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Facilitating young children's language and vocabulary development using a cognitive framework

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Young children's proficiency in English and their vocabulary development are predictors of their early school achievement. This paper reviews general guidelines and activities that can facilitate young children's receptive and expressive vocabulary and language development. While vocabulary development is an essential element in children using language to enhance their reasoning, it is only one element of a set of elements that connect children's language and reasoning together. From this perspective, Marion Blank (2002) has theorized four levels of language and reasoning that are hierarchical and that can be progressed using child and adult dialogue and talk. Examples are presented on how these four levels can be incorporated into early childhood learning settings.

The *Australian Early Years Learning Framework* (Council of Australian Governments, 2009) maintained that from birth to 8 years, there should be a specific emphasis on: play-based learning; communication and language; and children's social and emotional development. Within this framework, communication is considered vital for children's successful learning across the curriculum. Australia is not alone in this focus on early children's vocabulary, language and emergent literacy development, particularly for children from low-income or non-English-speaking families (Bishop & Leonard, 2000; Farkas & Beron, 2004). There is recurring evidence that the development of these skills for children is sensitive to the quality of the language and literacy environment both in the home (Winne & Nesbit, 2009; Snow, Griffin, & Burns, 2006) and in out-of-home settings (Nation, 2005; Neuman & Dickson, 2001). For example, from Australian research on young children's language levels, Hay and Fielding-Barnsley (2009) identified that, in terms of receptive language (listening), approximately 15% of the children starting Year 1 did not have the receptive language skills to cope fully in that environment. A similar pattern was also identified for these children's expressive language (speaking) abilities.

Children's language and emergent literacy skills can be influenced and enhanced by a variety of interventions, for example:



- (1) Group programmes, such as the *First Steps Oral Language programme* (Western Australia Department of Education, 2001)
- (2) Programmes that increase the parent-child language interactions (Hay & Fielding-Barnsley, 2006, 2007; Morgan & Goldstein, 2004)
- (3) By the level and appropriateness of teacher talk in the classroom (Cook, 2000; Nuthall, 2005).

The following suggestions further outline how parents, early childhood teachers and others can enhance young children's receptive and expressive language. These lists are based on the work of Hay and Fielding-Barnsley (2006; 2009); Paul (2007); and Morrow (2009).

Receptive Language Development

1. Provide children with settings in which they will hear varied language frequently.
2. Give children the opportunity to discriminate and classify sounds they hear.
3. Expose children to a rich source of new vocabulary on a regular basis.
4. Keep your language at a suitable level of complexity and clarification for the young child to engage in a conversation with you.
5. Provide more time talking about the meanings of words and the relationship of groups of words together.
6. Have children say back the new words they hear and use those words in a related sentence.
7. Offer children the opportunity to listen to others and demonstrate that they understand what is said.
8. Provide children with opportunities for following directions.
9. Provide children with good models of standard English.
10. Provide instructional periods that are shorter in duration, but more frequent.

Expressive Language Development

1. Encourage children to pronounce words correctly.
2. Help children increase their speaking vocabularies.
3. Encourage children to speak in complete sentences at appropriate stages in their development.
4. Give the child time to consider their response and discourage others from answering for the child.



5. Reinforce use of effort as well as outcome.
6. Avoid over corrections of incorrect pronunciations but say the word again in a sentence and seek a response using that word.
7. Give children opportunities to expand their use of various syntactic structures, such as adjectives and adverbs.
8. Give the children opportunities to talk about a topic they know about
9. Provide wait time between answers and use peers within a conversational setting.
10. Encourage children to communicate with others so that they can be understood.
11. Give children the opportunity to use language socially, interpreting feelings, points of view, and motivation and by solving problems through generating hypotheses, summarizing events and predicting outcomes.
12. Give children opportunities to develop language that involves numbers such as describing size and amount, and making comparisons.
13. Provide children with the opportunity to talk and listen in different settings

The above set of suggestions is designed to allow children's receptive and expressive language development to occur within a social context. Unfortunately, too often children's vocabulary development has been considered to be a separate skill and at times "taught" and transmitted to children away from its cognitive and semantic (meaning) framework (Goswami & Bryant, 2007; Winne & Nesbit, 2009). The notion of seeing language development within a cognitive framework was theorized by Vygotsky (1978) and it has been demonstrated to be an effective framework in a number of research studies (Farkas & Beron, 2004; Hattie, 2009; Sénéchal, 2006). From this perspective, Marion Blank (2002) has focused on young children's early language and their ability to use reasoning. For her, these two skills are interactive and self-enhancing, such that as children's understandings of words and use of words improves, so does their ability to reason, which further enhances their ability to use the words in more complex settings.

For Blank, it is the social dialogue that helps to transmit the meaning of the words to the child and that also provides the child with the opportunity to practice the words in situations that require more reasoning. She claimed that early childhood teachers and others can improve young children's language and reasoning development by enhancing their own dialogue, questioning and talk with the children. From this perspective, Blank and her colleagues (Blank, 2002; Blank & Franklin, 1980; Blank, Rose, & Berlin, 2003) proposed four levels of dialogue complexity, where the children are active participants in the talk and reasoning interchanges. In such a communicative context, the teacher initiates and shapes the dialogue so that the children respond at a more appropriate and advancing level of linguistic and reasoning complexity.



Blank's four basic levels of questions and interactions in terms of their complexity are outlined in Table 1. Children who have limited mastery of the lower levels of complexity will generally have difficulty with the more advanced levels (Blank, 2002; Elias, Hay, Homel, & Freiberg, 2006; Hay et al., 2007). Teachers can use these four levels to introduce and review topics for discussion, reasoning, and learning, and to go backwards or forwards along the levels depending on the responses provided by the children.

Table 1. *Blank's four levels of language complexity*

Level of Complexity & Proficiency	Language Complexity to the Experience	Example of Teacher Discourse
1	Directly Supplied Information (Matching experiences)	What do you see?
2	Classification (Selective analysis of experience)	Group the shapes by colour. How is this different from this?
3	Reorganisation (Reordering the experience)	Re-tell me the story What is your experience with this topic?
4	Abstraction and Inference (Reasoning about the experience)	What made it happen? Why do they do this?

Before exploring this in more detail, it is worth considering some hypothetical examples of children's language and putting the children's responses within a language framework. Young children, let's say with a language vocabulary of around aged 3.5, may point to a telephone booth when out with an adult and say "hut" or maybe "cave," and the adult will usually respond by saying something like, "it's a telephone booth." Similarly, at home a young child might pick up an older brother's stapler and, while not knowing its name, will tell of its function and say, "you put paper in here and a wire joins." Again, the parent usually expands on the child's utterances and, in the process, provides more specific vocabulary. For example, saying: "Yes, it does join together paper. The wire is called a staple and the object that we push down is called a stapler". This elaboration of the child's utterance and the refining of names, objects and events within a dialogue interaction is an important process of building the child's language structure and vocabulary (Barrett & Hammond, 2008; Catts & Kamhi, 2005; Yule, 2010).

While parents and educators are often comfortable with this expansion and elaboration of children's utterances, they may hear talk that they consider odd and even amusing from young children, as is illustrated in the following example from practice. As part of a language-based programme in an Australian preschool (children aged around 4.5 years), the children from a community that



had been identified as “disadvantaged” were looking at a picture of some farm animals. The early childhood teacher took out two pictures – one of a brown hen and the other of a white duck. After some time was spent working out the names of the birds, the early childhood teacher pointed to the feet of the duck and the hen and asked: “how are the feet different?” The answer given by a child in the group was: “they do not wear slippers”.

Such a response may be seen as the child trying to be funny. However, more likely, reasoning that draws on that child’s experiences is being used. On hearing the word “feet” the child recalls being told “put your slippers on your feet.” Not knowing what to look for when comparing the duck’s and hen’s feet, and not having the vocabulary to describe the feet and then compare them, the child recalls from long term memory the logical association of feet and slippers. If we look at the verbal interaction using Blank’s levels of language and reasoning (as outlined above), we can see the teacher has asked a comparison question, Blank’s level 2. If the child has not mastered the vocabulary and concepts associated with how others describe duck’s or hen’s feet – web-feet or claws; the association of ducks with water and hens with scratching in the garden – the comparison reasoning question (Blank’s level 2 stage) is too advanced. These words and concepts first need to be discussed and understood (Blank’s level 1 stage).

The advantage to early childhood teachers in understanding, knowing and using Blank’s levels of questions is that they can adapt and respond more appropriately to the children’s answers and utterances. It becomes an informal method of quickly assessing and making sense of the children’s talk and subsequently engaging with the children in a way that makes sense to the children. Importantly, just ignoring the children’s utterance because they are “silly” devalues these utterances within the learning context. If children perceive that their talk is not valued they are more likely to remain silent and even regress in their language development (Clark, 2003; Yule, 2010).

The following examples, drawn from our own research and work within early childhood learning settings, further elaborate on how Blank’s levels of dialogue interaction can be incorporated into an early childhood programme. The three *lessons* are orientated towards moving young children from level 1 (vocabulary focused) to level 2, where basic reasoning and comparison are more the focus.

**Examples of language-focused lessons using Blank’s levels of dialogue.
The topic is fruit.**

Lesson 1: Apples

- Present children with a basket containing apples wrapped in a towel. The basket should contain a wide selection of apples, in terms of colour, size, texture and shape.
- Tell the children that you cannot see and that you don’t know what the basket contains. Children have to guess what the contents of the basket could be. (Blank’s Level 2)
- Show the children the apples. Allow the children to hold them.
- Use Blank’s Level 1 questions to describe the apples:
What colour is this?
Red, green, brown, speckled



What size is this?
Small, large, tiny, huge
What shape is it?
Round, like a love heart
What is inside it?
Seeds, flesh, juice, pith, core
What is on the outside of it?
Skin, stalk, leaf

Lesson 2: Apples and Oranges

- Revise vocabulary from the previous lesson relating to the colour, size, shape and texture of apples.
- Introduce the basket of apples and oranges.
- Ask the children about the size, shape, colour and texture of the oranges. (Level 1)
- Compare and contrast what we know about oranges with what we know about apples.
How are apples and oranges different? (Level 2)
- Children draw the inside and outside of their fruits.
- Make fruit prints.

Lesson 3: Other Fruit

- Introduce a wider selection of fruit including: mandarins, strawberries, cherries, bananas, rock melon, honeydew melon, watermelon, as well as apples and oranges.
- Let the children feel and smell the fruit.
- Cut the fruit in half.
- Discuss the differences of all fruit involved. (Level 2)
- Discuss the similarities. (Level 3)
How are these fruit the same?
- Finish lesson by making a fruit salad. Let the children taste the different fruit.
Tell me about the taste. (Level 2)
What is your favourite fruit of all? (Level 3)
Why do you like that one? (Level 4)
Tell me a fruit that is not here? (Level 3)
What else do you know that has seeds? (Level 3)
What fruit would you sell if you were a greengrocer? (Level 4)
What will happen if I plant an apple seed? (Level 4)

The examples above are directed at young children, but Blank's work also has application with older children. The following examples are based on work the authors have conducted in a Year 3 classroom. It is part of a writing unit and this is the pre-writing activity. The first example is the "usual" dialogue between a Year 3 child and the class teacher, involving a conversation about fishing. The stimulus was a picture of four children fishing in a fast flowing stream.



Initial dialogue between teacher and child

Speaker	Dialogue
Teacher	Four friends go fishing. One catches the most fish.
Child	Yeah.
Teacher	Why do you think one of the children caught the most fish?
Child	Because of the spot he's standing in.
Teacher	What about that spot?
Child	I don't know.

The second example below reports the same teacher's questions of the same child a few days later, but this time the questions used have been organised by Blank's levels.

Dialogue questions used between teacher and child

Levels	Dialogue questions of the teacher
1 Description	Where are the shady spots? Where is the water moving fastest? What is the time of day?
2 Classifying (focus on comparison)	What bait are the different people using? How do the rods differ? How are the water and the spot different for each person?
3 Retelling/Reordering	Have you gone fishing? Were you successful? How different is it to river fishing in this?
4 Abstract/Inference	Why do you think one of the children caught the most fish?

In response to each question, in the second example the child was able to provide more expanded and reasoned responses. In terms of the final "why" question, the child was able to give an elaborate response along the lines of: "the one who caught the most fish had the right rod and bait for the river, and looked at the water to guess where the fish were to be found."

One of the core differences between the two examples is the dialogue interactions. In the first example, the "why" question came too quickly for the child to engage with the task. The child had not been given the "cognitive" time to think and reason about the topic, to retrieve the relevant background information, or to relate to the event and connect with the task and the picture.



This was achieved more in the second dialogue interaction and with the teacher applying Blank's levels of dialogue and language/reasoning levels.

Conclusion

How to advance the early and ongoing language development of young children has been the topic of this paper. While there are no *magic* solutions, the paper outlines some general guidelines to facilitate children's vocabulary and language development. A core theme in the paper is the need to have young children's talk encouraged, accepted, and respected. This talk is the most authentic place to begin child and adult dialogue that is purposeful and designed to build the child's vocabulary, concepts, reasoning and understandings of the topic being discussed.

Marion Blank's levels of language are reviewed as a theory that links children's language and their reasoning together. The evidence is that engaging with children in a positive dialogue learning context, as outlined by Blank and her colleagues (Blank 2002; Blank & Franklin, 1980) directly facilitates children's vocabulary and language development along with their cognitive and reasoning development. That is, children's "errors" in using the language associated with a topic reflects their stage of reasoning with that topic and so become the "window of opportunity" to advance the children's language and reasoning. Furthermore, if children perceive that their talk is valued and expanded on they are less likely to remain silent and so advance in their language and reasoning development. If, however, children perceive that their talk is not valued and restricted they are more likely to remain silent and even regress in their language and reasoning development.

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