Word and print awareness in 4-year-old children

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Abstract

Word and print awareness comprise key elements of young children's emergent literacy development. There are currently few assessment instruments for examining preschool children's skills in these areas. This article describes two informal measures that may be used to examine word and print awareness in preschool children. Results of administering these measures, referred to as the Preschool Word and Print Awareness assessment, to 30 typically developing preschool children are presented. This protocol as well as the developmental observations presented may be useful to early childhood educators and speech-language pathologists who wish to examine young children's emergent literacy knowledge.

Introduction

By 6 years of age, most children demonstrate fairly sophisticated levels of emergent literacy knowledge. Important reading prerequisites are reflected in preschool children's emerging abilities to recognize environmentally embedded and contextualized print, to understand the form and function of print, and to perceive the relationship between speech and print (Mason, 1980; Hiebert, 1981; Goodman, 1986; Dickinson and Snow, 1987). These and other emergent literacy abilities form the foundation for young children's forthcoming entrance into conventional literacy instruction.

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Preschoolers who do not have these requisite emergent literacy skills may have difficulty meeting the subsequent and rigorous demands of formal literacy instruction. Preschoolers who are judged at-risk for delayed attainment of emergent literacy include children with language impairment (Gillam and Johnston, 1985; Boudreau and Hedberg, 1999; Ezell *et al.*, 2000), children reared in poverty (Dickinson and Snow, 1987; Chaney, 1994), children with developmental disabilities (Koppenhaver *et al.*, 1991; Saint-Laurent *et al.*, 1998), and children learning English as a second language (Snow *et al.*, 1998). Young children with language impairment, for example, demonstrate sufficiently less skill in recognizing commonly occurring environmental print (e.g. 'Coke' and 'Band-aid') compared with typically developing peers (Gillam and Johnston, 1985). Delayed attainment of such skills may serve as warning signals for later difficulties in higher level literacy development. As such, speech-language pathologists and early childhood educators have been encouraged to identify preschool children experiencing delayed emergent literacy acquisition and to provide intervention addressing emergent literacy (Katims, 1991; Mogford-Bevan and Summersall, 1997; Boudreau and Hedberg, 1999; Ezell *et al.*, 2000; Justice and Ezell, 2000).

The literature provides descriptions of emergent literacy skills that are important prerequisites for conventional literacy (Mason, 1980; Snow, 1983; Teale and Sulzby, 1986; Dickinson and Snow, 1987; Adams, 1990; Chaney, 1992). Several key areas include print awareness, word awareness, and phonological awareness. Print awareness refers to children's ability to recognize the function and form of print and the relationship between oral and written language (Mason, 1980; Hiebert, 1981; Goodman, 1986). Word awareness describes children's ability to recognize words as discrete elements of both print and speech and to discern the relationship between written and spoken words (Tunmer *et al.*, 1983; Bowey *et al.*, 1984). Phonological awareness describes young children's ability to identify and manipulate the sounds of a language (Lundberg *et al.*, 1988; Ball and Blachman, 1991; Ball, 1997). Skills across all three dimensions are acquired, for the most part, incidentally and gradually during the preschool period.

In recent years, considerable attention has been directed towards young children's acquisition of phonological awareness. Word and print awareness, in contrast, have received substantially less attention in the developmental literature. This is not to say that these skills are not important. Longitudinal studies have shown that word and print awareness serve as key predictors of later reading achievement (see

Adams, 1990, for discussion) and comprise important elements of the foundation of emergent literacy knowledge (Stuart, 1995).

Most studies examining preschool children's word awareness have focused on children's concept of word within oral contexts. Enquiries have addressed, for example, children's ability to handle word-referent discrimination (Bowey *et al.*, 1984; Chaney, 1992), to understand the meaning of the term *word* (Bowey *et al.*, 1984), and to segment orally presented strings of words (Tunmer *et al.*, 1983; Chaney, 1992, 1994). Such studies have shown that preschool children readily make sophisticated metalinguistic judgements about words, including the ability to discriminate words from sounds and the ability to segment spoken utterances into their respective word elements (Tunmer *et al.*, 1983; Chaney, 1992; Bowey *et al.*, 1984). To date, however, there are limited empirical data regarding preschoolers' word awareness in written language contexts. Word awareness in written language contexts is a necessary competency for beginning reading development, with the concept of word fingerpointing tasks comprising a key element of early reading instruction (Clay, 1979; Invernizzi *et al.*, 2000).

In contrast to the dearth of research on word awareness in written language contexts, a number of studies have addressed preschoolers' attainment of print awareness, or 'print literacy' as it has been referred (Mason, 1980; Hiebert, 1981; Snow, 1983; Goodman, 1986; van Kleeck and Schuele, 1987; Chaney, 1992). Like word awareness, print awareness gradually emerges within the preschool period. Print awareness reflects children's emergent abilities to think about and interact with written language, thus representing children's growing understanding of the form and function of print. The understanding that print carries meaning emerges between the third and fifth year of life, as demonstrated in Mason's (1980) examination of the development of print literacy in 4-year-old children. Mason has asserted that at this time, children undergo a striking transformation in which independent and self-motivated interactions with print exponentially increase: for example, children begin to use print as a communication device, to recite the alphabet, and to recognize letters and words occurring in print. Development of such skills within the preschool period is an important predictor of later reading achievement (Adams, 1990; Stuart, 1995).

Word and print awareness, along with phonological awareness, are viewed as key building blocks for conventional literacy. Both early childhood educators (Snow *et al.*, 1998) and speech-language pathologists (American Speech-Language-Hearing Association [ASHA],

2000) have been encouraged to address these skills in prevention, assessment, and intervention activities A problem faced by educators and therapists, however, is that there are few formal or informal measures available by which to examine preschool children's word and print awareness. Many educators may thus feel limited in their ability to include a systematic emergent literacy focus when working with young children because of the lack of measures by which they may quantitatively or qualitatively examine children's abilities.

The purpose of the present article is to describe a measure that may be used to examine preschool children's word and print awareness, and to provide descriptive data on the performance of a small cohort of preschool children. This measure, the Preschool Word and Print Awareness assessment (PWPA), utilizes the early literacy assessment approach devised by Marie Clay. Specifically, Clay developed the Concepts about Print test (CAP), an informal assessment often used to identify and remediate early reading problems in school age children (Clay, 1979). Clay's 24-item test examines beginning readers' knowledge of print and book reading conventions, such as left-to-right directionality of print, and their emergent knowledge about the nature of letters, words, and other print symbols (e.g. punctuation marks). CAP tasks are administered within the context of an examiner–child shared book reading session using two books authored by Clay, which are available in English and Spanish versions. These books were designed specifically to elicit children's knowledge about written language.

The CAP has been used widely by researchers to provide both qualitative and quantitative indices of preschool children's emergent literacy knowledge with respect to word and print awareness (Harris, 1986; Dickinson and Snow, 1987; Chaney, 1992, 1994; Stuart, 1995; Boudreau and Hedberg, 1999). A key limitation in using the CAP in this manner, however, is that it was not developed for use with children of preschool age. Rather, the CAP protocol was designed for use with children demonstrating difficulties in the early stages of reading instruction – that is, children in first or second grade (Clay, 1979). This suggests that Clay's protocol, although useful for characterizing the strengths and weaknesses of beginning readers, may not be the method of choice for characterizing word and print awareness in preschool children.

The objectives of this article are twofold. The first objective is to present a measure of emergent literacy that may be used to quantitatively and qualitatively characterize word and print awareness in preschool children. This protocol was influenced by the work of Marie Clay, and

particularly, her CAP test. The second objective is to provide descriptive findings regarding preschool children's performance on specific word and print awareness tasks included in the measure. The assessment protocol described herein can be readily administered and interpreted by early childhood educators and assistants as well as by speech-language pathologists in order to link emergent literacy enhancement activities to knowledge of children's skills.

Methods

Participants

Thirty 4-year-old children were administered the PWPA. The children (18 females, 12 males) ranged in chronological age from 3;11 to 5;1, with a mean age of 4;6 (SD = 4 months). All participants were assessed prior to their enrolment in an emergent literacy enhancement programme (Justice and Ezell, 2000) and were recruited through day care centres, preschools, and public library story-times.

To be eligible for participation, children were required to pass a bilateral hearing screening (25 dB at 500, 1000, 2000, and 4000 hertz), to speak English as a first language and be residing in homes in which English was the primary language spoken, and to achieve standard scores of 85 or greater on the Peabody Picture Vocabulary Test – Revised (Dunn and Dunn, 1981) and the Expressive One-Word Picture Vocabulary Test – Revised (Gardner, 1990). In addition, the children were required to have no known history of speech-language, motor, or neurological impairment, as determined through a parent questionnaire. Participant characteristics are presented in Table 1.

General procedures

Assessments were conducted in families' homes or on the university campus, with location based solely on parental preference. After the eligibility procedures were completed, the PWPA was administered by the first author to each child in a single session that lasted about 25 min. No praise or feedback was provided to children during assessment, although reinforcement for on-task behaviour was permitted as needed. The children's parents were asked to wait in a separate room for the duration of the assessment to ensure that parents would not prompt or otherwise mediate children's responses. Assessments were conducted over a 6-week period for the 30 participants.

Table 1 Participant characteristics (n = 30)

Measure	Mean	SD	Range
Chronological age (months)	54	4	47–61
Receptive vocabulary	107	10.7	88–128
Expressive vocabulary	112	17.1	85–138

Note: Receptive vocabulary = standard score on Peabody Picture Vocabulary Test – Revised (Dunn and Dunn, 1981). Expressive vocabulary = standard score on Expressive One-Word Picture Vocabulary Test – Revised (Gardner, 1990).

The PWPA was designed in a manner consistent with Clay's model (1979) of literacy assessment via interactive engagement between examiner and child. In this study, children were presented a series of tasks embedded within the context of a shared storybook reading routine. To initiate the PWPA tasks, children were told that they would be reading several books with the examiner and that they would need to help her read. Subsequently, each child was presented with a total of 26 tasks and their performance was scored on-line.

Materials

Materials included equipment for audio-recording assessment sessions and the PWPA. All assessment sessions were recorded in their entirety using a portable tape recorder and 60-min high-fidelity cassettes.

The PWPA. As previously noted, development of the PWPA was influenced by Marie Clay's protocol for early literacy assessment, as represented in the CAP (Clay, 1979). However, the PWPA differs from the CAP in two principal ways. First, the PWPA focuses specifically on those emergent literacy skills that are in the process of maturing in children of preschool age. Items were developed by adapting several items from Clay's CAP and by devising new tasks based on descriptive observations in the literature of preschool children's emergent literacy knowledge (Adams, 1990; Snow *et al.*, 1998). Second, the PWPA is administered using commercially available, conventional children's storybooks, whereas administration of the CAP requires special storybooks developed by Clay.

The PWPA comprises two measures: Words in Print and Print Concepts. Each measure uses a different storybook to administer a series of tasks. Words in Print was administered using the book *Spot Bakes a Cake* (Hill, 1994), whereas Print Concepts was administered using *Nine Ducks Nine* (Hayes, 1990). These two storybooks were selected for use in the PWPA for several reasons. Both books feature large narrative print,

which is an important feature when asking children to interact with and respond to print. Moreover, both texts feature numerous instances of print embedded within the illustrations. This quality allows for examination of children's responsiveness to and interactions with contextualized print. Both books also feature large, colourful illustrations and an engaging storyline. These aspects encourage children's engagement in the assessment activities.

Variations of both PWPA measures have been used in a number of studies by the present authors (Ezell and Justice, 1998, 2000; Ezell *et al.*, 2000; Justice and Ezell, 2000, in press). A copy of the PWPA is included in the Appendix. Neither book was owned by any of the children in the present study, as indicated by a parent questionnaire.

Procedural fidelity

All PWPA assessments were conducted by the first author. To ensure her consistency in providing directions, sequencing tasks, and providing feedback during task administration, session audiotapes were examined so that procedural fidelity could be determined. A trained research assistant randomly selected and independently scored eight (27%) of the 30 assessments to calculate a fidelity score. Specifically, this assistant listened to the audiotapes of assessment proceedings and marked items on a checklist to objectively monitor the administrator's delivery of task instructions (that all children received the same set of instructions), the sequence in which tasks occurred (that all children received the tasks in the same order), and the extent to which feedback was provided (that no children received praise or feedback for performance). A fidelity score was calculated by dividing the number of points attained by the total number of points possible. Scores ranged from 96 to 100%, with a mean score of 99%, indicating a high level of uniformity in test administration across individual children.

Results

In the present study, the PWPA was administered to 30 typically developing preschool children. Results are presented by first describing children's performance on the Words in Print portion of the PWPA. Subsequently, children's performance on the Print Concepts portion is described. Descriptive findings (mean, standard deviation, range of scores) are presented for each measure and for individual tasks.

Words in Print

The children averaged 30% accuracy on Words in Print; individual scores ranged from 0 to 67% (SD = 16%). This indicates considerable variation in children's performance on this set of tasks. Several children performed with generally high levels of skill (i.e. percentage correct of greater than 50%), whereas other children performed with low levels of skill (i.e. percentage correct of fewer than 10%).

Table 2 details the children's performance on individual Words in Print tasks. As can be seen from these data, there was considerable variation in children's performance across tasks. To illustrate, the majority of children (n = 24) accurately discriminated words occurring in large font ('big words') from words presented in small font ('little words'). This refers to the third task, which examined children's ability to visually discriminate words comprising the narrative text from words that were contextualized in the illustration. Nearly half of the children (n = 12) were able to accurately represent the number of words depicted in contextualized presentations; that is, 12 children accurately identified the number of words occurring in a string of words.

On other items, few children performed with proficiency. The first task asked children to point to just one word on the page, whereas the fourth task asked children to point to the first word on the page. Less than 20% of the children performed accurately on either of these two tasks. None of the children were able to perform accurately on a task requiring them to point to the last word on a page.

Table 2 Summary of children's performance on word awareness subtest of PWPA (n = 30)

Item	Children responding correctly (%)	(*N*)
1) Show me just one word on this page.	0.10	3
2) Show me where the little words are on this page.	0.63	19
3) Show me where the big words are on this page.	0.80	24
4) Show me the first word on this page.	0.13	4
5) Show me the second word on this page.	0.17	5
6) Show me the very last word on this page.	0.00	0
7) How many words are on this sign? [3]*	0.40	12
8) How many words does the mouse say? [1]	0.40	12
9) How many words are on this page? [5]	0.17	5
10) Show me the longest word.	0.23	7
11) Show me the space between two words.	0.37	11
12) Point to the words as I read.	0.27	8

*The correct response is bracketed.

Descriptive observations of performance on the Words in Print tasks suggested that many of the children demonstrated considerable difficulty in discerning letters from words or discerning words comprising strings of words. Such observations in tandem with quantitative indices suggested incomplete knowledge of preschoolers' concept of word in written language contexts. On the first task, for example, in which children were asked to point to just one word on the page, only three children were able to do so. Qualitative observations of the other children's performance indicated that most either pointed to just one letter or ran their finger along all words on the page. Similarly, on other tasks requiring children to identify the number of words depicted in a string of words, less than half of the children responded accurately (see tasks 7–9). For those youngsters who were not able to respond correctly, observations indicated that these children were counting letters, not words. This suggested that they did not fully understand the difference between the terms 'letter' and 'word'.

Print Concepts

The children averaged 55% accuracy on Print Concepts, with individual scores ranging from 17 to 83% accuracy (SD = 15%). Table 3 shows children's performance on individual Print Concepts tasks. Similar to the

Table 3 Summary of children's performance on print awareness subtest of PWPA (n = 30)

Item	Children responding correctly (%)	(N)
1) Show me the front of the book.	0.97	29
2) Show me the name of the book.	0.80	24
3) What do you think it says [the title]?	0.67	20
4) Where do I begin to read?	0.23	7
5) Then which way do I read?	0.50	15
6) Show me where one of the ducks is talking.	0.17	5
7) Do I read this page (left) or this page (right) first?	0.80	24
8) Which line do I read first on this page?	0.67	20
9) Which line do I read last on this page?	0.43	13
10) Why are all these words in the water?	0.17	5
11a) Show me just one letter on this page.	0.87	26
11b) Show me the first letter on this page.	0.37	11
11c) Show me a capital letter.	0.13	4
12) Where does it say 'stupid ducks'?	0.53	16

results for Words in Print, children's performance varied substantially across tasks. On several tasks many children performed accurately, whereas on other tasks few children performed with proficiency. Tasks performed with the highest degree of accuracy included identifying the front of the book (n = 29), the title of the book (n = 24), and the left-to-right sequence of page reading (n = 24). Likewise, many children were able to attribute appropriate meaning to the title of the book (n = 20) and to indicate the line of text that is read first on a page (n = 20). In contrast, only 23% of the children were able to indicate that reading begins on the first word of the top line, and 13% of the children were able to discriminate a capital letter.

Discussion

This article described an informal measure that we have used to examine preschool children's word and print awareness. Also included were findings from administering this measure to a cohort of 30 typically developing preschool children. This provides the reader with a preliminary view of how 4-year-old children may respond to these tasks. Descriptive findings indicated considerable variation in individual children's performance on the two measures comprising the PWPA. Findings also suggested that children acquired many print concepts earlier than word concepts, although it was evident that mastery had not been achieved on either set of tasks.

While informative, these findings were not particularly surprising, in that it was expected that considerable variation would occur across children and across tasks. The literature has clarified several important points regarding preschool children and emergent literacy. First, emergent literacy knowledge differs vastly across individual children, with skill levels mediated by experiential and developmental characteristics of the child (Mason, 1980; Goodman, 1986; Chaney, 1992). Secondly, there is a developmental progression in young children's development of word and print awareness (Hiebert, 1981; Lomax and McGee, 1987). Some skills are necessarily mastered prior to other skills. For example, the ability to discriminate broad features of print ('big' words from 'little' words) should precede the ability to discriminate fine features of print (upper-case from lower-case letters) (Badian, 2000). What is also important to note is that performance observations indicated that many children readily made fine (albeit inaccurate) metalinguistic judgements regarding the discrete nature of written language and the form and function of print.

As previously noted, early childhood educators and speech-language pathologists have been encouraged to take a proactive approach in their efforts to prevent, identify, and remediate emergent literacy problems in children of preschool age. The impetus for this line of thought is the view that addressing literacy problems early may provide a vehicle for reducing reading failure in children at risk for reading difficulties (Snow *et al.*, 1998). The extent to which educators and speech-language pathologists are able to address emergent literacy problems is, of course, mediated by their access to tools for examining these skills in preschool children.

Observations of children's performance on PWPA tasks may be used to serve several pedagogical purposes. The PWPA may be used as part of a classroom literacy screening programme or as part of a comprehensive oral/written language assessment in order to characterize strengths and weaknesses in children's emergent literacy knowledge. Results may also be used to guide short- and long-term emergent literacy goal development for individual children based on their PWPA performance profiles. Likewise, the PWPA may also be used to monitor the efficacy of emergent literacy intervention implemented in either the classroom of the clinic.

To illustrate, Ezell and colleagues (2000) recently used a version of Print Concepts to guide development of print awareness goals for preschoolers with language impairment enrolled in a clinic-based parent–child book reading programme. Children were individually administered the Print Concepts at the start of the programme, and goals were developed for children based on tasks that they were unable to perform. Parents were coached in ways to directly enhance their children's mastery of these skills during shared book reading interactions. After a 5-week intervention period, children were re-administered Print Concepts to document progress towards their goals. This profile of our use of the PWPA illustrates how informal knowledge of children's task performance may provide an integral component to intervention planning and delivery.

Several limitations of the present study should be noted. First, the PWPA described has not been empirically scrutinized in terms of psychometric quality. That is, the present battery has not been systematically analysed in terms of predictive validity nor concurrent validity with other measures of emergent or conventional literacy. Along similar lines, considerable variability in children's performance was observed in the present investigation, suggesting the need for possible revision of the print and word awareness tasks to more validly represent the emergent literacy skills of children in this age range. Thus, results of

the PWPA should be viewed as informal skill indices. Second, it is also important to note that the present sample included only typically developing children. The utility of these measures for characterizing word and print awareness in children judged at-risk for emergent literacy development has yet to be determined. Third, this sample comprised only 30 children. The PWPA needs to be administered to a larger group of children before any developmental norms or expectations can be derived. In addition, it also should be noted that the assessment was given to 4 year olds only. Replication of this work with children of other ages (e.g. 3 and 5 year olds) is needed to see more clearly how these skills emerge.

In summary, these limitations suggest several key areas in which research is clearly needed. Presently, there are few measures for examining word and print awareness in preschool children. The lack of such measures presents an important barrier to early childhood educators' and speech-language pathologists' ability to prevent, assess, and remediate emergent literacy problems. It is important that emergent literacy measures targeting key areas of development are developed and refined and that the utility of these measures for assessing and monitoring word and print awareness in at-risk preschoolers be determined. To this end, adaptations of PWPA tasks used should be investigated for their effectiveness in accurately and validly representing the emergent literacy knowledge of preschool children. Access to tools that provide accurate representations of children's emergent literacy abilities can help educators and speech-language pathologists take a proactive approach towards helping all children become skilled readers.

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[*Appendix appears overleaf*]

PWPS: Preschool Word and Print Awareness Assessment*

L.M. Justice and H. K. Ezell

Child (First and Last): _____ Date: __/__/__

Gender: __M __F Birthdate: __/__/__ Examiner: _____

PART 1: PRINT CONCEPTS

DIRECTIONS: Present the following tasks in the order depicted below. Use the book Nine Ducks Nine (Hayes, 1990). Read the text presented on the page and then administer the task. Each item may be repeated one time. Do not prompt or reinforce the child in any way.

SAY: *We're going to read this book together, and I need you to help me read.*

_____ 1. Front of book	**Cover:** ***Show me the front of the book.*** 1 pt: turns book to front or points to front.
_____ 2. Title of book	**Cover:** ***Show me the name of the book.*** 1 pt: points to one or more words in title
_____ 3. Role of title	**Cover:** ***What do you think it says?*** Child's response: _____ 2 pt: says 1 or more words in title or relevant title 1 pt: explains role of title ('tells what book's about')
_____4. Print not pictures	**Page 1-2:** ***Where do I begin to read?*** 2 pt: points to first word, top line 1 pt: points to any part of narrative text. **CUE:** If child does not answer correctly, put finger on first word in top line. Say: ***I begin to read here.***

* Several tasks were adapted from M. Clay (1979). *The early detection of reading difficulties: A diagnostic survey with recovery procedures*. Exeter, NH: Heinemann.

_____5. Directionality	**Page 1-2**: ***Then which way do I read?*** 2 pt: sweeps left to right 1 pt: sweeps top to bottom
_____6. Contextualized print	**Page 3-4**: ***Show me where one of the ducks is talking.*** 1 pt: points to print in pictures
_____7. Directionality (left to right)	**Page 5-6**: ***Do I read this page (point to left page) or this page (point to right page) first?*** 1 pt: points to left page
_____8. Directionality (top to bottom)	**Page 7-8**: ***There's four lines on this page (point to each). Which one do I read first?*** 1 pt: points to top line **CUE** If child does not answer correctly, put finger on first line. Say: ***I read this one first.***
_____ 9. Directionality (top to bottom)	**Page 7-8**: ***Which one do I read last?*** 1 pt: points to last (bottom) line
_____10. Print function	**Page 9-10**: **CUE** ***Point to the words spoken by the ducks in the illustration.*** ***Why are there all these words in the water?*** Child's response_____ 1 pt: tells that words are what ducks say or equivalent
_____11. Letter concept	**Page 11-12:** **A.** ***Show me just one letter on this page.*** 1 pt: points to one letter **B.** ***Show me the first letter on this page.*** 1 pt: points to first letter **C.** ***Now show me a capital letter.*** 1 pt: points to capital letter
_____12. Print function	**Page 23-24**: ***And the fox says "stupid ducks." Where does it say that?*** 2 pt: points to fox's words 1 pt: points to other print

PRINT CONCEPTS SCORE

Raw Score: Add the numbers in 1 – 12.	**Raw Score:**	_____/12
Percentage Correct: Divide raw score by 12.	**Percentage Correct:**	_____%

PART 2: WORDS IN PRINT

DIRECTIONS: Present the following tasks in the order depicted below. Use the book Spot Bakes a Cake (Hill, 1994). Read the text presented on the page and then administer the task. Each item may be repeated one time. Do not prompt or reinforce the child in any way.

SAY: *We're going to read another book together. Just like before, I need you to help me read.*

_____ 1. **Page 1-2** ***Show me just one word on this page***
1 pt: points to one word on page.

CUE *I see some big words on this page and some little words. Some are big and some are little.*

_____ 2. **Page 1-2:** ***Show me where the little words are on this page***
1 pt: points to one or more little words on page

_____ 3. **Page 1-2:** ***Now show me where the big words are on this page.***
1 pt: points to one or more big words on page

_____ 4. **Page 3-4:** ***Show me the first word on this page.***
1 pt: points to first word

_____ 5. **Page 3-4:** ***Show me the second word on this page.***
1 pt: points to second word

_____ 6. **Page 3-4:** ***Now show me the very last word on this page.***
1 pt: points to last word

_____ 7. **Page 5-6:** ***How many words are on this sign?***
1 pt: says 'three'

_____ 8. **Page 9-10:** ***How many words does the mouse say?***
1 pt: says 'one'

_____ 9. **Page 11-12:** ***[cover up the words on page 12 and track the words on page 11] How many words is this?***
1 pt: says 'five'

_____ 10. **Page 13-14:** ***[cover up the words on page 14 and track the words on page 13] Show me the longest word on this page.***
1 pt: points to 'decorate'

_____ 11. **Page 17-18:** ***Show me the space between two words.***
1 pt: points to space

_____12. **Page 21-22:** ***Point to the words as I read.***
1 pt: word by word pointing (all three words for credit)

WORDS IN PRINT SCORE

Raw Score: Add the numbers in 1 – 12.
Percentage Correct: Divide raw score by 12.

Raw Score: ____/12
Percentage Correct: ____%

PWPA
Performance Summary

PART 1: PRINT CONCEPTS

Raw Score _____
Percentage Correct _____

PART 2: WORDS IN PRINT

Raw Score _____
Percentage Correct _____

Observations: _____