., 1986). Transcription comprises spelling skills (Juel et al., 1986; Kim, 2020) and handwriting (Berninger & Winn, 2006; Kaderavek et al., 2009). Composition is the iterative process of generating and organizing ideas to communicate meaning (Flower & Hayes, 1981; Graves, 1983; Quinn & Bingham, 2019). These skills develop concurrently yet not at the same pace, with transcription trailing behind composition (Kaderavek et al., 2009; Puranik & Lonigan, 2014).

Preschoolers need reasons to integrate transcription and composition into writing tasks attuned to their everyday play experiences (Bingham et al., 2018; Quinn & Bingham, 2022; Quinn et al., 2016; Rohloff et al., 2023). Engaging children's interest in meaningful writing creates the scaffolding opportunities necessary to boost children's letter/sound mapping (Almeida & Silva, 2021; Ouellette & Sénéchal, 2008) and comprehension of story structure (Kirby et al., 2021; Pesco & Gagne, 2017). Sociodramatic play, also known as pretend play, is a staple of the preschool years (Bergen, 1988; Bettelheim, 1987; Rubin, 1982). Characterized by its narrative structure (Bodrova, 2008; Eckler & Weininger, 1989), sociodramatic play facilitates children's storytelling abilities (Nicolopoulou, 2005). Its social context affords purposes for writing (Rowe, 2018a). The present study asked whether preschoolers would engage in a writing process for longer, produce more text, and improve their transcription when prompted to write by their sociodramatic play experience versus the play context of other children or in response to a non-play writing prompt.

Componential View of Early Writing

Writing involves expressing ideas in print (Gerde et al., 2012). It is a challenging form of communication to master (Kim, 2020; Shanahan, 2006). Despite its complexity, the simple view of writing by Juel et al. (1986) offered a straightforward theoretical framework for writing development. According to Juel and collaborators, writing emerges as the product of two distinct constructs: *transcription*, encoding sounds into written symbols, and *composition*, generating and organizing ideas for communication. Transcription draws on literacy skills such as understanding the alphabet principle to translate speech into text. Composition requires linguistic skills such as oral language to produce a meaningful message (Wheatley et al., 2016). These processes are complementary and equally necessary for writing to occur (Bingham et al., 2018).

Early Transcription Skills

Both spelling and handwriting take time to master and require explicit instruction (Gerde et al., 2012). An abundance of writing materials in a print-rich preschool environment kindles children's interest in transcribing (Roskos & Neuman, 2011). However, adult scaffolding is crucial in facilitating the progression of children's transcription skills (Bingham et al., 2015; Gerde et al., 2015; Ouellette et al., 2013).

Development of Children's Transcription Skills. As children's hand-tracing ability matures and their knowledge of the alphabetic system expands, children's writing representations show increasing degrees of conventionality (Gentry, 1982, 2006). Individual ability differences aside, children's transcription fluctuates depending on the nature and difficulty of the task (Puranik & Lonigan, 2014; Rowe & Wilson, 2015). The gradual progressions of transcription skills are better described in developmental growth phases (Ehri, 1995, 2005; 2022).

Non-Alphabetic Writing. Children's earliest writing marks may be incidental, appearing while exploring crayons or pencils (Hall, 2009). However, as children discover the visible marks they made, their early transcription skills begin to unfold (Gentry, 1982). Once children realize the connection between their physical actions and the resulting marks, they focus on the marks themselves (Coates & Coates, 2016; Treiman, 2017). Berefelt (1987) observed 18-month-old toddlers engaging in scribbling for longer when the pencils used left visible marks than when given non-functioning writing tools. The directionless scribbles and zigzag lines that characterize children's early markings indicate a non-alphabetic phase (Gentry, 2006; Gerde et al., 2012). Akin to what babbling is to speech, children's scribbles are un-formed written language (Gardner, 1980; Hall, 2009). Children become attentive to writing marks in different contexts, such as product labels, street signs, and storybooks (Treiman, 2017). They notice patterns in print around them (i.e., statistical learning), which helps children distinguish text from other graphic products (Pollo et al., 2009). Children's drawings show random symbols and shapes resembling letters as they attempt to imitate visual features frequently appearing in print (Perruchet & Pacton, 2006). However, the letter shapes do not represent sounds (Gentry, 1982).

Pre-Alphabetic Writing. Eventually, with gradual gains in letter-shape recognition, children emulate writing by printing clusters of letters in horizontal alignment (Guo & Mackenzie, 2015; Rowe & Wilson, 2015). These linear markings characterize children's transition into pre-alphabetic writing (Gentry, 2006). Children do not know yet how words are represented in print (Treiman et al., 2022). Thus, they tend to draw "a writing" (Levin & Bus, 2003, p. 895).

However, pre-alphabetic productions show recognizable visual features and patterns of the environmental print children are exposed to, such as directionality and letter arrangement

(Gerde et al., 2016; Otake et al., 2018; Rowe & Wilson, 2015). Around their third birthday, the marks children make when asked to write differ from those they make while drawing. Otake et al. (2017) noted that preschool children would use dark tracing implements and print small marks and letter-shaped forms when asked to write. In contrast, the children chose colourful pencils for drawing tasks. They also tended to make free-form traces covering a large drawing area. The authors argued that the differences in children's products showed an initial awareness of the practical uses of writing. Children's attention is so often fixated on the visual aspect of print that they may recognize a word by its graphic features like they would learn a logo (i.e., logogram; Ehri, 1998).

Children become particularly interested in the letters of their name (Treiman et al., 1996), which is often the first word they learn to write (Levin & Aram, 2005). They can distinguish their given name from other printed words (Pollo et al., 2009; Villaume & Wilson, 1989) and may learn to print its letters in the correct spelling sequence (Kaderavek et al., 2009). However, as children only have an introductory level of alphabet knowledge, they cannot dictate the letters in their names (Levin & Aram, 2005). In an observational design, Both–de Vries and Bus (2008) asked 96 preschoolers to write their names and 16 other words. These children compensated up to 52 % of their unlearned letters in the additional words with those in their name. Also, the children used appropriate phonetic spelling for the first time while writing the initial letter of their name. It is argued that as children frequently hear their name, they become more familiar with its letters and first sound than with any other word (Bloodgood, 1999; Both–de Vries & Bus, 2008; Levin & Aram, 2005). A given name is a personal and meaningful word that provides a relevant context for connecting speech with print (Bowman & Treiman, 2002; Levin & Aram, 2005), thus kindling children's progression toward partial alphabetic spelling (Gentry, 1982).

Partial Alphabetic Writing. As children get exposed to more letters, they start integrating their developing phonology to identify words (Bowman & Treiman, 2002). In their initial attempts to translate sounds, children write only the consonants in a word, such as "BT" for "boat" (Ehri, 2022). Using their emergent knowledge of the alphabet letters, children explore the symbols to find a match that represents the sound in question (Ouellete & Sénéchal, 2008). Thus, they use letter names to represent whole syllables, as in "AT" may stand for the word "eighty" (Ehri, 2022). Children's initial awareness that sounds in speech have a printed counterpart signals their rising understanding of the alphabetic principle (Bowman & Treiman, 2002).

Children's writings are now partially alphabetic, as they use letters to represent parts of the sounds in a word (Read, 1975). These unconventional representations are called *invented spelling*, children's self-guided attempts to translate words into print (Ouellette et al., 2013). Sénéchal et al. (2024) conceptualized invented spelling as the developmental process that precedes formal literacy instruction. It is fundamental in the transition from spoken to written language, in which children try charting word sounds to letters they know. Like overall writing development, invented spelling follows a progression as children gradually acquire more letter/sound combinations, accumulating spelling patterns (Treiman, 2017).

Full Alphabetic Writing. Typically observed during the first school years, children eventually write a letter for every sound they hear (Gentry, 2006). Full alphabetic writing productions might not always feature complex orthographic conventions (Ehri, 1998). Nevertheless, they contain remarkably creative and highly readable phonetic spellings (i.e., "BUTH" for "booth"), as children now print almost any word in phonetic writing (Gentry, 1982).

Consolidated Alphabetic Writing. Over time and with more exposure to print, children acquire many spelling patterns necessary to transcribe words conventionally (Gentry, 2006). At

this point, they have entered the realm of conventional spelling. Yet, the relevance of invented spelling to children's transcription abilities remains paramount.

Scaffolding Early Transcription. There is much variation in the path and rate at which individual preschool children develop their transcription skills (Rowe & Wilson, 2015). However, some children need more help with transcription than others to generate readable texts (Berninger et al., 2006; McCutchen, 2006; Puranik & Al Otaiba, 2012; Puranik & Lonigan, 2011). One way to provide support is to guide children to contrast their invented spelling to a spelling example one level higher in sophistication (Ouellette & Sénéchal, 2008; Ouellette et al., 2013). This type of scaffolding has been known to increase children's ability to focus on and manipulate phonemes (i.e., phoneme awareness; Almeida & Silva, 2021; Martins & Silva, 2006). It can also facilitate spelling progression and word reading abilities (Martins et al., 2013). The same effect has been found working with children in small groups (Martins et al., 2016). Based on constructivist theory, scaffolding interventions build on children's invented spelling strategies (Ouellette et al., 2013). Children's self-guided spelling attempts are within their *zone of proximal development*, the distance between children's present abilities and the next level of skill competence (Vygotsky, 1962). Hence, by scaffolding one level of sophistication at a time, children's skills grow within their developmental capability (Pulido & Morin, 2018).

To exemplify with a recent study, Almeida and Silva (2021) tested the effectiveness of this constructivist approach and an explicit teaching approach. Individually, 90 preschoolers were asked to write dictated words to the best of their ability. In the scaffolding group, children were praised for their invented spelling efforts and then shown a spelling example slightly different from their way of spelling (e.g., children's invented spelling plus one extra letter not yet produced). They were encouraged to contrast both invented spellings and analyze which example

was better, inducing children's thinking. In the explicit teaching condition, the children were shown which letters were missing in their invented spelling. In the control group, children were asked to draw. At the end of the intervention, the children who received scaffolding demonstrated higher sophistication in their invented spellings than children in the explicit approach and the control group. In terms of phonemic awareness, only scaffolded children showed improvement. This study exemplifies how guiding children to evaluate their writing brings forth learning within their developmental capacity (Ouellette et al., 2013). Showing children the conventional way of spelling does not help them restructure their understanding of the alphabetic principle (Almeida & Silva, 2021; Silva & Almeida, 2015). As children learn to focus on letter-sound connections, they become aware of phonemes, which facilitates the progression of their writings (Martins & Silva, 2006; Pulido & Morin, 2018).

Early Transcription Assessment. Several valid and reliable tasks have been developed to concurrently assess preschoolers' handwriting and spelling abilities, including name writing, letter writing, and word writing tasks (e.g., Bingham et al., 2017; Gerde et al., 2015; Invernizzi et al., 1997). Together, the measures obtained on these tasks are considered valid predictors of the development of preschoolers' transcription skills (Puranik et al., 2011). Name-writing ability, which entails using writing materials to print one's name, is one of the most frequently relied upon indicators of preschoolers' letter recognition and *print-related knowledge*, the understanding of how print works to convey meaning (Bloodgood, 1999; Welsch et al., 2003). Although, by itself, children's name-writing skill is not a good indicator of their average writing ability (Drouin & Harmon, 2009; Puranik et al., 2011). Letter-writing tasks assess children's alphabet knowledge and understanding of the alphabetic principle (Diamond et al., 2008). At last, word-writing tasks are used to determine the progression of invented spelling (Cabell et al.,

2021) by asking children to write five dictated words with a consonant–vowel–consonant (CVC) syllabic structure (i.e., sad, hug, lip, net, job; Invernizzi et al., 1997).

Sénéchal et al. (2024) accentuated the critical need for a scoring scheme responsive to the developmental progressions outlined in the early writing literature (e.g., Bloodgood, 1999; Sulzby et al., 1989; Tangel & Blachman, 1992). Evidence shows that children's writing varies with the task's demands. Still, children's writing performance variability depends heavily on the scoring method selected (Quinn & Bingham, 2022). Therefore, selecting a coding scale highly descriptive of children's writing forms is paramount

Cabell et al. (2021) used a scoring scale with codes representing each developmental phase to assess children's transcription skills in a dictated task. The low-scoring categories for children's pre-alphabetic writing included 0 (r*efusal to write*), 1 (*scribbling*), or 2 (*drawing as writing*). The mid-scores were for pre-alphabetic written forms showing the use of writing strategies, such as 3 (*linear scribble*), 4 (*letter–like shapes*), and 5 (*primarily letters but no sounds represented*). Finally, high-rank scores were for partially alphabetic forms, such as 6 (*one accurate sound represented*), 7 (*two accurate sounds represented*), or 8 (*word spelled correctly*). It is essential to remember that as writing entails the intention to express meaning in print (Gerde et al., 2012; Rowe, 2018b; Sulzby et al., 1989), the tasks discussed above only partially measure children's early writing ability. Without including composition measuring items, these tasks are yet to assess children as writers (Quinn & Bingham, 2022).

Early Composition Skills

For seasoned writers, composing is the internal process of *planning*, generating and organizing ideas for a writing goal (Flower & Hayes, 1981). For beginner writers, this planning process is linked to children's oral language skills (Kim et al., 2011). In a recent review of

literature on early composing, Quinn and Bingham (2019) found that out of 270 articles defining composition, 30.7% conceptualized it as children's experimentation with oral language (e.g., Myhill & Jones, 2009), and 25.9% operationalized composition as the oral text that complements children's written text (e.g., Dennis & Votteler, 2013). Indeed, children often think aloud the words they wish to write (McCutchen, 1996; McGee & Schickedanz, 2007) and will likely write words they have used in speech (Spencer & Petersen, 2018; Stadler & Ward, 2005). Quinn et al. (2021) reported that preschoolers, in particular, seem more inclined to demonstrate their composition potential orally than in writing, as they tend to utter long and complex sentences of oral text when reading from their unconventional marks. The authors argued that this tendency might hint at a developmental pattern of text generation.

Development of Children's Composition Skills. Composing skills emerge as toddlers translate and structure their assorted thoughts into simple oral discourses to express their needs and wants (Paris & Paris, 2003). With a developing vocabulary, 2-year-olds' utterances primarily label and list what they know (Stadler & Ward, 2005) and use hand and body gestures to complement their meaning-making (Rowe, 2018b). By 3-years-old, at the start of preschool, most children can use *decontextualized language* when they recount experiences detached from their immediate context (Paris & Paris, 2003). Being able to use language that refers to "a there and then" also allows children to understand the stories narrated to them (Griffin et al., 2004; Reese, 1995; Snow, 1983) and to compose stories themselves (Copp et al., 2016; Levy, 2003). Preschoolers assimilate storytelling patterns from their linguistic community as mental representations of how language is used and structured to produce coherent stories (Mandler & Johnson, 1977). In other words, from extensive exposure to storytelling and reminiscing conversations, children recognize there is a structure needed to narrate stories (Peterson &

McCabe, 1994; Spencer & Petersen, 2020). As adults prompt for details, preschool-age children start planning their anecdotes, organizing elements according to story grammar, such as setting, plot, characters, and points of view (McCabe & Bliss, 2003; Stein & Glenn, 1979). Children also learn to use cohesive vocabulary (e.g., then, otherwise, because) to connect story elements into a coherent discourse (Justice et al., 2010; Pinto et al., 2016).

Composition of Personal Narratives. Narratives are decontextualized stories recounting past or future events structured in causal and temporal sequences (Stadler & Ward, 2005). Preschool children may have a natural sensitivity to recognize causal connections in stories, facilitating their comprehension of narratives (Lynch et al., 2008). Soon enough, preschool children spontaneously narrate their experiences following such structure (Spencer & Petersen, 2020). With proper guidance, 4-to-5-year-olds may compose complex and well-structured personal narratives and respond with genuine interest to peers' narratives (McCabe & Rollins, 1994). Personal narratives have been considered preschoolers' first formal attempts at composing (Dyson, 2009; Frausel et al., 2021; Levy, 2003). Narrating from a personal perspective allows children to recall who, what, where, and when the events happened based on an authentic first-hand experience of themselves as protagonists (McCabe & Rollins, 1994).

Scaffolding Early Composition. Preschoolers' composing skills are enhanced by brief sessions of strategic instruction on narrative comprehension (i.e., sequencing, structure, evaluation, and inferencing strategies; Kim & Schatschneider, 2017; Kirby et al., 2021; Spencer & Petersen, 2018). Within the context of storybook reading, these short narrative scaffolding lessons can be followed with guided practice of retelling the story in the storybook, allowing children to apply the new information learned (Pesco & Devlin, 2014). Further, as storytelling is an inherently social experience (Spencer & Petersen, 2020), receiving narrative scaffolding

during group discussions within the context of storybook reading (i.e., verbal scaffolding) has shown to be an effective and age-appropriate strategy to instruct preschoolers about story grammar, characters' points of view, and causal and personal connections (Pesco & Gagne, 2017). Moreover, verbal scaffolding can be complemented with story enacting or using props, which relate to their sociodramatic play, as children's gains in narrative comprehension and expression seem to be superior when these playful strategies are also available, compared to discussion alone (Pesco & Gagne, 2017). If so, sociodramatic play might be an appropriate context to scaffold children's engagement in composition.

Early Composition Assessment. Unlike several validated and reliable transcription measures, psychometrically sound procedures to assess early composition are still in development (Quinn & Bingham, 2019, 2022). Moreover, children's text generation varies according to the nature of the task (Rowe & Wilson, 2015). Gerde and Bingham (2013) exemplified this effect. These authors used a story-composing task to prompt preschool children to write within a speech bubble structure. They found that children produced more writing than drawing inside the bubble structure. On the other hand, in an open-ended task in which children are asked to write a story without guidelines or prompts, preschoolers tend to use drawings and scribbling to represent their compositions despite their prior use of advanced invented spelling (Bus et al., 2001; Hooper et al., 2010; Sulzby et al., 1989). Moreover, preschool children often complement their written marks with utterances and pictorial representations to add meaning (Coates, 2002; Quinn & Bingham, 2022; Treiman et al., 2016). To assess composition while accommodating children's alternative meaning-making strategies for composing text, researchers have used contextual tasks (picture description/labelling, e.g., Rowe & Wilson, 2015) and narrative tasks (storytelling; e.g., Bigozzi & Vettori, 2016). These tasks are deemed preschool-

appropriate to assess essential features of children's early composing, such as oral text, idea generation, oral-written translation, and task adherence (Quinn & Bingham, 2022).

Contextual writing tasks assess children's generation of text for a specific purpose. Children are given a picture and asked to write a description or caption alongside the image (e.g., Rowe & Wilson, 2015). The task is close-ended to some extent, as children's idea generation is bound to what is portrayed in the picture's image (Quinn & Bingham, 2022). The picture provides a visual scaffold to guide children's composing, which affords a less effortful transcription (Gerde & Bingham, 2013). Contextual tasks can be further structured to support children's composing by adding a blank shape delimiting the space for text generation (i.e., speech bubbles, sentence strips; e.g., Quinn & Bingham, 2022; Thomas et al., 2020).

In sum, assessments for preschoolers' early composition should be aligned with age-appropriate practices by encompassing children's various mediums for text generation (Copple & Bredekamp, 2009). Moreover, a comprehensive measure of preschoolers' text-generation ability should aim to explore children's written forms and the oral language they produce when elaborating on the meaning of their written marks (Quinn et al., 2021; Kim, 2020). Contextual tasks rely partly on children's transcription skills to demonstrate composing abilities (Quinn & Bingham, 2022). This reliance can be mitigated by adopting measures sensitive to children's oral text production, such as task adherence, oral-written translation, and the number of ideas (Quinn & Bingham, 2022).

Bridging Early Writing Research and Practice.

Comprehensive Early Writing Research. Quinn et al. (2021) implemented an integral exploration of early writing. These authors pioneered a study exploring the nature of 4- to 5-year-olds' early composing with a sample of 245 preschoolers. The authors used a contextual

prompt with a speech bubble to elicit preschool children to write dialogue. The *raccoon task* is an illustration showing two characters: a mama raccoon and a baby raccoon. Mama raccoon is featured as an adult raccoon standing on a grassy field near the base of a tree. High up, on the tree's branch, sits a baby raccoon looking down towards its mama. The authors added the speech bubble between the two characters. Then, they asked the children to write their dialogue ideas inside the speech bubble, giving no further instructions. Once the task was completed, the researchers asked the children to read what they wrote. The authors' composition measures were sensitive to children's oral text production, namely, *task adherence*, children's ability to generate text congruent to the task, and *oral-written translation*, children's ability to read what they wrote.

Using their contextual picture prompt, Quinn et al. (2021) corroborated that preschoolers could compose to different degrees. The children's samples were categorized into four groups according to the sophistication of their compositions. The first group, the *no-match* group, were the least advanced composers and represented 29% of the participants. The second group, the *task-match* group, consisted of children who demonstrated advanced composing of oral text but did not translate in writing. Interestingly, this group represented 50.6% of the total sample. Two more groups were formed with the children who could write more conventionally: the *text-match* and *all-match* groups. These groups only represented 11.8% and 8.6% of the preschoolers, respectively.

Quinn et al. (2021) reported that the main predictor of children's task-match performance was not children's age but their expressive vocabulary and letter knowledge. Moreover, the children in the task-match composing ability met the task's demands with oral text. They commonly uttered long and highly complex sentences with several connected ideas. However, they also tended to produce less sophisticated written forms (e.g., scribbles, strings of letter-like

forms). In contrast, the more advanced writers in the text-match and all-match groups tended to produce shorter oral texts as they tried to match their written text. The authors inferred that to generate text, children might have chosen a strategy that played into their strengths (e.g., task-match children choosing an oral language to compose). Quinn et al. (2021) encouraged more research on preschoolers' composition to attain a more comprehensive view of early writing.

Early Writing in the Preschool Classroom. Generating further study into the complexity of children's early writing might be decisive in harmonizing theory and practice. In many preschool classrooms, the unilateral focus on writing mechanics prevails (Drainville & Charron, 2021; Gerde et al., 2015, 2019). Bingham et al. (2017) examined the support available in preschool classrooms concerning children's early writing skills. The authors found that out of 41 classrooms sampled, 58% of educators' writing support was given to promote children's handwriting and 35% was geared toward spelling. Teachers were observed giving children a word to trace, telling them which letter comes next in spelling a word. The remaining 7% of the teaching practices facilitated children's composition.

Like Bingham et al. (2017), Gerde et al. (2019) noted that educators seldom planned writing activities, even though many preschool classrooms had abundant writing materials. Further, most educators neither modelled nor scaffolded the use of writing materials, and support was only given if requested by children. Providing writing supplies and a print-rich environment is paramount to children's writing development (Gerde et al., 2015; Neuman et al., 2000, 2007). However, it is not enough for a long-lasting influence on children's writing unless paired with educators' comprehensive support (Bingham et al., 2017; Mashburn et al., 2008).

Bingham et al. (2017) evaluated the effects of educators' instructional support on preschoolers' writing outcomes. The authors noted that the children receiving only transcription

guidance did not improve their composition ability by the end of the year. Interestingly, there were a few classrooms where educators cultivated preschoolers' composition, for example, by including the children's input while writing morning messages. In those classrooms, the researchers observed significant improvements in children's invented spelling and name-writing abilities by the end of the year. Bingham et al. (2017) concluded that while educators scaffold preschoolers to compose better texts, the children get to practice their transcription, becoming better writers overall.

Nurturing both early writing components is essential (Quinn et al., 2021; Rowe et al., 2021). When emergent transcription skills are left unattended, it could stifle children's writing development (Pinto et al., 2015). In a longitudinal study, Bigozzi and Vettori (2016) found that for typically developing preschoolers, oral narrative ability predicted the quality of written narratives children could print in first grade. The authors concluded that once children develop the ability to transcribe, they retain the oral narrative abilities created in preschool. However, Bigozzi and Vettori (2016) observed that children who could not achieve the expected spelling and handwriting fluency by first grade did not seem to retain their oral narrative gains from preschool. Pinto et al. (2015) observed a similar relationship when attempting to predict children's written narrative abilities in Grade 2 from their oral narratives in kindergarten. To counterbalance these effects, many researchers have encouraged preschool educators to integrate composition in partnership with transcription in their curriculum (e.g., Quinn et al., 2016, 2021; Rowe, 2018a; Rowe et al., 2021; Gerde et al., 2012), which nurtures both crucial components of writing, and avoids overlooking either skill set (Bingham et al., 2017).

To create scaffolding opportunities, educators may engage children's interest in writing with activities inspired by everyday preschool activities (Bingham et al., 2018; Cabell et al.,

2013; Gerde et al., 2012). Educators may use play themes in writing activities to facilitate a purposeful writing experience for children (Neuman et al., 2000; Rowe & Nietzel, 2010). That being the case, children's play contexts could be a gateway to tether transcription and composition into a meaningful writing practice (Gerde et al., 2012; Kissel et al., 2011).

Play-Based Learning

Play experiences in early childhood shape children's disposition, motivation, and behaviour toward learning (Copple & Bredekamp, 2009; Hyson, 2008). From a socio-cultural perspective, play provides context to interact with peers and receive expert guidance from educators (Bingham et al., 2018). In the preschool years, sociodramatic play predominates over other play choices (Vygotsky, 1978), amounting to 60% of preschoolers' child-initiated and child-directed play activities (Rubin, 1982). In terms of early writing, this advanced type of play has been known to integrate transcription and composition in meaningful ways (Ihmeideh, 2015), providing a social context to explore the written code (Kissel et al., 2011; Smith, 2021).

Socio-Dramatic Play

Also referred to as symbolic or make-believe, *socio-dramatic play* entails role-enacting by using imagination to create as-if scenarios (Bodrova, 2008). These "pretend" scenarios emerge as preschoolers develop *symbolic thinking*, the capacity to form mental representations of objects and events (Nicolopoulou & Ilgaz, 2013). Understanding symbolic representations allows children to use writing symbols to represent speech (Copple & Bredekamp, 2009; Hall, 1991). They also use letters and letter forms to add meaning to their drawings (Mackenzie & Veresov, 2013). In their symbolic play, children explore writing functions by pretending to make shopping lists, write letters to family, or make signs for others to read (Pellegrini & Galda, 1993). Rowe and Neitzel (2010) noted that 3-year-olds show patterns in how they engage in writing during

play. For example, children with creative interests enjoyed generating text stories, and those more socially inclined liked writing letters and messages. The authors concluded that children's interests guided preschoolers' writing behaviours during play, and they used writing to fulfill those inclinations.

In connecting sociodramatic play and early composition skills, Eckler and Weininger (1989) had preschoolers engage in pretend play within a controlled setting and asked them to narrate their actions. The authors observed that 76% of children's narrations included story grammar elements, such as setting, characters, and plot. Indeed, sociodramatic play seems to promote children's use of decontextualized language and narrative discourse through their *metaplay*, children's discussions about their ongoing pretend scenarios that occur outside their imagined play (Rand & Mandel, 2021). Williamson and Silvern (1992) observed that preschoolers who engaged in metaplay showed higher narrative comprehension than those playing without engaging in negotiations outside of play's boundaries. Negotiating roles and symbolic meanings during socio-dramatic play helps children translate their ideas into oral language (Pellegrini, 1984; Rand & Mandel, 2021).

The affordances of children's use of narrative language in the sociodramatic play context may facilitate the integration of meaningful writing. To exemplify, Ihmeideh (2015) implemented a mixed-methods study to explore how writing opportunities embedded in the drama play center may impact the writing produced by 4-to-5-year-old children. For the intervention group and not the control group, the researcher integrated writing activities in the drama center of the children's classroom. During the play session, the children used the writing materials to produce letter shapes in their drawings and invented spelling attempts. The researcher conducted structured observations in both groups to record children's behaviours related to writing. The observations

were coded according to the developmental progression of children's transcription. No measures of composition were included. The author reported that after the playful writing session, the children in the intervention group produced writing forms of enhanced conventionality compared to the control group. In a subsequent interview, the children expressed enjoying writing lists, cheques, and letters to friends. Even though Ihmeideh's (2015) design excluded composition measures, the findings suggested that play experiences could promote children's engagement in early writing.

Play-Based Early Writing Research

Emergent literacy research is a commonly used methodological approach to studying early writing (Clay, 1975; Teale & Sulzby, 1986). Rowe and Wilson (2015) used an emergent literacy approach to observe children's writing behaviours in a play-based childcare environment. As part of a 3-year-long qualitative design (i.e., Rowe & Neitzel, 2010), 2-to-5-year-olds were prompted to write a caption for a photograph of themselves during play-based activities in their preschool (e.g., working on a puzzle, riding a tricycle). Each unique photograph was structured following the same protocol (i.e., letter-sized white paper, printed in colour, picture-centered, framed white space). Rowe and Wilson (2015) noted that using children's photographs as a contextual prompt afforded high ecological validity. Moreover, as the children were likely to have the necessary language to describe their experiences, the task was achievable even for the youngest children. The authors also mentioned that the picture captured a familiar experience in children's lives, adding relevance and authenticity to the visual scaffolding inherent to the task.

As the task required children to generate a written message, as opposed to writing from dictation, Rowe and Wilson (2015) reviewed the coding schemes of 15 studies that had used

open-ended questions to prompt children to write (e.g., Levin et al., 2005; Levin & Bus, 2003; Sulzby et al., 1989). The authors compiled a list of writing behaviours most often observed in the written productions of 2-to-5-year-old children. From the assessment of children's written samples, the authors develop four descriptive, research-based measures of early writing: directionality, intentionality (oral-written translation), message content (task adherence), as well as 13 descriptive categories (range 0-12) to assess children's written forms. Findings from this research attested to the high variability in the developmental patterns of early writing. They contributed valuable knowledge about early writing tasks related to children's day-to-day play activities. The study of children's text generation in authentic writing conditions has generated valuable findings in the early writing field (e.g., Otake et al., 2017; Quinn et al., 2021; Thomas et al., 2020).

Several participatory researchers have focused on boosting children's play with writing opportunities (e.g., Barratt-Pugh et al., 2021; Byrnes-Cloet & Hill, 2021; Kissel, 2012; Kissel et al., 2011; Kissel & Miller, 2015). Quinn and Bingham (2022) have reiterated the need to develop writing tasks connected to children's experiences in the preschool years. However, to this author's knowledge, no studies with a quantitative design and a comprehensive view of early writing have explored whether children's sociodramatic play experiences are better at eliciting children's writing than other types of prompts. In the current study, I experimentally manipulated the types of writing prompts preschoolers were given. The present design allowed me to examine whether prompting children with pictures of their sociodramatic play experiences results in extended engagement in the writing process, more composition, and enhanced transcription, compared to when children are prompted with images of other children playing or non-play pictures.

Method

Participants

The researcher contacted two private daycare centers in Montreal, Quebec. They were both located in Notre-Dame-de-Grâce, an anglophone neighbourhood. The daycare directors reviewed an information form provided (see Appendix A). They agreed to host the present study in their preschool classrooms. The researcher provided the daycares with a recruitment poster (see Appendix B) for display in the preschool classroom area. A package including an information and consent form (Appendix C) and a demographic survey (Appendix D) was placed in all preschool children's cubbies. Parents interested in having their children participate in the study were asked to return the documents completed. The response rate was very high, with 20 out of 21 parents providing parental consent.

Out of the 20 preschool children, one participant was absent during the play experience, and another declined the invitation to complete the tasks. The resulting sample included 18 participants (nine girls, nine boys), ages 3 years 7 months to 5 years 4 months (*M* age = 4 years 7 months; *SD* = 5.5). Parents who responded to the demographic survey (*n* = 14) reported children's ethnic origins as Hispanic (7.1%), Multiracial/Biracial (21.4%), and Caucasian/European (71.5%). The sample was drawn from highly educated parents. Reports of the level of education included a doctorate as the highest (7.1%), a master's degree as the most frequently achieved (42.9%), followed by a bachelor's degree or equivalent (35.7%), college certificate (14.3%) and high school diploma (14.3%). Regarding annual household income, 28.6% of parents reported earning within Quebec’s average income bracket of $60k and $80k (Statistics Canada, 2024), while most parents (42.9%) reported earning between $80k and $110k. The remaining 28.6% of parents reported earning $150k or more. Some families reported using

only one language at home (English, *n* = 5; Spanish, *n* = 1; Russian, *n* = 1), while others identified as either bilingual (English–French, *n* = 5; English–Latvian, *n* = 1) or multilingual household (English–French–Arabic, *n* = 1). However, all the children in the sample spoke fluid English. They were also exposed to bilingual (English-French) learning environments at daycare.

Materials

Demographic Survey

The participants' parents and legal guardians were asked to volunteer information about the participant and their family by completing a demographic questionnaire. Three short-answer questions were asked about the nature of the respondent's adult/child relation and their respective date of birth. The four following questions had a multiple-answer format. They asked for information about the child's ethnic background, parents' level of education, annual household income, and languages spoken at home. One final question asked the respondents about the participant's experience with camping. This question was included given that this activity was part of a sociodramatic play activity used in the study (see below).

Preliminary Screening Instruments

Children's vocabulary, phonological awareness, and letter name knowledge were measured to build a comprehensive profile of our sample. Two developmentally appropriate early writing measures were collected: name writing and word writing. These tasks are often used to assess early transcription ability (e.g., Diamond et al., 2008; Gerde et al., 2015; Puranik et al., 2011; Invernizzi et al., 1997).

Peabody Picture Vocabulary Test, Fourth Edition (Dunn & Dunn, 2007). The administration of this widely used assessment provided a measure of children's receptive vocabulary. This measure was obtained as assurance that participants would understand

instructions and the purpose of the task. The Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4; Dunn & Dunn, 2007) consisted of 12 items, each featuring four pictures and a verbal target word. The participant was shown each item and asked to point to the picture matching the target word. Scoring followed standardized protocols.

Comprehensive Test of Phonological Processing, Second Edition (Wagner et al., 2013). Three subtasks of the Comprehensive Test of Phonological Processing, Second Edition (CTOPP-2; Wagner et al., 2013) were used to measure participants' phonological awareness. This information was obtained to understand participants' performance in the task, as their awareness of the sounds in speech is a precursor to their ability to represent those sounds in writing (Moats, 2010). The *Elision* subtest asked children to repeat a word minus one essential sound. The *Blending Words* subtest required children to create an accurate word after hearing all its sounds separately. The *Sound Matching* subtask asked the children to match pictures with sounds. Then, the target image was paired with a target sound, and the participant was required to match the target sound with one of the three images shown. Scoring followed standardized protocols.

Quick Letter Name Knowledge Assessment (Tortorelli et al., 2017). This assessment was administered to provide a snapshot of children's alphabet knowledge independent of their transcription ability. The Quick Letter Name Knowledge Assessment (Q-LNK; Tortorelli et al., 2017; see Appendix E) comprised six unique groups of letters. Each group contained eight strategically assigned letters in upper- and lower-case combinations to account for variation in letter difficulty (Bowles et al., 2014; Justice et al., 2006). The test required the participant to name each of the eight letters shown. All materials and resources were accessed from The Early Language and Literacy Investigations Lab (http://www.ellilab.com). We printed all six forms on white paper, sized 8.5 x 11 in., one letter per page, for 48 pages in total. The child’s responses

were scored dichotomously, with either 0 (*incorrect letter name/no name provided*) or 1 (*accurate letter name*). The sum of the scores (range 0–8) was used for comparative analyses.

Name Writing Task. The children were given a marker and blank paper to write their names. The children's name representations were scored using an adaptation of a 9-point scale (range 0-8) commonly used to code children's name and word writing productions (e.g., Cabell et al., 2021; Bingham et al., 2017; Diamond et al., 2008).

Word-Writing Task. The children were given a blank paper and black marker to write five consonant–vowel–consonant (CVC) words: "sad," "hug," "lip," "net," and "job.". These words represent each vowel letter and two unique consonants and have been widely used to assess preschoolers' word-writing ability (e.g., Cabell et al., 2021; Gerde et al., 2015; Puranik et al., 2011). The children's word representations were scored on a 9-point scale. An average score was obtained from the sum of each of the five CVC-word scores (range 0–8).

Play Experience Session

Play Camping Site. Each hosting daycare director agreed to provide the researcher with access to the play area within the classroom to set up a sociodramatic play experience for the children. The researcher provided a collection of real-looking materials and props and arranged them to create five distinctive play areas (for play area pictures, see Appendix F). The *tent area* included a 5 x 5 ft backdrop of a forest camping scene, an adjustable backdrop-stand kit, a green foldable play tent (6 x 6 ft), and assorted blankets. The *barbecue area* consisted of two classroom tables (2 x 4 ft), a gingham-patterned tablecloth, a camping stovetop, camping cookware (e.g., small aluminum pot and pan, foldable kettle), cooking and eating utensils (e.g., prongs, wooden spoon, wooden forks), disposable plates and cups, barbecue-themed play food, and a beach umbrella. The *fishing area* was built using two yards of blue sequin fabric (3 x 6 ft), two

aluminum steam pans (21 x 13 x 3 in), tap water mixed with a few drops of blue food colouring, a school of foam fish, ten magnetic fishing rods made from 12 in. wooden dowels, 1 in. screw ring hooks, 20 in. necklace cords, 2 in. wooden craft sticks, and ½ in. craft magnet discs. The *firepit area* consisted of six campfire centrepieces of 3D-printed laminated cardboard (10 x 12 in.) and a 20 x 4 in. round wooden slab. Finally, the *Smores-making corner* had a plastic serving tray with cotton balls, cardboard-made graham crackers, foam chocolate squares, 12 in. wooden dowels, and a laminated Smore-making infographic sheet.

Play Experience Documentation. The participants were photographed during the play camping experience (with parental consent) using a camera application on a mobile device (i.e., Samsung Galaxy S24 Ultra). The image was deleted if a non-participant was inadvertently captured in a photograph. All digital images were saved in a .jpg file format and encrypted by the device's secure folder with added passcode-lock access. A photo editing application on the same device was used to adapt selected photographs to the desired format and to ensure optimum printing quality. All picture files were later downloaded to a secure server of the Education Department and then erased from the mobile device.

Experimental Early Writing Instruments

Contextual Writing Prompts. Three contextual writing prompts were used, each showing a picture of two or more subjects. A pictorial writing prompt (i.e., *raccoon task*; see Appendix G; Gerde & Bingham, 2013; Quinn et al., 2021; Thomas et al., 2020) was used as the control task. Two other prompts were created using authentic photographs of children engaged in socio-dramatic play. The standard task (see Appendix H) had a generic picture of two preschool children (image used with parental consent, see Appendix I) playing in a cooking area. The experimental task (for samples, see Appendix J) contained individualized pictures featuring the

participants engaged in the pretend camping play experience. All pictures featuring children were used with parental consent.

All three writing prompts followed a similar portrait format. All images were sized to a 4:6 ratio and aligned with the page's horizontal center and two inches below the vertical center. All prompts included a speech bubble, a white oval-shaped structure with a tail or pointer, sized 3.7 x 5.4 inches. Each speech bubble was placed on the upper half of the page, hovering above the photograph, with its tail pointing towards a child's face. The position of the speech bubble varied slightly in each experimental task to adapt to the candid nature of each picture. Finally, a sentence strip was added at the bottom of the page, a rectangular white shape measuring 1.5 x 6 inches, positioned 1/8 inch below each picture.

All the graphic elements, the speech bubble, the photograph, and the sentence strip, were outlined with a solid black line, freehand sketched style, and 2-point width. All writing prompts were printed in full colour on letter-sized white paper. The participants were given easy to grasp writing tools (e.g., thick black markers) to produce text for each writing prompt. At the end of each writing session, participants received a child-friendly themed sticker of their choice (e.g., superheroes, dinosaurs)

Writing Sessions Documentation. With parental consent, the audio during the experimental writing sessions was documented using a voice recording application on a biometrics-secured mobile device (i.e., Samsung Galaxy S24 Ultra). The researcher also used a clipboard with lined paper and pencils to record written annotations. The audio recordings were saved in .m4a format and encrypted in the device's secure folder with added passcode-lock access. All audio files were later downloaded to a secure server of the Education Department and then erased from the mobile device.

Appreciation Tokens

At the end of the study, all children were given a "Kid Scientist" diploma and a storybook of their choice to thank them for participating. A diploma template was customized with the participant's first name and printed in full colour on a letter-sized parchment-like paper. Also, parents who completed the demographic survey (n = 14) received a $15 gift certificate from a local coffee shop (e.g., Tim Hortons, Starbucks) upon return of the documents.

Design

This study followed a repeated measure, fully within-subject design. Each child participated in a sociodramatic play session. Afterwards, all participants were invited to a writing session. The session consisted of three writing conditions: control, standard, and experimental. The participants were asked to plan, write, and read their text using a different picture prompt in each condition. Children's composition productivity, transcription progression, and engagement in a writing process (duration) were analyzed across the three writing tasks. The control task was used to introduce the children to the writing activity. Thus, it was always presented to the children first. The order of the standard and experimental tasks was counterbalanced thereafter.

Procedure

The researcher visited each classroom before the administration of screening tests. The initial interaction aimed at helping children habituate to the researcher's presence in the learning environment, establishing rapport with educators, and answering parents' questions. The researcher introduced herself to the children as a "kid writing scientist" and daycare teacher. The researcher offered a brief and age-appropriate description of the upcoming activities, welcoming the children's questions and comments. Finally, the researcher read the storybook *Don't Let the Pigeon Drive the Bus* (2003) by Mo Willems. In the book, the author used speech bubbles to

display the dialogue among the characters, which the researcher pointed out during the reading to ensure children's familiarity with this graphic feature in print.

Data Collection

Preliminary Screening Sessions. Each hosting daycare provided the researcher access to a quiet, supervised work area (resource room, quiet corner, kitchen) for one-on-one meetings with each participant. As part of a preliminary screening, the children participated individually in a series of activities as part of a battery of early literacy assessments, followed by brief writing activities (approximately 20 minutes; see below). The testing took place in the week following the initial visit. The children were invited to meet with the researcher (e.g., “Would you like to play some word games and do some writing together?”). The activities were implemented in a playful and supportive manner. At the end of each session, children's participation was rewarded with a child-friendly themed sticker (e.g., superheroes, dinosaurs).

Receptive Vocabulary Assessment. The participant’s receptive vocabulary was assessed at the start of the screening session using the Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4; Dunn & Dunn, 2007). The experimenter said the target word and asked the child to point at the picture matching the target word from four choices (e.g., “Point to the [target word.]”). Testing was continued until reaching the *ceiling item* (i.e., the last item in a set with eight errors). All children were provided low-level encouragement independent of performance (e.g., “Good!” “Well done!”). The child’s answers were marked on the scoring sheet and later analyzed following standard protocols.

Phonological Awareness Assessment. The participant’s phonological awareness was assessed next using the Comprehensive Test of Phonological Processing, Second Edition (CTOPP-2; Wagner et al., 2013). The three subtasks from the CTOPP-2 administered were listed

as age-appropriate for a 4-to-6-year-old age group. For the *Elision* subtest, the child repeated a word without a relevant component (e.g., "Now, say toothbrush, without saying tooth."). In the *Blending Words* subtest, the child was asked to listen attentively as a word was said in parts, one part at a time (e.g., "What word do these sounds make? /pɛn/ /s/ /əl/). Then, the child was asked to put the parts of the word together (e.g., "pencil"). In the final subtest, *Sound Matching*, the child was shown a target image and a row of three other images (e.g., “This is *neck*, and these are *nut*, *bed*, and *cake*.”). Then the child was given a target sound (e.g., “*Neck* starts with /n/ sound”) and asked to match one of the images to the sound (e.g., “Which of these pictures starts with the /n/ sound, like *neck*). The child’s answers were recorded and then scored following standardized protocols.

Alphabet Knowledge Assessment. The participant’s alphabet knowledge was assessed using the Quick Letter Name Knowledge Assessment (Q-LNK; Tortorelli et al., 2017). The test required choosing one 8-letter form from the six forms available that excluded the first letter of the child’s name. The child was asked to name the eight letters in the form as they were presented one letter at a time (e.g., "What is the name of this letter?"). The scoring was dichotomous, with 0 assigned when a letter was named incorrectly or not named and 1 assigned when the letter was named correctly. The resulting score was the sum of all letters correctly named (range 0 - 8).

Name Writing Ability. A name-writing task assessed letter recognition and print-related knowledge (Bloodgood, 1999; Welsch et al., 2003). The child was introduced to the term “kid writing” (e.g., “You can use your own kid-writing."; Jensen, 1990; Sulzby et al., 1989) to boost the participant’s confidence and encourage their early writing attempts. Then, the child was handed a thick black marker and blank paper and asked to print their name on the paper (e.g.,

“Please use this marker to write your name on the page.”). Name representations were scored (range 0-9) from 0 (*refusal/no response*) to 8 (*all letter sounds represented/correct spelling*). The categories also included: 1 (*scribbling*), 2 (*drawing as writing*), 3 (*scribble writing*), 4 (*letter-like shapes*), 5 (*letters/letter-like shapes but no sounds represented*), 6 (*partial name or word/one accurate sound represented*), 7 (*most letters-incorrect order/two letter-sounds represented*).

Word Writing Ability. A word writing task was administered to assess the progression of the child’s invented spelling (e.g., Cabell et al., 2021). For this task, the child received a blank page, a thick black marker, and verbal instructions (e.g., “I will say a few words that you have used before, then you can write your best guess. Ready?”). Then, the researcher dictated the following words: "sad," "hug," "lip," "net," and "job" (Invernizzi et al., 1997), one at a time. After the child finished writing each word, they received a new blank page for the next word and were asked to return their written paper. The five-word written samples were scored on the progression of their writing forms with the 9-point scale used for the name-writing task (5 words x 8 maximum score = max score 40). The final score used during comparative analyses was an average sum of all five words’ scores.

Sociodramatic Play Session. The play experience sessions occurred during the children’s morning routine on a scheduled date after the preliminary screenings concluded. The researcher had access to the classroom area in advance to set up the play activity before welcoming the children. As the setup required a cleared physical space, permission was obtained from the educator to temporarily move any furniture (e.g., chairs, small tables), equipment (e.g., toy sets, toy props, book displays) and personal items (e.g., backpacks, misplaced clothing, shoes) that might have obstructed the campsite layout. Then, the researcher equipped the space with a collection of real-looking materials and props that recreated a "camping" scenario, all

aesthetically displayed to entice children's exploration and play. The camping theme likely differed from other play themes available in preschool drama centers. Hence, it was chosen to provide children with a play experience that was as unique as possible. At the same time, the type of materials children had access to and how they were presented were controlled by the researcher.

Play Experience Area Setup. The space was arranged in five distinctive camping play areas. The *tent area* was framed by a backdrop showing a forest camping scene, which was mounted on an adjustable backdrop stand kit. A green foldable play tent was set against the backdrop and furnished with assorted blankets. A classroom table was outfitted with a gingham-patterned tablecloth for the barbecue area. Its surface accommodated a camping stovetop, camping cookware (e.g., small aluminum pot and pan, foldable kettle), cooking and eating utensils (e.g., prongs, wooden spoons, wooden forks), disposable plates and cups, and barbecue-themed play food. The beach umbrella canopy covered a small section of the table, designating it as an eating area. The *fishing area* recreated a lake basin delimited by two yards of blue sequin fabric pooling around two large aluminum steam pans. Each shallow steam pan was half-filled with tap water, a few drops of blue food colouring, and a school of foam fish. The researcher prepared magnetic fishing rods of wooden dowels, necklace cords, magnet discs, and other craft materials. The *firepit area* was placed near the tent, featuring six campfire centrepieces at the top of a large round wooden slab. Finally, the *Smores-making corner* was placed next to the firepit area. The pretend ingredients were cotton balls' marshmallows, cardboard-made graham crackers, and foam sheet chocolate squares. A laminated Smore-making infographic provided visual instructions for the children to follow.

Play Experience Implementation. The children were welcomed to explore the play area swiftly as they entered the space. With support from their early childhood educator, the children were invited to gather around the researcher for a brief group discussion about the materials and play areas (e.g., “All these things are to go camping”), the purpose of the session (e.g., “After your camping experience, you and I will get to write about it!”), and behaviour expectations (e.g., “Be careful with the fire, pretend it's real,” “Use your fishing rod carefully around others”). After the discussion, the children were invited to play in a child-directed, independent manner. The educator was asked to maintain group awareness and intervene if requested by the children or if deemed necessary for the children’s safety.

Play Experience Documentation. The researcher was tasked with taking photographs of the children (with parental consent) as they interacted with each other during the play experience. An abundance of pictures was taken to obtain at least two images per participant as a focal point while interacting with another child. Careful consideration was used to capture the photos from a child’s height to obtain images from a child’s perspective. One photograph was chosen for each of the participants, then formatted and presented as their experimental writing prompt.

Experimental Early Writing Sessions. The writing sessions took place two days after the play session to increase the likelihood that children remembered their experiences. They were held in the exact location used for the screening tests. With parental consent, the writing sessions were audio recorded using a voice recording application on a biometrics-secured mobile device (i.e., Samsung Galaxy S24 Ultra). The researcher also took written annotations of the observed writing behaviours of the participant (e.g., makes marks on the paper, looks at marks on the paper, points at text while reading).

All participants were first introduced to *the raccoon task* (control). The two remaining writing prompts, the standard and experimental task, were counterbalanced so that each task went first for half of the participants. The administration protocol (adapted from Jensen, 1990; Quinn et al., 2021; Rowe & Wilson, 2015; Sulzby et al., 1989; see Appendix K) was consistent among the three tasks, with only slight variations when referring to the image on each prompt (e.g., "What do you think [momma raccoon/you/that kid] is saying to […]?). The administration of the raccoon task is described below to exemplify the protocol followed.

Contextual Writing Tasks. The children meet one-on-one with the researcher (e.g., "Would you like to do some writing?"). The child was invited to sit across from the researcher. Then, the researcher introduced the purpose of the task (e.g., "You'll get to do kid writing. First, I will give a paper with a picture on it. You can tell me your ideas about the picture. Then, you can use the paper to write your ideas down. Ready?"). After the child was assented, a picture prompt was given to the participant. The child was allowed to observe the prompt uninterrupted. The researcher prompted the child to start *planning* by verbalizing ideas for their text (Flower & Hayes, 1981). The planning prompt provided them with a writing goal (e.g., "This is momma raccoon, and this is baby raccoon, what do you think momma raccoon is saying to baby raccoon?"). The researcher listened intently to the child's answer. If the child stopped with end-of-sentence intonation or stalled their telling for at least five seconds, the researcher redirected the child (e.g., "Anything else you want to add?;" Jensen, 1990).

The researcher gave the child a black marker once the child was confirmed to be finished. Pointing at the speech bubble without touching it, the researcher cued the storybook read during the introductory visit (e.g., "That is a speech bubble, like the book we read about the pigeon. The author used it to write what the pigeon said"). Then, the researcher prompted the child to start

writing (e.g., “You can use the speech bubble to write what momma raccoon is saying to the baby raccoon”). When the child stalled their writing or seemed to be finished, the researcher prompted the child to resume (e.g., “Anything else you want to add?”).

Once the child confirmed the end of their writing, the researcher pointed toward the marks on the paper and prompted them to read what they wrote (e.g., “Now, please read it to me, what does it say?”). The researcher transcribed the child’s *reading* (translating their written marks' meaning). Once the child finished, the researcher complimented their effort (e.g., “You are good at reading your writing!”).

After gathering all materials and clearing the work surface, the child was presented with their three written tasks (e.g., “You wrote about each of these pictures”). The researcher pointed at each task, one at a time, and asked the child, “Which of these was your favourite to write about?” The researcher maintained an unrushed demeanour, allowing the child to consider their choice. Once the child answered, they were asked to explain their choice (e.g., “Why is that your favourite?”). At the end of the task, the researcher expressed gratitude for the child’s participation (e.g., “Thank you for writing with me”) and invited them to return to their classroom (e.g., “How about we walk together back to your classroom?”).

All children received encouragement to start the task (e.g., “You can write in your own way,” “You can use your kid-writing!”; Rowe & Wilson, 2015; Sulzby et al., 1989) and encouragement to stay on task (e.g., “You are working hard!”; Rowe & Wilson, 2015; Sulzby et al., 1989). No explicit teaching nor scaffolding was given to ensure consistency across measurements. At the end of each session, the participant chose a child-friendly themed sticker (e.g., superheroes, dinosaurs, rainbows).

Data Analysis

The number of seconds the child spent on-task during planning and writing was quantified as a measure of the child's engagement in the writing process. The audio waveform of the recordings' playback was bookmarked at specific times: (a) after the researcher verbally prompted the child to start planning (e.g., "What do you think mamma raccoon is saying to baby raccoon?"), (b) the researcher verbally prompted the child to start writing (e.g., "You can use this maker to write that on the speech bubble"), (c) the child confirmed the end of their activity (e.g., "Are you done? Well done!"). The bookmarks' placement was used to determine the start-time and end-time of children's planning and writing. The number of seconds between each start-time and end-time was calculated with an online time calculator (e.g., www.calculator.net) and recorded as planning and writing time, respectively. Each task's mean number of seconds was used for comparative analyses across writing conditions. The child's favorite task and their rationale were recorded and entered as a nominal variable.

Regarding the child's composition productivity, other studies have used the total number of written words or written forms to measure composition productivity (e.g., Cabell et al., 2021; Kim et al., 2011; Puranik & Al Otaiba, 2012). However, at the pretest, the children in our sample produced written marks of an early level of conventionality (e.g., combinations of strokes, clusters of letter-like forms). Hence, to avoid underscoring their composition ability with this measure, children's written marks were replaced by the number of words of oral text they produced when translating their text and the number of words they generated while planning their text.

The child's utterances during the session were transcribed from the audio files. The audio recordings of the writing sessions were studied on playback and cross-referenced with the

written annotations. Once transcribed, the number of words uttered by the child while planning and the number of words generated by the child while reading from their written marks were processed to confirm task adherence, using either 0 (*no adherence to task demands*) or 1 (*text in adherence to task*). All task adherent words were quantified and used during comparative analyses.

As a non-parametric measure of composition sophistication, children's oral/written text were analyzed to assess their oral-written match. This measure encompassed composition features related to children's ability to assign meaning to their written marks (oral/written translation) and their message's content (task adherence; Quinn et al., 2021; Rowe & Wilson, 2015). Children's written and oral texts were assessed under the following categories: 0 (*neither oral nor written text matched the task*), 1 (*oral text matched the task but written text did not match)*, 2 (*children read what they wrote but it did not match the task*), and 3 (*children read what they wrote, and it matched the task demands*). This categorical scale was adapted from recent findings on the study of children's composing abilities (i.e., Quinn et al., 2021). The data indicated the sophistication of children's texts generated in each writing condition.

To measure children's transcription performance, the written forms the children produced on each writing prompt were scored using a coding scheme established by Rowe and Wilson (2015). The categories are highly descriptive of written representations of child-composed text (vs. adult-dictated; Rowe & Wilson, 2015). The scale (range 0–12) included the following anchors: 0 (*no marks/refusal to write*), 1 (*drawing only*), 2 (*drawing as writing*), 3 (*uncontrolled motor activity with marker*), 4 (*scribble units or patches*), 5 (*individual stroke units/ lines or curves*), 6 (*letter-like forms/runs of lines, loops, or zig-zags*), 7 (*conventional letters plus inventions*), 8 (*conventional letters, no letter-sound correspondence*), 9 (conventional

letters/memorized words), 10 (*invented spelling, first syllable or letter-sound*), 11 (*invented spelling first and last letter-sound/missing sounds*), and 12 (*invented spelling/most sounds represented*). The most advanced written forms were scored if the child produced text addressing more than one category. The score obtained from the written forms of each task was used during comparative analyses.

Results

Descriptive Statistics

The participants (N = 18; M age in months = 57, SD = 5.5) had receptive vocabulary within the average range, as indicated by their standard scores on the PPVT-4 (M standard score = 101.22, SD = 11.95). The PPVT-4 manual suggests that a score of 100 is the average standard for the 4-to-6-year-old age group. The children's ability to detect and manipulate sounds was evaluated using the COTTP-2. The results indicated that most children (n = 14) fell into the average range or higher for phonological awareness (M percentile = 52.94, SD = 28.75). The participants' average name-writing ability was high (M = 7.5, SD = .8), with a score of 8 representing conventional name-writing. However, children's samples, from word writing to dictation and letter naming, were placed in the pre- and partial-alphabetic phases, respectively (Ehri, 1995, 2005). The average word forms produced during dictation were a mix of letters and letter-like shapes with no sound/letter correspondence (M = 5.14 out of 8, SD = .37). On average when presented with 8 lower- and-upper-case letters, excluding the first letter in their name, the children were able to name half of the items (M letters named= 3.9, SD = 2.5). Piasta et al. (2012) suggested that the optimal letter-naming benchmark by the end of preschool is 15 to 18 letters out of 26. The participants' letter knowledge was within this recommended threshold.

Comparative Analyses

Engagement in Writing Process. The first question this study aimed to answer was whether prompting children with a picture of their own sociodramatic play, a picture of other children's play, or a non-play picture would change children's engagement in the writing process. Engagement in the writing process was operationalized as the amount of time in seconds that children spent planning and the amount of time the children spent writing during each of the three conditions. The means and standard deviation for both measures of engagement are shown in Table 1.

Table 1.

Descriptive Statistics for Engagement in a Writing Process

Measure (in seconds)	Control		Standard		Experimental	
	M	*SD*	*M*	*SD*	*M*	*SD*
Time spent planning	22.28	12.63	30.83	18.33	59.39	26.49
Time spent writing	64.11	24.93	55.11	25.65	71.11	22.71

Two separate, one-way repeated measures of ANOVAS were conducted using "condition" as the repeated measure. In the first ANOVA, the dependent variable was the time children spent planning. In the second ANOVA, the time spent writing was the dependent variable. Beginning with the planning data, Mauchly's test of sphericity indicated that the assumption of sphericity had not been violated, $\chi 2$ (2) = 4.82, $p \geq .05$. The time children spent planning was significantly different between the three conditions, $F(2, 34) = 20.94$, $p < .001$, partial $\eta 2 = .552$.

A post-hoc pairwise comparison using the Bonferroni correction in place indicated that the mean difference between the experimental condition and the standard condition was

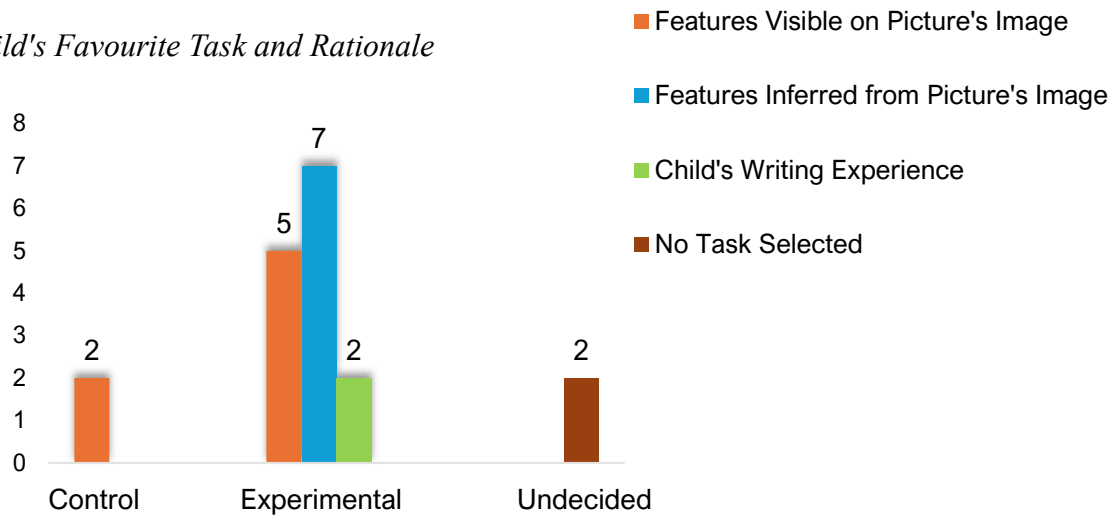
statistically significant (p <.001). Moreover, the comparison between the experimental condition and the control condition was also statistically significant (p <.001), with an average increase of 37.11 seconds (95% CI [17.6, 56.62], p <.001) spent planning using a picture of the children's sociodramatic play experience, compared to using a picture of other children's play. No other pairwise comparisons were statistically significant ($p \geq .05$). In the second ANOVA, the dependent variable was time spent writing. The assumption of sphericity was met, as assessed by Mauchly's test of sphericity, $\chi 2$ (2) = 2.97, $p \geq .05$. However, the ANOVA showed no statistically significant changes in the time children spent writing between the three conditions, $F(2, 34)$ = 2.33, $p \geq .05$, partial $\eta 2$ = .121.

Two non-parametric measures were also examined. The first, the child's favourite task, represented the child's choice of favourite picture to write about, and the second, the child's rationale, represented as categories based the focus of children's responses. A descriptive statistic analysis of frequencies was conducted on the child's favourite task data. The exploration showed that out of the 18 participants, 14 chose the experimental condition as their favourite, two chose the control condition, and two did not select a favourite task. Children's rationale responses were categorized according to the object of focus of their response. Children's rationales were grouped into four categories: The purpose of asking children to choose a favourite task was to obtain their self-evaluation of their experience using each writing condition. A group of children referenced features visible on the image in question (e.g., "because this one is colourful," "because I am cooking that corn on the cob," "because that is Minnie and me, fishing"). This category described both responses from children who chose the control task as their favourite (i.e., "because I love raccoons," "that one is more different"). Another group of children referenced features that were inferred from the picture but not readily visible on the image (e.g., "because I

did the activity," "because we were going to the mountain," "because that day was fun"). There was a third group of responses that referenced children's writing experience (e.g., "because I wrote longer on this one," "because I wrote my name on it") and a final category that grouped undecided responses (i.e., "I don't know," "just… because"). A second descriptive statistic analysis of frequencies was conducted on the data obtained from children's rationale for their choice of favourite task. This frequency distribution is shown in Figure 1.

Figure 1

Child's Favourite Task and Rationale



Composition. A second objective of this study was to examine whether prompting children with a picture of their sociodramatic play experience, a picture of other children's play, or a non-play picture would result in different outcomes on children's composition. Text productivity was operationalized as the number of words related to the task's demands uttered by children when planning their text and reading their text during each of the three writing conditions. Regarding text sophistication, the oral-written match scores obtained in each of the

three conditions defined the relatedness of children's text production to the demands of the task and its oral-written translation.

Text Productivity. Two separate, one-way repeated measures ANOVAS (analysis of variance) were conducted using *condition* (control, standard, experimental) as the repeated measure. In the first ANOVA, the dependent variable was the number of words uttered during planning. In the second ANOVA, the dependent variable was the number of words the child read from their text. The means and standard deviations for both productivity measures are shown in Table 2.

Table 2

Descriptive Statistics for Text Productivity: Number of Words

Measure	Control		Standard		Experimental	
	M	*SD*	*M*	*SD*	*M*	*SD*
Words uttered at planning	9.61	5.71	10.83	8.85	22.72	15.73
Words read from own text	10.61	8.21	7.44	5.67	15.61	10.42

Beginning with the planning data, Mauchly's test of sphericity indicated that the assumption of sphericity had not been violated, $\chi 2$ (2) = 5.88, $p \geq .05$. The repeated measures ANOVA revealed that children's text productivity during planning was significantly different between the three conditions, $F(2, 34) = 15.38$, $p < .001$, partial $\eta 2 = .48$. A post-hoc pairwise comparison with the Bonferroni correction in place, indicated that the mean difference in text production between the experimental condition and the standard condition was statistically significant ($p < .001$). Children's average text generation at planning showed a substantial

increase of 11.89 words (95% CI [5.32, 18.46], $p < .001$) when presented with a picture of their sociodramatic play experience, compared to when given a picture of other children's play. Moreover, the mean difference in text generation at planning between the experimental and control conditions was also statistically significant ($p = .002$). Children's average text generation at planning showed a substantial increase of 13.11 words (95% CI [4.56, 21.67], $p = .002$) when presented with a picture of their sociodramatic play experience, compared to when given a non-play picture. No other pairwise comparisons were significant ($p \geq .05$).

In the second ANOVA, the dependent variable was the number of words children read from their text, and the three conditions were used as the repeated measure. A Mauchly's test indicated that the assumption of sphericity had not been violated, $\chi 2\ (2) = 3.81$, $p \geq .05$. The repeated measures ANOVA revealed that children's text productivity while reading their text was significantly different between the three conditions, $F(2, 34) = 9.42$, $p < .001$, partial $\eta 2 = .36$. A post-hoc pairwise comparison using the Bonferroni correction indicated that the mean difference on text production between the experimental condition and the standard condition was statistically significant ($p = .003$). Children's average text production showed a significant increase of 8.17 words (95% CI [2.73, 13.61], $p = .003$) when reading from their text using a picture of their sociodramatic play experience compared to using a picture of other children's play. No other comparisons were significant (all $p \geq .05$).

Text Sophistication. The composition sophistication of the text children generated across the three writing conditions was explored using the oral-written-match scores, a non-parametric measure to assess children's use of task adherence and oral-written translation. A descriptive statistic analysis of frequencies was conducted. The children showed a modal tendency to generate text equivalent to the task-match group for composition sophistication (*m* = task-

match). In other words, from 54 prompt samples gathered across the three conditions, in 81.5% of the written samples (n = 44), the children had composed oral text in adherence to the task but did not translate in their writing. The frequency distribution is shown in Table 3.

Table 3

Composition Sophistication of Texts per Writing Condition: Frequency Count

Oral-Written Match	Control	Standard	Experimental
	n	*n*	*n*
No match [a]	–	1	–
Task match [b]	15	14	15
Text match [c]	3	1	1
All match [d]	–	1	2

[a] Children who did not generate text; oral text neither matched task nor written text.

[b] Children who generated oral text matching the task but did not match written text.

[c] Children who read their written text, but the text did not match the task demands.

[d] Children who read their written text and text matched the task demands.

Transcription. The third question this study aimed to test was whether prompting children with a picture of their sociodramatic play experience, a picture of other children's play, or a non-play picture would result in differences in children's early transcription. The word forms children produced on the three conditions were scored according to their gradual progression toward conventionality on a scale from 0 to 12. The final word form score indicated their transcription performance on each writing task.

A one-way repeated measure ANOVA was conducted using condition (control, standard, experimental) as the repeated measure, and the dependent variable was the word forms scores. A Mauchly's test of sphericity indicated that the assumption of sphericity had not been violated, $\chi 2$ (2) = 3.39, $p \geq .05$. Children's transcription performance across the different conditions was significantly different, $F(2, 34) = 10.08$, $p < .001$, partial $\eta 2 = .37$. A post-hoc pairwise comparison using the Bonferroni correction indicated that the mean difference on the scores of children's word forms between the control condition ($M = 7.44$, $SD = 1.69$) and the experimental condition ($M = 8.56$, $SD = 1.92$) was statistically significant ($p = .02$). Furthermore, between the experimental condition and the standard condition ($M = 6.78$, $SD = 2.76$), there was a mean difference of statistical significance ($p < .001$). No other pairwise comparisons were significant ($p \geq .05$).

Discussion

The findings related to using children's sociodramatic play experiences to prompt their writing have significant practical implications. Regarding their engagement in the writing process, data showed that the current participants spent significantly longer planning their text when using a picture of their sociodramatic play experience. This increased planning time was well spent, as the children tended to utter more words when their play experience prompted their planning. The writing time data showed that the difference in the average time children spent writing between the three conditions was not significant. However, the children read more words overall from their writing if their play experience prompted it. Moreover, the word forms children produced when their play inspired their transcription showed higher progression toward conventionality compared to writing with the other two picture alternatives.

Regarding the time children spent planning, using images of children's sociodramatic play experiences as prompts sustained a prolonged engagement in the ideation process. A prompt with children as central figures may have offered a unique advantage. It allowed children to engage in the ideation process from a personal perspective. The literature suggests preschool-aged children's first attempts at composition arise when constructing personal narratives (Dyson, 2009; Frausel et al., 2021; Levy, 2003). Composing from a first-hand experience may give children an edge, as they are intimately familiar with the protagonist's point of view (McCabe & Rollins, 1994).

Furthermore, the image of their play experience may have served as a memory aid, triggering the recall of an authentic personal experience (Rowe & Wilson, 2015). A visual reminder could spark children's recollection of the specific details of their play experience, what, where, and when it happened (McCabe & Rollins, 1994). In that sense, the writing task's close connection to children's play experience explains children's prolific ideation as reflected by the high number of words children uttered during the prolonged time they spent planning their text. These findings shed light on the boosting effect on early composition productivity that writing tasks inspired by children's play experiences may have.

A similar finding was found with children's text productivity when reading from their text. The data showed that, on average, children produced more words when reading their play-inspired text compared to the other conditions. This effect might be attributed to the strategies children had available to meet the task's demands. Quinn et al. (2021) remarked that when reading from their text, preschoolers who produced text at a task-match ability level tended to read complex and lengthy utterances even though the verbalized text was not reflected in their writing. The children in this sample showed the same tendency. Most children met the task's

demands by producing oral text, as they could not produce written text with the same proficiency on average. When planning with their play experience picture, the children uttered more oral text words. Then, when reading their play experience-inspired text, they seemed to read as many words from their unconventional marks as they planned to write, which they then printed with higher conventionality. These findings suggest that using children's play experience as a writing prompt may provide a meaningful medium for children to make the connection between their oral and written text.

Regarding children's performance during writing, the findings can be ascribed to the nature of the task. The contextual design of the raccoon task, used as a control condition in the present study, has afforded the comprehensive analysis of children's early writing skills as the context of its picture prompts children's meaningful writing (e.g., Cabell et al., 2021; Quinn et al., 2021; Thomas et al., 2020). Furthermore, including a speech bubble has been shown to ease preschoolers' effortful transcription by providing a practical and manageable writing space (Gerde & Bingham, 2013). The present study builds upon these findings.

The experimental prompt mimicked the same concept as the raccoon task: a picture to prompt children's composition and a speech bubble to scaffold transcription. This study applied these premises with a picture of the child's sociodramatic play as a prompt to examine children's meaningful writing. The children in this sample had a good command of oral language yet limited transcription skills at the pretest, a pattern often observed with preschoolers' early writing (e.g., Diamond et al., 2008; Dyson, 2013; Gerde et al., 2015; Rowe & Wilson, 2015). However, the data showed that children could transcribe word forms slightly more advanced when using the picture prompt featuring their sociodramatic play compared to the other prompts. When producing these enhanced transcriptions, the children spent no significantly different time

printing them than the other conditions. The meaningfulness of their play experience image may be scaffolding preschoolers' transcription, acting as a mediator for a typically effortful task. In other words, using a picture of children's play as a context for children's composition seems to have a positive effect on children's transcription. The implication that using images of children's play as a stimulus may lead to more conventional early transcription merits further investigation.

An essential aspect of this study is the allotment of time for children to plan their writing. This study simplified the writing process into two distinct subtasks: planning and writing. During planning, the children were encouraged to discuss their ideas about the image presented. Then, the children were prompted to transcribe their ideas onto the paper during writing. The children were required to use oral language to plan their text and writing required spelling and handwriting skills. As previously discussed, the children in this sample relied on their oral proficiency to meet the task's demands and not on their transcription as a text-generation strategy. Affording children an opportunity to verbally plan their compositions before engaging in transcription positively influenced their engagement and text productivity.

Allotting time for planning may play into preschoolers' strengths by encouraging them to use a text-generating strategy that is accessible to them. Allowing children to explore their writing ideas aloud before embarking on transcription may leverage the constraints their emergent transcription might have on text generation. Crediting the role of oral text in preschoolers' text generation has potential benefits worth exploring, as it could impact the shared understanding of how children approach and perform a writing task.

Limitations

The main limitations of this study were the small size of the sample, which tends to limit the generalizability of the findings, and the participants' transcription skills at the pretest, which

were in the early phases of development. It would be interesting to explore implementing an equivalent design to a larger sample of children of a slightly older age group.

Practical Implications

The findings from this study have significant practical implications for early childhood educators and K-2 teachers. Observing children at play and documenting their interactions is at the core of early childhood education (Copple & Bredekamp, 2009). Educators may capture pictures of children's sociodramatic play experiences, such as a group of children playing 'house' or 'doctor ', and then introduce them in the writing center as writing prompts. For instance, as a guided play opportunity, a picture of children playing 'house' can prompt a writing activity where children write about their dialogues and roles in the play. Engaging children in writing for a purpose relevant to their lives at preschool could provide an optimal opportunity to scaffold children's composition and transcription. Using children's play pictures to prompt children's writing may be a powerful teaching tool to engage preschoolers in meaningful text production while supporting the progression of their writing skills.

Future Directions

The findings in this study are compelling enough to continue exploring. It may yield exciting results by retaining the essential aspects of this design with a larger sample at the cycle 1 level and exploring whether these findings can be repeated without using an image of the play experience but from the experience itself. Testing whether prompts featuring other kinds of play elicit the same effect as sociodramatic play prompts is essential. Further, assessing the play picture prompts' effectiveness in eliciting narrative writing compared to the other two conditions would be a relevant step forward. Another compelling research idea would be to examine the effectiveness of the play prompts in conjunction with transcription scaffolding (e.g., Ouellette et

al., 2013) to promote children's progression to conventionality. This study also presents an opportunity for potential collaboration with existing research, and to continue developing writing tasks that encourage children's self-directed engagement in meaningful writing.

Conclusion

In this study, 18 preschoolers participated in a sociodramatic play session followed by a process-oriented writing task. For the writing session, the children were given three contextual writing prompts, each with a speech bubble and a different picture context, one of the children's sociodramatic play experiences, another of other children's sociodramatic play, and a non-play picture context. Participants engaged in planning (oral ideation), writing, and reading their text. In each writing task, children's early writing performance was examined to compare their engagement in the writing process and whether their early writing abilities were facilitated. Comparative analyses showed that using images of children's sociodramatic play experiences to prompt their writing significantly impacted preschoolers' text-planning engagement and facilitated their early writing skills. These findings contribute to developing contextual writing tasks connected to children's experiences to promote their early writing skill components in tandem. They also suggest adopting a process-oriented view of writing to expand the shared understanding of preschoolers' engagement in early writing.

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Appendix A

Hosting a Research Study - Information Form

Study Title: Play Experience and Preschoolers' Engagement in Early Writing
Student Researcher: Pamela Callejas Aliaga (BA in EC Elementary Education, Qualified ECE)
Researcher's Contact Information: (514) 746-5413, p_call@live.concordia.ca
Faculty Supervisor: Dr. Sandra Martin-Chang
Faculty Supervisor's Contact Information: (514) 848-2424 ext. 8932, s.martin-chang@concordia.ca
Thesis Reviewing Committee: Dr. Diane Pesco, Dr. Nathalie Rothschild
Research Assistant: Marie-Helene Navarra
Source of funding for the study: Social Sciences and Humanities Research Council (SSHRC)

The daycare center, under your direction, has been invited to host the research study named above. This form provides information about the research study and what that means to be a hosting daycare. Please read it carefully before deciding whether you want to take part in this research project. Please ask the student researcher if anything is unclear or if you want more information.

PURPOSE OF THIS STUDY

- We think that prompting 4-to-5-year-olds to write with a picture of themselves playing pretend might facilitate their engagement in a writing task and make composing and transcribing text (writing) easier. Therefore, the main objective of this study is to determine the effect of using different pictures as writing prompts on preschoolers' engagement in writing.

MATERIALS & EQUIPMENT

If possible, the hosting daycare facilitates the following equipment:

- 1 or 2 small table(s) or desk(s),
- 1 or 2 adult chair(s),
- 1 or 2 child-sized chair(s),

The research team will provide the following:

- All writing materials
- A privacy screen, if needed
- All play materials and props

SETTING

If possible, the hosting daycare facilitates the following space:

- A quiet area within the daycare (kitchen, office, quiet corner) to meet one-on-one with the children. Preferably, it should be an area away from distractions yet at a safe distance from educators.
- A play area within the classroom's learning environment, of approximately 5 x 5 ft., to set up a pretend play scenario for the children.
    - The researcher will bring all play materials and props. The play space could be set up 20 min before the play activity. It will be dismounted immediately after the play activity concludes.

PARTICIPANT CANDIDATES

- Preschool children aged 4-to-5-years-old, of all writing skill levels.

RECRUITMENT OF PARTICIPANTS

> *"To protect the potential participants' right to privacy and confidentiality, the researcher is not permitted to initiate direct contact with a potential participant whose contact information is not publicly available. Rather, recruitment material must be provided by the researcher to their contacts for further dissemination. Those interested would then contact the researcher directly" (Article 3.1 of the TCPS 2).*

Daycare directors are to be provided with advertising materials. These materials provide a link for parents to access all recruitment documents:

- a colourful poster for each preschool classroom at the daycare (printed or PDF form available),
- an invitation letter (paper and electronic form) for the director to disseminate to all parents in participating classrooms. The letter contains a link for parents to access a web form with detailed information about the study,
- parents who wish their children to participate, may fill out and sign a paper version of the form to provide their consent. A web form will also be available upon request. Parents may return the completed and signed form within the sealable envelope and hand it to the researcher or daycare director.

PROCEDURES

The interaction with participants in this study will take place in three stages: Introductory Meetings, Pretend Play Experience, and Writing Tasks.

Introductory Visits:

- In a brief, scheduled visit, the children will have the opportunity to interact with the researchers.

The initial interaction is aimed at helping children habituate to the researcher's presence in the learning environment, establish rapport with educators, and be available to parents' questions.

- The researcher will be a "special guest" for Storytime during the visit. She will introduce herself to the group of children as a "kid-writing scientist", explain the upcoming study in child-friendly terms ("We are interested in the way you write"), and proceed to read a storybook (e.g., "Don't Let the Pigeon Drive the Bus," by Mo Willems).
- In the following days, at a reconvened time, the researcher will invite the participating children (signed parental consent) to join her for a one-by-one writing session.
    - With their verbal assent, the children will participate individually in a series of brief writing activities (e.g., letter-naming, sound/letter matching, name writing) implemented in a playful and supportive manner (approximately 10 minutes).

Pretend Play Experience:

- For the second stage of the study, the ECE and researcher will schedule a play activity. The researcher will set up an area of the learning environment with a collection of real-looking materials and props as a pretend play "camping" scenario.
    - All children in the classroom (participants and non-participants) will be invited to play.
- Only the participants (with parental consent) will be photographed during the play session while engaged in play. From the pictures taken, one photo of each participant will be selected and formatted as their personal writing prompt.

Writing Tasks:

- For the third and final stage of the study, the participating children will have one individual writing session per day (10 min), on two consecutive days.
    - Writing Session 1: to be scheduled with ECE.
    - Writing Session 2: to be scheduled with ECE.
- During each session, the children will be asked to join the researcher in doing some writing.

The children will be presented with three writing tasks throughout the two sessions. Each task will show a different picture.

  - The children will be guided to discuss what they see in each picture.
  - Then, they will be encouraged to use their kid writing to write their ideas about the picture on the
    paper prompt. Finally, the children will be asked to read what they wrote as the researcher writes it down.
  - Each writing session will take approximately 10 minutes. All forms of writing will be welcomed.

- Parents will be asked for consent to record the writing sessions, which would allow the researcher to remain responsive to the children's needs during the task.

  Incentives:

  - The children will receive general encouragement throughout the sessions (i.e., "Do your best!" "Great kid-writing!" "Is there anything else you want to write?").
  - Children participants will receive a small token after each session (i.e., sticker). In the last session, each of the children will receive a "kid scientist" certificate and a storybook to take home.

RISKS AND BENEFITS

- There are no known risks to participating in the activities described here.
  - Drawing from her expertise as a qualified early childhood educator, the researcher will provide children with developmentally appropriate support throughout the writing tasks.
  - All procedures will be reviewed with the classrooms' educators to maintain an atmosphere of collaboration.
- Potential benefits for children may include interacting with peers during pretend play, practicing storytelling, and opportunities to practice their writing skills. Long-term benefits may consist of a reinforced self-image of children as "writers," which may have a positive academic outcome. Potential benefits for the hosting classrooms may include educators pursuing children's interest in early writing activities by enriching their literacy curriculum with similar age-appropriate writing activities.

CONFIDENTIALITY

- All information gathered during the recruitment process and obtained during the procedures of this study will remain confidential and will be used solely for the research described in this form.

- All video and digital picture files will only be accessible to the authorized research personnel mentioned above.
- We intend to publish the results of the research. However, it will not be possible to identify either the daycare establishment or the participants.

CONDITIONS OF PARTICIPATION

- Taking part in this research study as a hosting daycare is entirely voluntary. There are no negative consequences for declining to host this research.

DAYCARE DIRECTOR DECLARATION

I have read and understood this form. I have had the chance to ask questions, and any questions have been answered. Under the conditions described in this document,

I, _____AS DAYCARE DIRECTOR /

ADMINISTRATOR AT THE DAYCARE CENTRE NAMED_____,

AGREE TO HOST THIS RESEARCH STUDY IN THE DAYCARE CENTRE

SIGNATURE _____

DATE _____

If you have questions about this research's scientific or scholarly aspects, don't hesitate to contact the student researcher Pamela Callejas Aliaga at p_call@live.concordia.ca or Dr. Sandra Martin-Chang (Thesis supervisor) at s.martin-chang@concordia.ca

- If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca

Appendix B

Recruitment Poster

Appendix C

Information and Consent Form – Participant

Study Title: Play Experiences and Preschoolers' Engagement in Early Writing
Student Researcher: Pamela Callejas Aliaga
Researcher's Contact Information: (514) 746-5413, p_call@live.concordia.ca
Faculty Supervisor: Dr. Sandra Martin-Chang
Faculty Supervisor's Contact Information: (514) 848-2424 ext. 8932, s.martin-chang@concordia.ca
Thesis Reviewing Committee: Dr. Diane Pesco, Dr. Nathalie Rothschild
Research Assistant: Marie-Helene Navarra
Source of funding for the study: Social Sciences and Humanities Research Council (SSHRC)

You and your child are invited to participate in the above research study. This form provides information about what participating would mean. Please read it carefully before deciding whether you want your child to participate. If there is anything you do not understand, or if you want more information, please ask the student researcher.

A. PURPOSE

The study aims to determine the effect of different pictures used as writing prompts on preschoolers' engagement in a writing process and their early writing skills (composition and transcription). We think that prompting preschoolers to write with a picture of themselves engaged in pretend play might promote their engagement in the task and make composing and transcribing text (writing) easier.

B. PROCEDURES

In the study, the participants (children aged 4-to-5-years-old) will have access to a unique "pretend play" experience. With your consent, the children will be photographed during this play session. From the pictures taken, one picture of each participant will be selected and formatted as a play experience writing prompt.

After the children's play experience, a writing session will follow. During this session, the children will be given three writing prompts, each with a different picture. One writing prompt will feature a cartoon illustration (control measure). The other two writing prompts will have either a picture of the children's play experience or a standard picture of different children's play. The children will be asked to talk about each image. Then, they will be asked to write on the writing prompt. Finally, the children will be asked to read what they wrote, and the researcher will write it down. The children will receive general encouragement throughout the session (i.e., "Do your best!" "Great writing!" "Is there anything else you want to add?"). Children participants will receive a small gift after each session. In the last session, each of the children will receive a "kid scientist" certificate and a storybook to take home.

With your consent, each writing session will be recorded to obtain a complete record of children's writing behaviour. The researcher will remain responsive to the children's needs during the task. The recordings will only be analyzed by the research team to study children's writing behaviours.

C. RISKS AND BENEFITS

There are no known risks to participating in the activities described here. Drawing from her expertise as a qualified early childhood educator, the student researcher will provide children with appropriate support throughout the writing tasks.

Potential benefits for children may include interacting with peers during pretend play, practicing storytelling, and opportunities to practice their writing skills.

D. CONFIDENTIALITY

We will gather the following information as part of this research:

- Demographic information (your and your child's date of birth, parent(s)/guardian education level, primary languages spoken at home)
- Your family's shared storybook reading habits,
- Your child's writing abilities

By agreeing to have your child participate in this study, you agree to let the researcher use the information gathered during the tasks for the purposes described in this document. We will not allow anyone to access the information except those directly conducting the research. We will only use the information described in this form for the study.

The information gathered will be confidential. That means that only the research team will have access, and the identity of the participants will not be disclosed in the disseminated results. We will protect the information by ensuring the paper copies of all tasks are kept in a locked laboratory and by keeping the data on a secure server in a locked room.

All video and digital picture files will be stored electronically in a folder on a password-protected research server in the Department of Education. These files will only be accessible to the authorized research personnel mentioned above.

We intend to publish the results of the research. However, it will not be possible to identify you or your child in the published results.

We will destroy any link to your or your child's name five years after the completion of this study. The unlinked data from this study will be permanently archived.

F. CONDITIONS OF PARTICIPATION

Your child does not have to participate in this research. It is purely your decision. If they participate, they can stop at any time. You may elect to have their data removed from the study. Suppose you decide that you do not want us to use their information. In that case, you must tell the researcher within one month of participating.

As a compensatory indemnity for participating in this research, your child will receive a choice of stickers at each session. If they withdraw before the end of the study, they will still receive the small gift. Your child will receive a storybook and a kid scientist certificate at the end of the research activities.

To ensure that research money is being spent properly, auditors from Concordia or outside will have access to a coded list of participants. It will not be possible to identify your child from this list.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions, and any questions have been answered. Under the conditions described in this document,

☐ I AGREE WITH MY CHILD PARTICIPATING IN THIS RESEARCH STUDY

☐ I give permission to take photographs of my child at play and to use the resulting images for the research purposes described in this document.

☐ I give permission to record my child's participation in this study and to use the resulting records for the research purposes described in this document.

Parent/Guardian's NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about this research's scientific or scholarly aspects, don't hesitate to contact the student researcher Pamela Callejas Aliaga at p_call@live.concordia.ca or Dr. Sandra Martin-Chang (Thesis supervisor) at s.martin-chang@concordia.ca

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca

Appendix D

Demographic Survey

A. What is your relationship to the child? _____

B. What is your date of birth? mm/ dd/yyyy _ _/ _ _/ _ _ _ _

C. Date of birth of the child: mm/dd/yyyy _ _/ _ _/ _ _ _ _

D. How does your child identify? (Check the appropriate box):

- ☐ Boy
- ☐ Girl
- ☐ Transgender boy
- ☐ Transgender girl
- ☐ Non-binary

E. What is the language(s) spoken at home? Please list.

- _____
- _____
- _____
- _____

F. Which of the following ethnic groups describes your child? Please check all that apply:

Asian or Pacific Islander	
African Ancestry	
Hispanic or Latin-American	
Indigenous Ancestry	
European Ancestry	
White or Caucasian	
Multiracial or Biracial	
Race/Ethnicity is not listed here,	
Please expand:	
Prefer not to answer	

G. Please indicate your highest level of education:

- ☐ No certificate, diploma, or degree
- ☐ High (secondary) school diploma or equivalency certificate
- ☐ Apprenticeship certificate
- ☐ College, CEGEP, or other non-university certificates
- ☐ University certificate or diploma below bachelor level
- ☐ Bachelor's degree
- ☐ University certificate or diploma above bachelor level
- ☐ Master's degree
- ☐ Earned doctorate.

H. Please indicate your family's annual income by checking the appropriate box:

Less than 20,000.00	
Between $20,000.01 and $30,000.00	
Between $30,000.01 and $40,000.00	
Between $40,000.01 and $60,000.00	
Between $60,000.01 and $80,000.00	
Between $80,000.01 and $110,000.00	
Between $110,000.01 and 150,000.00	
More than $150,000.01	
Prefer not to answer	

Appendix E

Quick Letter Name Knowledge Assessment (Tortorelli et al., 2017)

Child ID _____ Letter Name form _____

Age _____ Date _____

Letter Name Knowledge

Materials: Letter stimuli in binder. Be sure to use correct form. Make sure that you choose a form that does NOT include the first letter of the child's name.
Instructions: Present each letter one at a time. Say, "**What letter is this?**" Examiner may reprompt with "**What is the name of this letter?**" Do not correct child if response is not a letter.
Scoring: Mark 1 if child gives correct letter name. Mark 0 if child gives incorrect letter name or no answer.

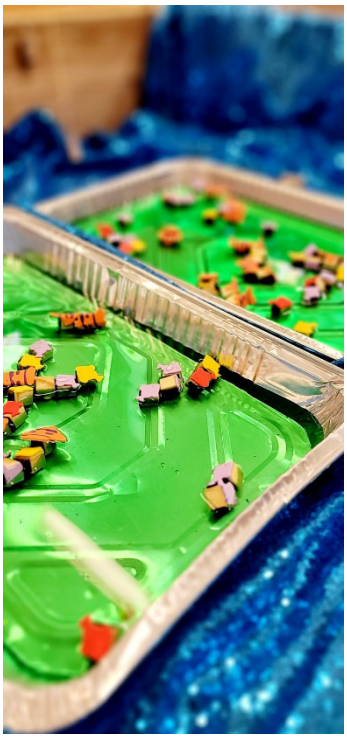
Form 1	Form 2	Form 3	Form 4
1. **o** _____	1. **B** _____	1. **X** _____	1. **A** _____
2. **s** _____	2. **E** _____	2. **k** _____	2. **c** _____
3. **w** _____	3. **P** _____	3. **D** _____	3. **H** _____
4. **F** _____	4. **Y** _____	4. **J** _____	4. **G** _____
5. **e** _____	5. **I** _____	5. **N** _____	5. **z** _____
6. **m** _____	6. **U** _____	6. **p** _____	6. **r** _____
7. **u** _____	7. **v** _____	7. **a** _____	7. **j** _____
8. **V** _____	8. **d** _____	8. **t** _____	8. **q** _____

Form 5	Form 6
1. **S** _____	1. **R** _____
2. **M** _____	2. **K** _____
3. **W** _____	3. **T** _____
4. **L** _____	4. **Z** _____
5. **i** _____	5. **Q** _____
6. **f** _____	6. **y** _____
7. **n** _____	7. **h** _____
8. **g** _____	8. **b** _____

Source: Quick Letter Name Knowledge Assessment (Q-LNK; Tortorelli et al., 2017)
Retrieved from: https://ellilab.com/free-assessments/

Appendix F

Play Experience Layout



Camping Gear

Play Walkie-Talkies and Flashlights

Appendix G

Raccoon Task

Appendix H

Standard Task

Appendix I

Information and Consent Form - Image Use - Standard Task Pictures

Study Title: Play Experiences and Preschoolers' Engagement in Early Writing
Student Researcher: Pamela Callejas Aliaga
Researcher's Contact Information: (514) 746-5413, p_call@live.concordia.ca
Faculty Supervisor: Dr. Sandra Martin-Chang
Faculty Supervisor's Contact Information: (514) 848-2424 ext. 8932, s.martin-chang@concordia.ca
Thesis Reviewing Committee: Dr. Diane Pesco, Dr. Nathalie Rothschild
Research Assistant: Marie-Helene Navarra
Source of funding for the study: Social Sciences and Humanities Research Council **(**SSHRC)

This form provides information about the research study mentioned above. Please read it carefully before deciding if you want your child's image to be used in this study. Please ask the researcher if you would like more information about the study.

A. PURPOSE

The research aims to determine whether using a picture of a child engaged in pretend play, an image of other children engaged in pretend play, or a picture of a non-play context may have different effects on preschoolers' early writing skills and their engagement in writing.

B. PROCEDURES

During this study, the participants (children aged 4-to-5-years-old) will be given three writing prompts, each with a different picture. One writing prompt will feature a cartoon illustration for a control measure. The other two writing prompts will have either a picture of the children engaged in pretend play or a standard picture of "other children" engaged in pretend play. The children will be asked to talk about each picture. Then, they will be asked to write on the writing prompt. Finally, they will be asked to read what they wrote.

If you consent, we will use a picture taken by the student researcher featuring your child's image. The picture will be formatted to produce a standard prompt for "other children" engaged in pretend play. It will be used to prompt the children participating in the study to write.

C. RISKS AND BENEFITS

There are no potential risks from your involvement in this study neither for you nor your child. This research is not intended to benefit you or your child personally.

D. CONFIDENTIALITY

As part of this research, we will collect your name and signature, consenting to us using pictures with your child's image (in digital and printed form). The information gathered from you will be confidential. That means only the research team will know your identity and your information will not be disclosed in disseminated results. Your information will not be used for data analysis. We will not allow anyone to access your information or your child's image except those directly involved in the research (See authorized persons on page 1). We will destroy the information five years after the end of the study.

We intend to publish the results of this research. You may decline to include your child's image in the published results.

F. CONDITIONS OF PARTICIPATION

Should you consent, we will use a picture with your child's image (in digital and printed form) only for the purposes described in this form. You are not obligated in any way to consent to using your child's image in this research. It is purely your decision. You can withdraw that consent at any time, and your choice will be respected. There are no negative consequences for withdrawing your consent to use your child's image in this research. Be sure to contact the researcher before April 30th, 2023, or as soon as possible once you withdraw your consent.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions, and any questions have been answered. I agree to the use of my child's image in this research under the conditions described.

☐ I consent to the use of visual images involving my child for the procedures of this research study.

☐ I accept to the use of my child's image in the published results with all recognizable features blurred.

Parent/Guardian's NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about this research's scientific or scholarly aspects, don't hesitate to contact the student researcher Pamela Callejas Aliaga at p_call@live.concordia.ca or Dr. Sandra Martin-Chang (Thesis supervisor) at s.martin-chang@concordia.ca

If you have concerns about ethical issues in this research, please get in touch with the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca

Appendix J

Experimental Task – Sample

Appendix K

Name and Word Writing Task - Administration Script

1. Give the children a black marker and blank paper.
2. Ask the children to write their names:
    - "Please use the marker to write your name at the top of the page."

1. Praise the child for their efforts:
    - "Well done!, thank you for writing your name!"
2. Give the child a new blank paper and ask for their written paper back:
    - "Can we switch paper? I will give you a new one for the next word."
3. Explain that you will dictate some words for them to write to the best of their ability:
    - "Now, I will say a few words aloud. They are going to be short words that you might have used before. I want you to write each word on the paper as you hear them. If you don't know the word, write your best guess. Ready?"
4. Dictate each word and pronounce each phoneme. Repeat each word once. Pause for 5 seconds in between each word:
    - "sad," "hug," "lip," "net," and "job."
5. Praise the child for their efforts,
    - "Well done! good word writing!"

Writing Tasks- Administration Script

1. Maintaining an unrushed and warm attitude, establish rapport with the child by going to their eye level to invite their participation. Respectfully make your presence known by gently placing your hand on their midback and waiting for them to switch their attention to you.
2. Once you have their attention, you can say, "Would you like to come and do some writing with me? [pause]. Wait for the child's response. "Ok! let's go together."
    a. If they are hesitant or say, "But I can't write!" you can say, "There are many ways to write," "Not all writing looks like grown-up writing," "You can do your own writing." "If I cannot read it, you will be there, so, you can read it for me."
3. Once they assent, invite the child to join you. You may offer your hand to hold or use it to guide them to walk next to you to the testing area (a quiet room or private corner).
4. Invite the child to sit directly in front of you. Once settled, say, "We are here to do some writing. First, I will show you a paper with a picture. You can tell me your ideas about it. Then, you can use the paper to write them down. Ready?"
5. Give the child the corresponding prompt. Allow the child to observe the prompt, uninterrupted.
6. Pointing to the picture, without touching the image you say, "What do you see in this picture?" Allow the child to answer, then echo their answer.
7. Then prompt their planning, "What do you think it's happening? What do you think they are saying?"
    a. When the child answers, listen intently without interrupting, until the child:
        - stopped with end-of-sentence intonation,
        - paused their telling for at least 5 seconds,
        - says, "the end," "that's all,"
8. Then say, "Anything else?" Remain focused on the child if they continue. If there is no answer, assume the child is finished.

9. Then, praise the child's efforts by saying, "Thos were good ideas! Now, we will do what writers do! You can write those ideas on paper [pause]. Your paper has those special spaces [signal towards speech bubble and sentence strip]. Now, you can write there.
    a. If a child says they cannot write, say, "Do it your way," or "You can pretend to write if you want to, do your best."
10. When the child pauses, encourage their efforts at writing with positive evaluations about the general quality (e.g., "You are working hard!" "You are a good writer!" "That's great kid writing.").
11. Allow children to stop if, after you encourage them, they say they have done all they can.
12. When the child is finished, point towards their marks without touching them. Then, prompt their translation, say, "Now, can you read it to me? What does it say?"
    a. Take anecdotal notes about relevant behaviours while re-reading their writing (e.g., looking at printed text, pointing at specific letters of words while translating)
13. When they pause for long or seem to be finished, ask them once, "Anything else?"
14. When they declare they are finished, thank them for their efforts and participation.

Adapted from Jensen, 1990; Quinn et al., 2021; Rowe & Wilson, 2015; Sulzby et al., 1989.