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**Parental Strategies to Scaffold Emergent Writing Skills in the Pre-School
Child within the Home Environment**

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Abstract

Joint writing activities between parent and child can enhance literacy skills in young children. This paper describes the strategies used by a mother to scaffold her daughter's alphabet letter shaping, word, and story writing in the years before formal schooling. The strategies included identifying alphabet letters embedded in environmental print and books, tracing letter shapes with fingers whilst using directional language, and using whole arm movements to form letter shapes in the air. Writing samples and examples of parent-child interactions were collected at 3 to 4 years of age and are described within the framework of Gentry's writing stages. The joint-writing techniques and activities illustrated in this case-study emphasize the use of letter names and letter shapes and may provide effective strategies for parents and early childhood educators to scaffold emergent writing development in young children.

Key words: emergent writing; joint-writing activities; alphabet knowledge; parent-child interaction; scaffolding strategies; environmental print.

Introduction

Emergent writing skills include a positive attitude towards writing and print, an understanding of the concepts and functions of writing, representation of ideas through scribbles, drawings and rudimentary letter formations, copying print from the environment, and linking of letters to sounds when experimenting with writing (Chan, Zi Juan, and Lai Foon 2008; Mayer 2007; Otto 2008). From an emergent literacy perspective, learning to write begins very early in a child's life (Stellakis and Kondyli 2004) and the home environment can provide many opportunities to develop emergent writing skills (Aram and Levin 2002; Neumann, Hood, and Neumann 2009). However, especially when compared to parental story book reading relatively little research has examined parental involvement in emergent writing (Aram 2008). This may reflect the spontaneous and functional nature of home writing activities (e.g. labelling one's clothing, making a birthday card; Burns and Casbergue 1992), which do not occur as systematically or frequently as storybook reading (Wood 2002). Nevertheless, the critical role parents play in supporting their children's early writing, providing writing materials, mediating and clarifying writing interactions has been established (Aram 2002; Aram and Levin 2001 2002; Burns and Casbergue 1992; Neumann and Neumann 2009; Otto 2008; Stellakis and Kondyli 2004; Yang and Noel 2006).

As early as 2 to 3 years of age, children begin to understand the symbolic nature of print (e.g. differentiating print from pictures/drawings; Lavine 1977; Yamagata 2007) and experiment with representing rudimentary features of written language in the forms of horizontal lines, arcs, circles, and dots (Stellakis and Kondyli 2004). Educators have used scaffolding techniques to support emergent writing in children. Scaffolding refers to the interactional guidance provided to a child within their Zone of Proximal Development which is the space between a child's level of mastery with and without assistance (Vygotsky 1978).

Scaffolding also describes the process by which a learner moves from assisted to independent performance (Bodrova and Leong 1998).

Scaffolding can use visual or verbal cues to help a child develop writing skills.

Bodrova and Leong (1998), for example, used visually highlighted lines as a scaffolding tool to help kindergarteners represent their units of oral speech in written form. Eventually, this scaffolding tool was no longer needed when the children were able to plan and monitor their own writing process. Gentry (2005) also described the benefits of stretching out the sounds in words to verbally scaffold a kindergarten child's early word writing. In addition, letter formation was scaffolded by using verbal descriptions of letter shapes to help the child remember how to form it (e.g. the lower case *n* was described by the kindergarten teacher as a stick with a hump. The verbal description was no longer needed when the child could independently write the letter on his own.

Stellakis and Kondyli (2004) suggest that learning to write is facilitated through real, daily, meaningful, and interactive print rich experiences and activities. In this context, parents can play an important role in scaffolding their child's emergent writing skill acquisition (Aram 2002; Aram and Levin 2002; Burns and Casbergue 1992; Yang and Noel 2006). For example, Aram and Levin (2002) examined mothers' scaffolding strategies (e.g. word segmenting, retrieval of letter shapes and printing) during joint writing activities with their kindergartner children. Mediation in joint writing activities was strongly linked to basic literacy skills such as word writing/recognition and phonological awareness.

Other researchers have examined the strategies used by parents to support their pre-school children's emergent writing development (e.g. Aram and Levin 2001; Aram 2002; Bissex 1980; Burns and Casbergue 1992). The guided writing strategies have included the parent holding and leading the child's hand to write the letters and words (Aram and Levin 2001 2002; Aram 2002), the parent writing a letter or word and encouraging the child to copy

it (Aram and Levin 2001, 2002; Aram 2002), and the parent dictating the names and sounds of letters for the child to write their word (Aram and Levin 2001, 2002; Burns and Casbergue 1992). Aram and Levin (2001) also reported how a mother verbally scaffolded her child's formation of an unknown letter by saying a word that included this letter or by explaining how to change a known letter to make the unknown one (e.g. this could be done by changing an L to make E).

The present research reports on the interactions and scaffolded writing strategies that one parent used with her preschool aged child over a 2 year period before her child began formal schooling. The young age of the child required the parent to use strategies that emphasised the use of letter names and letter formation as a way to help the child identify and write letters. The parent-child interactions are described within the framework of Gentry's (2005) early writing stages. Gentry's (2005) writing scale begins with *non-alphabetic* writing consisting of non-discernable marks and scribbles. Stage 1 is *pre-alphabetic* writing where children show some control of letter formation (pre-communicative spelling) consisting of random letter strings with no letter-sound correspondences. Stage 2 is *partial alphabetic* writing and involves writing a few letter sound matches mixed with random letters (semi-phonetic spelling). Stage 3 is labelled *full alphabetic* writing where children use a letter for each sound (phonetic spelling). Stage 4 consists of *consolidated alphabetic* writing where about two-thirds of words are spelled correctly (transitional spelling). The description of parent-child interactions during this case study spans from the non-alphabetic stage through the pre-alphabetic and into the partial alphabetic phase of writing.

Description of the child

Roseanna was from a middle income Australian family. Her mother and father were teachers. She had two older sisters (5 and 6 years older), one older brother (2 years older), and one younger brother (2 years younger). Her cognitive and physical development were normal.

During her pre-school years at home, before beginning full-time preparatory school at 5 years of age, Roseanna did not experience any letter drills, phonics instruction, or formal reading or writing instruction.

Data collection

To examine the parental strategies and interactions during joint writing activities, a longitudinal case study approach was used. Parent-child interactions were recorded in note form by the parent when the child was between the ages of 3 years 1 month to 4 years 11 months. This age range was used because it spanned the child's development across Gentry's (2005) non-alphabetic writing, pre-alphabetic, and partial alphabetic stages. It also spanned the age before the child began formal preparatory schooling. The notes made by the parent recorded information about the type of task the parent and child were engaged in, the objects that were being used, what behaviours occurred, and the dialogue that occurred during the interaction. A total of 40 writing samples were also collected. Due to the spontaneous nature of the joint-writing activities in the home environment it was not possible to record every interaction. From the data, vignettes and writing samples were selected that were indicative of the general nature of the interactions that occurred during the entire duration of the study. The majority of the parent-child interactions were with the mother. Some writing samples also contained the child's drawings. Children drawing when they write has been noted to occur naturally during young children's early writing development (e.g. Baghban 2007; Clay 1975; Temple, Nathan, and Burris 1982). However, it is the child's written products and parent-child interactions that will be focussed upon in this report.

Observations and writing samples

Non-alphabetic writing stage

Roseanna's non-alphabetic writing stage occurred between 3:1 and 4:0 years. Examples of parent-child interactions and joint-writing activities included: making letter shapes out of

play-dough, tracing environmental print with fingers, forming letter shapes in the air, singing songs with whole body and arm and hand movements, and learning of directional language up, down, around and across. These activities share the common elements that they made use of gross (whole body and arm) and fine (finger) motor skills, directional language (up, down, around and across), and introduced simple letter shapes (e.g. M, O) (Neumann 2007).

Environmental print (e.g. labels on food products, clothing, toys) was used extensively to scaffold emergent writing activities. The parent pointed out environmental print and print on story book titles on a daily basis. Roseanna quickly became aware of print in the environment and began pointing it out herself. This environmental print was mostly in upper case form and for this reason the parent emphasized upper case letters during the interactions. Research has also shown that knowledge of upper case letters develops earlier than lower case letters in young children (Worden and Boettcher 1990). This suggests that upper case letters should be used frequently during instruction (Bowman and Treiman 2004).

During the interactions, the parent always said the letter name that accompanied the printed text. There were also some instances in which the parent incorporated letter sounds during the interaction. In most cases, this occurred when the interaction incorporated alphabet books, story books, or singing songs (e.g. “snake slides in the sun s,s,s,s snake slides having fun”) but it also occurred during some interactions with environmental print. The parent-child interactions may thus be said to have emphasized letter names over letter sounds.

In addition, the parent took the opportunity to occasionally point out both letter names and sounds when appropriate and where possible, the environmental print letter the child was focussed on. There was occasionally an intermix of both with the parent using previous letter names and sounds discussed before to prompt Roseanna in remembering a feature of the letter in a new context or word. The parent would also refer to letters associated with familiar

objects Roseanna had previously read about in her alphabet story book (e.g. “A is for apple. The A is in the word OATS –see!”).

Below is an example of a parent-child interaction with environmental print.

[At breakfast Roseanna pulls out a cereal box from the pantry and her Mum points out the print on the box.]

Mum: Look Roseanna! There’s an O for Oats it goes around and around like the wheels of a car. Let’s trace it with our finger.

[Roseanna traces the O on the box then forms it in the air].

Roseanna and her Mum begin to sing their car song that goes ‘round and round and round and round and round goes the wheels of a car’ whilst moving their arms around in a circle.

Roseanna: Points out the next letter and begins to trace it with her finger.

Mum: Yes! It’s an A for apple and goes ‘up, down and across’. And look the next letter is a T for toy, it goes down and across.

Roseanna: There’s a snakey ‘SSSS’! [Roseanna makes the snake sound]

Mum: Great work! [Mum points to the word on the box again whilst running her finger under the word]. That word says OATS! We are having oats for breakfast.

Later that day Roseanna, pointed out and traced the letter T with her finger on a ‘Thomas the Train’ toy label.

Mum: That’s a T for ‘THOMAS’ can you find an M for Mum? [Mum points to it].

Roseanna: [She points to the M]

Mum: Yes! M for Mum goes up, down, up, down. [They trace the M on the label with their finger then form the M shape in the air].

Roseanna transferred her knowledge of letter shapes to different contexts as she independently pointed out the same letter shape embedded within a variety of environmental print words (e.g. she pointed out M: in **McDonalds**, in the toy label **THOMAS** and in the chocolate drink label **MILO**).

The parent also helped Roseanna form letter shapes with cookie dough and play dough and traced over the letter shapes with their fingers using directional language (up, down, around, across). The use of play dough to form letters transferred to other objects in the home. The parent observed Roseanna forming her own letter shapes out of household materials such as wool, string, and food (e.g. an F out of fish fingers, an O for Octopus from a hair ribbon, making an S for snake out of spaghetti, and using twigs in the garden to make a T).

The parent provided Roseanna with a range of writing tools (e.g. crayons, paints, pencils) and she enjoyed playing with them whilst exploring and experimenting with mark making on a variety of materials (e.g. paper, cardboard, blackboard). Roseanna was encouraged to form patterns and shapes on paper that went ‘up, down, up, down’ as the mother modelled and drew shapes on a vertical chalk board using the up and down language. Round shapes were introduced by drawing the wheels of a car and singing ‘round and round goes the wheels of a car’. The term ‘across’ was introduced by the parent modelling and encouraging Roseanna to draw a round sun with lines that go ‘across, across and across’ as the example shows in Figure 1. These joint drawing activities helped Roseanna make the link between the physical hand movement and shape and pattern formations that go ‘up, down, around and across’.

Insert Figure 1 about here

After Roseanna had mastered basic shapes and patterns, the parent helped her experiment with writing a few simple letter-like shapes such as an ‘M’ for mum that went up, down, up, down then stop! ‘A’ for apple that went up, down and across and ‘O’ for octopus that went around. Figure 2 shows examples of the marks that were produced during this interaction. The letter-like shapes that were produced during this interaction might be taken as evidence that Roseanna had entered the pre-alphabetic stage. However, the child was not considered to have entered this stage because they were produced only through the parent’s use of directional language to guide the child’s patterns and shapes. There was no evidence that the child could write letter-like shapes when unassisted by the parent. Rather, the directional language used by the parent may be interpreted as the parent scaffolding the child’s writing development within their zone of proximal development.

 Insert Figure 2 about here

There were instances in which the parent and child did not have writing materials with them such as driving in the car. In these interactions, the parent made use of alphabet letters embedded within environmental print signs. The parent would encourage the child to form the letters in the air using the directional language up, down around and across (e.g. Roseanna: ‘There’s an “M” in McDonalds. Parent: ‘And it’s also an “M” for Mouse. Let’s make an M in the air with our hand. M goes up, down, up, down’).

Pre-alphabetic writing stage

At 4 years 1 month, Roseanna showed evidence of entering the pre-alphabetic stage by forming discernable letter shapes independently. For example, Roseanna began writing the first 3 letters of her name unassisted in uppercase letters. However, she requested parental assistance with the remaining letters. To assist her, the mother used directional language (up,

down, around and across) to verbally scaffold (e.g. “the next letter E goes down, across, across, and across) formation of the final letters in her name. When writing the names of familiar objects such as Apple or Cat, Roseanna just wrote an A or strings of random letters with no letter-sound associations. However, she accurately and independently copied simple words such as MUM and COW and story book titles, but could not reread her writing. When asked if she could write her own story, Roseanna spontaneously drew a continuous up and down pattern to represent her story (see Figure 3). The zigzag-like pattern that was shown may represent Roseanna’s understanding that a story represents continuous speech.

Insert Figure 3 about here

Many of the words in her birthday card greetings for friends and family and shopping lists were self-initiated writing activities with the letter shapes and spelling scaffolded by her mother. Sometimes Roseanna wished to write a favourite word or label for one of her drawings. For example, after watching the movie ‘Scooby Doo’, she drew a picture of Scooby Doo and wanted to write his name (see Figure 4). Through parent scaffolding she was able to do it immediately, as follows:

Roseanna: How do I write Scooby Doo?

Parent: What letter do you think comes first?

Roseanna: [She says the word to herself emphasising the first letter]

‘SSSSScooby’.

Parent: That’s right, an S. Move your pencil in a snakey shape.

Roseanna then formed the S correctly and the parent continued to orally scaffold each letter shape in the name as Roseanna wrote them.

 Insert Figures 4 and 5 about here

Environmental print surrounded Roseanna every day and her awareness of it was evident in the independent writing samples that were collected. Roseanna showed her intrinsic motivation to spontaneously copy words in her home environment. Samples of unassisted copying of favourite environmental print labels included a juice bottle label (e.g. POP TOPS), movie titles from CD-ROM and DVD cases (e.g. MR HAPPY, ET), and toy labels (eg, My Little Pony). These unassisted writing samples with no parent scaffolding of the letter shapes are shown in Figure 5.

Figures 4 and 5 also show examples of the child making a drawing to accompany her writing. Temple, Nathan, and Burris (1982) note that drawings may be related to a child's writing in two main ways. First, the drawing may be unconnected to the text and does not help the reader's understanding. The top panel of Figure 5 in which POP TOPS is written represents an instance of this. The "people" that accompany the writing were not present on the product packaging. The second use of drawing is when the picture is intricately related to the text. The remaining drawings in Figure 5 are instances of a close relationship with the text. The "people" that accompanied the MR HAPPY text represent the Mr. Men characters and these characters were also on the CD-ROM case from which the child copied. The "pony" that was drawn with the MY LITTLE PONY text also represents a character that was present on the toy label that the child copied from.

Roseanna's partial alphabetic writing stage

Roseanna showed movement into the partial alphabetic phase by 4 years 11 months through evidence of independent word writing with invented spellings and some phonetic representations. For example, Roseanna used some letter-sound correspondence knowledge to

spell and read simple words by sounding out the letters, such as 'CAT' and 'DAD'. However, during her early invented spelling attempts she wrote for example, 'MP' for 'MUM' and 'SFM' for 'SAM' indicating that she had entered the partial alphabetic stage and her letter-sound knowledge of initial and final letters in words was developing. Roseanna was able to form all the letters in her first name without assistance and recognise her name in different contexts (e.g. on a birthday invitation, Christmas present label etc.). However, she was unable at this stage to write her surname without assistance. During these instances the mother guided the writing of Roseanna's surname by using directional language (up, down, around and across e.g. U goes down, around, and up) to verbally scaffold the formation of the letter shapes and the spelling of her surname. This approach boosted Roseanna's confidence and motivation to write new words with her mother's assistance

The parent-child activities during this stage included name writing, making birthday cards, shopping lists, labelling drawings, copying environmental print, and story writing. During these activities the need for parent scaffolding of letter shapes decreased as the child's knowledge about letter names and shapes increased. Roseanna continued to develop her ability and confidence in accurately copying product labels in the home environment (e.g. HOME BRAND, NUTRI GRAIN, MILK) and book titles (e.g. INSECTS AND SPIDERS) without assistance. In one instance, Roseanna was seen copying the label 'Baby Wipes'. This label was printed in upper and lower case letters. It was interesting to note that Roseanna copied the lower case 'b' in 'Baby' and correctly orally identified the lower case 'e' in 'Wipes' but chose to write it as an upper case E. This suggests that although Roseanna had been introduced mainly to upper case letters by her parents, her knowledge of lower case letters was also developing through her exploration of print in alphabet books, story books and a variety of environmental print labelled products. Figure 7 shows samples of Roseanna's unassisted copying of environmental print, including that of 'Baby Wipes'.

Insert Figure 6 about here

On other occasions, Roseanna spontaneously and orally dictated a story to her mother and asked her to help write it down. For example, one of Roseanna's stories was: *'One day there was a boy and a girl playing in a park. The boy tripped over and hurt his leg and then Mummy saw him and put a band-aid on him'*. The mother spelt out each word and dictated each letter. Roseanna knew many letters already and wrote them down as her mother said the letter names (see Figure 7). However, sometimes Roseanna had forgotten how to shape a particular letter (e.g. E) or did not know how to form an unfamiliar letter (e.g. Y, G, P and R) so her mother orally scaffolded Roseanna's letter shaping using directional language (up, down, around and across). For example, in the word DAY within her story, Roseanna had forgotten how to write the letter Y. The mother explained 'Y is for Yo-Yo it goes down, up and down, let's form it in the air together. Roseanna formed the letter in the air with her hand then wrote the letter Y on her page. Roseanna confused a B with a P, leading the parent to say it's 'P for PLAY, remember P is for Pig 'puh, puh, puh', it goes down and around. But B is for Boat and B is for Boy in your story. B goes down, around and around'. This verbal scaffolding allowed Roseanna to write the correct letter shape.

Roseanna was also encouraged to make a finger space in between each word, but this was difficult for her to remember and manage as seen in Figure 7. When Roseanna had finished writing one page she drew a picture, then the parent and child read the story together. However, it was difficult for Roseanna to point to and differentiate one word from another as the spaces between the words were narrow or absent. Other researchers have also noted that children have difficulty in rereading their writing if they omit spaces between words or put spaces within words (Clay 1975; Kamberelis and Perry 1994).

Insert Figure 7 about here

The mother scaffolded Roseanna's writing further by using lines. Initially, individual lines were used to indicate each letter within a word (e.g. _ _ _ _ _). As shown in Figure 8, this guided not only the placement of each letter within a word but also the spaces between words. With the visual guidance of these lines, Roseanna did not need to use finger spacing when writing and was able to focus more on thinking about matching sounds to letters and forming each letter shape. On completion of writing her story, Roseanna enthusiastically read her story back to her parent pointing to each individual word as the words were now visually clearer to differentiate from each other. This technique was much more effective than using fingers to make spaces between words. When Roseanna showed that she no longer needed to have the scaffolded individual lines to guide the placement of each letter within a word, her parent used one long line (e.g. _____) to represent all the letters within a word. As shown in Figure 8, in most instances a short line was used for short words and a longer line was used for long words. Using lines to represent whole words that a child intends to write is an effective scaffolding technique devised by Bodrova and Leong (1998). This technique was also useful in scaffolding spacing between each word and helping Roseanna remember the next word she had intended to write.

Insert Figure 8 about here

With parental scaffolding of her letter and word formation and numerous rich joint writing experiences, Roseanna had become a motivated and competent emergent writer in the early partial alphabetic phase. Furthermore, although Roseanna possessed only limited letter-

sound knowledge at this stage, she had mastered most of her alphabet letter names, possessing the fine motor skills to form letter shapes and had begun linking letter names to shapes and sounds. It is possible that these essential emergent literacy skills may assist her movement from the partial alphabetic to the full alphabetic stage during her first years of formal literacy learning at school.

Summary of the scaffolded emergent writing strategy

The main writing strategies used by the parent are summarized as follows:

- (a) Introduced and pointed out print in the child's environment (e.g. food/clothing/toy product labels, storybook titles).
- (b) Used songs and nursery rhymes that incorporated directional actions and arm movements (e.g. Incy Wincy Spider climbed *up* the water spout, *down* came the rain)
- (c) Traced letters in the environment with fingers using directional language (up, down, around and across), named letters and made their sounds, formed letter shapes in the air, and made letter shapes with household materials (e.g. string, cookie dough).
- (d) Associated each letter name with a familiar word and directions used when writing it (e.g. 'M for mummy' goes up, down, up, down)
- (e) Used directional language to verbally scaffold the child's writing of letter shapes (e.g. E is for Egg it goes down, across, across).
- (f) Guided the child's letter shaping and spelling (e.g. 'FLOWER starts with an F for Fish it goes down, across and across, then L for Lion it goes down and across' and so on).
- (g) Scaffolded word writing by using individual lines to represent each letter and scaffolded sentence writing by using individual lines to represent each word (Bodrova and Leong 1998).

Discussion

It has been well established that parents play an important role in supporting their child's emergent writing development (Aram and Levin 2001 2002; Aram 2002). The parent-child

joint writing interactions and simple strategies reported in this study detailed many practical ways in which parents can scaffold their child's emergent writing skills. The strategies used by the parent provided many rich opportunities for Roseanna to communicate and interact with her parent in a meaningful way about print and represent letter shapes in a variety of ways (e.g. forming letter shapes in the air or making letter shapes out of house-hold materials). The directional language (up, down, around and across) used by the parent also scaffolded Roseanna's letter shaping during their joint writing activities such as writing a shopping list, labelling a drawing or during story writing activities. In addition, Roseanna did not become frustrated when she did not know how to form the next letter shape in her word because she knew that her mother could scaffold the shape using directional language (e.g. F for fish goes down, across and across). Finally, Roseanna evidenced her intrinsic motivation to experiment with writing and explore print further in a range of contexts and genres through self-initiating her own writing activities and copying environmental print.

It is essential that joint writing activities in the pre-school years are child-directed but parent guided so the child remains interested and supported during each activity (Aram 2002; Chan et al. 2008). The strategies described in this study may be better suited to literacy interactions between child and parent than between child and early childhood educators. Parents may be more aware of what interests and motivates their child and can structure literacy interactions accordingly. It is also likely that the quality of the relationship (e.g. degree of sensitivity, responsivity, guidance, and attention) between the parent and child may influence the quality and frequency of parent-child literacy interactions (Dodici, Draper, and Peterson 2003). If the strategies described in this study are to be adopted by early childhood educators, it is crucial that they use developmentally appropriate drawing and writing activities that are adapted to the individual child's needs and abilities to foster each child's interest, engagement, and motivation to explore print further (Elliot and Ollif 2008). Baghban

(2007) also suggests that early educators use flexible and open-ended opportunities to write and draw in and avoid stating that there is a “correct way” of doing either.

The need to motivate young children’s interest and awareness of print is particularly important in pre-school age children who are at risk of developing future reading and writing difficulties, such as children who are language impaired (Justice et al. 2003). For example, a recent study by Cabell et al. (2009) has shown that children with language impairment lag significantly behind their typical language peers in emergent writing abilities. They also describe how language impaired children may be more likely to actively resist participating in shared writing and reading activities. Cabell et al. (2009) stress the importance of giving parents of language impaired children emergent literacy strategies that motivate their children to be intrinsically interested in exploring print and participating in joint writing activities.

The types of joint writing activities described in this case study coupled with the scaffolded letter shaping strategy based on the use of tracing environmental print with fingers, whole body movements and forming letter shapes in the air, use of directional language (up, down, around and across) and using lines to represent letters and words, may provide useful tools for parents to scaffold their child’s alphabet letter shaping, emergent writing, alphabet knowledge, letter-sound knowledge and print motivation. As many parents may find an emphasis on using letter-sounds unfamiliar, early literacy strategies that emphasise letter names and shapes may be more appealing to them. Further research could examine the effectiveness of these strategies by comparing them with other naturally-occurring parental strategies (e.g. the parent writing a letter or word and encouraging the child to copy it; Aram and Levin 2001 2002). Future research could also examine the use of these joint-writing strategies in a pre-school educational setting.

Notes

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Figure Captions

Figure 1. Through parent scaffolding, Roseanna learnt to draw lines that go 'across', as in the letter 'A', by drawing lines for the rays of the sun.

Figure 2. Roseanna's scribbles and letter formation when the mother scaffolded the writing of basic patterns and shapes and basic letters of e.g. 'O', 'A', and 'M'.

Figure 3. The spontaneous up and down pattern produced by Roseanna when she was asked to write a story in the pre-alphabetic phase.

Figure 4. Parent Scaffolding of 'Scooby Doo', a label for Roseanna's drawing.

Figure 5. Unassisted copying of environmental print from various items. The left panel shows the items of environmental print and the right panel shows the child's writing. The copied print were 'Pop Tops' from a drink product label (top), 'Mr Happy' from a CD-ROM case (middle), and 'My Little Pony' from a toy label (bottom).

Figure 6. Unassisted copying of environmental print from commercial product labels. The left panel shows the items of environmental print and the right panels shows the child's writing. The copied print were 'Nutrigrain' (top) and 'Baby Wipes' (bottom).

Figure 7. Roseanna's story produced by the parent scaffolding in which each letter was spelt out and directional language used to help form unfamiliar letters.

Figure 8. Techniques used to scaffold Roseanna's story writing used lines to indicate each letter (top) and lines to indicate whole words (bottom).