



EnJourMe (English Journal of Merdeka):

Culture, Language, and Teaching of English

Journal homepage: <http://jurnal.unmer.ac.id/index.php/enjourme/index>

Understanding the reading process: Insights from a second grade English language learner

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ARTICLE INFO

Article history:

Received 07 March 2020

Revised 06 April 2020

Accepted 08 April 2020

Available online 23 July 2020

Keywords:

reading process

reading activity

reading theory

literacy

English language learner

DOI: 10.26905/enjourme.v4i2.4036

How to cite this article:

Parlindungan, F., Rifai, I., & Sandy, F. (2020). Understanding the reading process: Insights from a second grade English language learner. *EnJourMe (English Journal Of Merdeka): Culture, Language, And Teaching Of English*, 5(1), 1-15. doi:10.26905/enjourme.v5i1.4036

ABSTRACT

The objective of this paper is to make a theoretically informed judgement about how a child processes a text in a reading activity. A second-grade English language learner participated as the subject of this study and was observed for five times of one-on-one guided reading condition (30 minutes each). The observation focused on what happened when the child read, how and what changes occurred over time. We also focused on the individual differences and the role of knowledgeable others in helping the child processed the texts. We took notes on observable behaviors in reading processing, including monitoring activities, self-correction behaviors, and problem-solving strategies. The findings suggest some critical arguments, including (1) reading is a problem-solving activity involving multiple knowledge sources, (2) self-correction in reading is as a sign of progress, and (3) reading progress from novice to expert occurs in different path system.

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1. Introduction

Many experts in the field of reading have conducted studies to construct theories of reading that follow particular paradigm such as cognitive, (see e.g. Chall, 1983; Rumelhart, 1994; Samuels, 1994) or sociocultural perspective (see e.g. Rudell & Unrau, 2013). Some may also exhaustedly study reading in the account of language socialization and literacy practices that consider diverse settings, parents' role, and various available texts (see e.g. Heath, 1983; Ochs & Schieffelin, 1984). Different epistemological stances of understanding reading influence reading researchers in many ways, including in their definition of reading.

For instance, with the emphasis of context or a larger social and political dimension, reading is defined as an event or a transaction involving particular reader and text, which occur at a particular time in a particular context (Rosenblatt, 2013). Reading is not only an accumulation of skills necessary to comprehend texts and to be success in school, but also a situated practice that emphasizes the role of language in positioning speakers and their texts within the heterogeneity of social positions and worldviews that operate in any culture, including issues of race, gender, class, and power (Grant, Wong, & Osterling, 2007). However, a good theory of reading should be able to explain change over time, how a reader goes from novice to an expert, what propels change, individual differences or variation in progress, and role of the knowledgeable others.

The objective of this paper is not to argue that particular line of research, whether cognitive or sociocultural paradigm, is more superior to the other. Instead, we would like to highlight theoretical frame, especially that focuses on how young readers process text in their head to account progress during literacy acquisition. That being said, it is important to consider a definition of reading by Clay (2001):

Reading is a message-getting, problem solving activity, which increases in power and flexibility the more it is practiced and it is complex because 1) within the directional constraint of written language attention to 2) verbal and 3) perceptual behaviors is 4) purposely directed 5) in some integrated way 6) to the problem of extracting a sequence of cues from a text 7) yield a meaningful and specific communication. (p. 102)

The aforementioned definition emphasizes problem-solving and decision-making elements, and that reading is a complex process that might require abundant of efforts involving perceptual knowledge, prior knowledge, and motivation of the readers. When young readers first encounter print, they must be able to integrate word and letter perception simultaneously to make meaning of what the print says (Rumelhart, 1994). It challenges bottom-up view of reading to which the processing of word is delayed until further processing of letters has been accomplished.

In the remainder of this article, we describe how a second-grade student, under the pseudonym Daniel, progresses over time in his learning to read. First, we explain the research method on how the data was collected and analyzed. Then, we present the findings and discussion that are divided into three themes; (1) reading as a problem-solving activity involving multiple knowledge sources, (2) self-correction in reading as a sign of progress, and (3) reading progress from novice to expert in different path system. Finally, we conclude the paper with some suggestions for future researchers and for practitioners.

2. Method

This study employed qualitative research method. We used observation, field note, and documentation as tools for data collection. The instrument for observation was based on Clay's (2013) observation survey of literacy achievement (see Appendix 1). The subject was a second-grade student who was learning English as a second language. He enrolled in an elementary school situated in the suburb Midwestern area of the United States. His name is called pseudonym in this study as Daniel. According to his classroom teacher, Daniel was a developing reader in his class compared to his peers, but was not a struggling reader. His instructional reading level was at level F, meaning that he could read independently by his own. He was beginning to understand and notice the differences between different types of books. He could read dialogue between characters (when characters talk) and could automatically recognize a large number of sight words.

We drew upon five times of one-on-one observation data (30 minutes each) of Daniel's reading to explain what happened when he read, how and what change occurred over time, the characteristics of individual difference and the role of knowledgeable others in helping him read the text. During the observation, we focused on the observable behaviors in reading

processing, including monitoring or noticing and searching while reading, self-correction behavior, and problem-solving activities. The gathered data were then analyzed qualitatively by grouping similar data into the same categories and reducing all irrelevant data out of the categories (negative case analysis).

3. Results and discussion

3.1. Reading as a problem-solving activity involving multiple knowledge sources

Reading activity entails a complex process requiring control of various skills. According to Clay (2001), when children read texts, they link everything they know from different knowledge sources (visual, auditory/phonological, movement, speaking/articulating, and knowledge of the language). This act of reading involves problem-solving activity, which uses different knowledge sources and makes different decision to respond to the text. It is in line with Rumelhart (1994) who argued that reading is not simply bottom-up process, from decoding-to-meaning, it involves “simultaneous joint application of all the knowledge sources” (p. 732). The knowledge sources that a child needs to be able to read a text are: (1) symbols and their features, (2) letter knowledge, (3) letter cluster knowledge, (4) word knowledge, (5) syntactic knowledge, and (6) semantic and discourse knowledge. With supports from the knowledgeable others, readers might be able to know how and when each kind of information can help with the decisions to read the text.

Clay (2001) also noted that “children make the print-to-language link only when they work from visual features in the print in reading text” (p. 174). As they search many inputs from the print, they rely on what is stored in the various knowledge sources, and then linked up those sources for making decision. Young readers accumulate implicit awareness of what kinds of words or letter sequences tend to occur in print, and then they string words together trying to find the acceptable phrasing.

Consider the following excerpts from Daniel’s reading, “Eat like a pig”.

Daniel : Pig sipped.
Text : Pig sipped.

Daniel : Poodle slur- ((stretching out)) slurp. Slurped. ((Looking at the picture))
Text : Poodle slurped.

Daniel : Pig and Poodle talk ((pointing)) talked? ((pause)) Poodle talked.
Text : Pig and Poodle talked.

Daniel : Pig chewed before he talked. ((Looking at the above line)). Talked.
Text : Pig chewed before he talked.

Daniel successfully read suffix –ed together in the word ‘sipped’ /sip/, but then he encountered difficulty to pronounce ‘slurped’ /slɜrp/ and ‘talked’ /tɔk/. However, for the word ‘slurped’/slɜrp/ he used visual information and segmented the sounds to help him problem solved the difficulty, and he also segmented the sound in ‘talked’/tɔk/. He knew what to do when he found difficulty. In fact, Clay (2001) also argued that “young children who learn a few past tense verbs ending in ‘ed’ – ‘played’, ‘mowed’, ‘tipped’, ‘stopped’ – can be hard taking the risk of adding similar endings to novel words” (p. 127). Daniel, in this sense, used strategic activity to pick up information, works on it, make a decision, and evaluate the response.

Gough (1984), on the other hand, might explain that Daniel’s word recognition is mediated by his letter recognition. As he got the –ed in ‘sipped’, he could have applied the same sound to ‘slurped’ and ‘talked’. However, the data showed otherwise. Daniel’s word

recognition is not dependable on his letter recognition. He evaluated the word ‘slurped’ and ‘talked’ by searching for visual information that gave him access to all other sources of information and the alternative predictions from which his decision was made.

Other data from Daniel’s reading “A tree full of life” below confirmed similar argument.

- Daniel : This gain ((pointing)) gi-ant ((stretching out) giant. This giant tree has a strong trunk.
Text : This giant tree has a strong trunk.
Kid reads : Ko-ala ((stretching out)) koala? ((look at the picture)) Koala bear lives in this tree.
Text : Koala bear lives in this tree.

Considering an explanation from Adam’s (2013) theory of word recognition is that reading process occurs through simultaneously active and interactive coordination of four processors: phonological, orthographical, meaning, and context. She argued that “rather than diverting efforts in search of meaning, the reader’s letter- and word-wise processes supply the text-based information on which comprehension depends” (p. 803). However, Adam did not provide comprehensive explanation about readers’ decision making. It provides ground breaking insights on practice though, based on eye movement research, that speed and fluency of word recognition are important.

Moreover, based on Chall’s universal stages of reading scheme (1983), Daniel’s reading explained previously might fall in Stage 2 (Grade 2-3, Ages 7-8) or confirmation, fluency, ungluing from print. Children in stage typically concentrate on high frequency words, learn more complex phonic elements and generalizations. They also use context in reading and gain fluency and speed. Children in this stage need an environment that allows them having more opportunities to read as many as familiar books. However, Chall’s scheme of reading is not comprehensive enough to explain children’s revision during reading, particularly their autonomous efforts to become more attentive to different kinds of information in print as they confirm their decisions.

3.2. Self-correction in Reading as a Sign of Progress

Novice readers often self-correct themselves while reading, particularly in reading unfamiliar words or phrases. According to Clay (2001), self-correction can be used as an indicator to evaluate students’ progress in reading. Self-correction is when a reader misreads a text and stops and corrects the error without prompts or signals from others. A closer look at self-correcting behaviors can provide evidence that a child develops executive control over time. Daniel’s behaviors like stretching out the sound, pointing, pause, reformulation, and repetition are evidences that he knew he needed to achieve coherent, intelligible texts without the help of other persons. Again, Clay (2001) highlighted that “self-monitoring and self-correcting behaviors appear early, in the first attempts at text reading, and they persist as good indicators of changes in inner control of in oral reading for two or three years” (p. 126).

Goodman and Goodman (2013), in addition, consider self-correction as “unexpected responses cued by readers’ linguistic or conceptual cognitive structures” (p. 525). They proposed the term “miscue” to replace the term “error” because error contains negative connotation. A reader’s predicting and confirming strategies are evident in miscues. Miscues that result in semantically acceptable structures are confirmed as acceptable to readers and, therefore, are less likely to be corrected than those that are not acceptable or acceptable only with the immediately preceding text. This statement is quite in line with Clay (2001) in the sense that young readers move from print to meaning recursively at each decision point, and that when a word requires problem-solving young readers will shift among meaning, letters, sound, and structure. For example, Daniel’s substitution of ‘tree’s branches’ with ‘tree’s bark’ in the following excerpts, might be considered as semantically acceptable although the

author's intended meaning is changed. However, this finding needs further investigation to ensure Daniel's construction of meaning and process of comprehending. Questions, such as why did he make this miscue? Does it make sense in the context of this story or article? are worth confirming.

Since self-correction behavior is dependent on many things, such as text difficulty and type of text, it might be challenging to inform progress. Through careful and continuous observations though, teachers can understand, notice, and supportively respond to children reading progress (Clay, 2001). The following excerpts illustrate how different types of text, i.e. informative and narrative text, shape self-correction behaviors of Daniel. However, given limited times of observation that we conducted, it might be inconclusive to argue that Daniel's self-correction behavior in this particular context were determined by those conditions, but it might inform what teachers can do in this situation.

I asked Daniel to read "A tree full of life".

Daniel : Ko-ala ((stretching out)) koala? ((look at the picture)) Koala bear lives in this tree

Text : Koala bear lives in this tree

Daniel : It lies between the tree's bark ((pause)).

Text : It lies between the tree's branches

In his first attempt, Daniel stretched out the sound and used visual information to make sense of the word 'koala'. He then repeated the whole sentence as correctly appeared in the text. However, he did not self-correct the word 'branches' in the next line although it did make sense. Clay (2001) argue that children gradually attend to more than on kind of information to solve words and phrases, and then select a response to a particular word and seems to take visual, phonological and structural information and meaning into account, even when the solving fails. Now consider the excerpts below when he reads "Amira's petting zoo".

Daniel : Animal's petting zoo

Text : Amira's petting zoo

Daniel : Amir was at the zoo ((Checking the front page))

Text : Amira was at the zoo

Daniel : Amir paint – pass. "Piglets" ((Looking at the picture)) she said.

Text : Amira pointed. "Piglets!" she said.

Daniel : I'll never pet an animal," Amir mo-aned ((Stretching out)) moaned.

Text : "I'll never pet an animal," Amira moaned.

Daniel : He loves it, she exclaimed – explained, she explained.

Text : "He loves it!" she exclaimed.

Daniel was confused by the word 'Amira' and 'Animal' when he first read the book. He did not get 'Amira' though for the rest of the book. He substituted it with 'Amir' although he did check for visual information. He also substituted 'exclaimed' with 'explained' although he already got 'exclaimed' in his first attempt. Both of the examples above which are from two different reading events with two different types of text showed how self-correction is sometimes increased and decreased. It also showed how the problem solving and decision-making revolve around knowledge sources, which related to how fast the knowledge sources can identify information before pulling all the information into decision.

To this end, Clay (2001) suggest that in order to develop self-regulation of the students, teachers should teach students to learn how to pick up information, link them, and

check a decision. Teachers' language, such as "have a go", "you try it", "does it make sense?", "does it look right?" might invite students to process the text and check their decision. It will help students establish strategic behaviors needed to do all correct readings.

For more perspective, Anderson and Kaye (2017) argued that observing allows teachers to think of their teaching decision and give the students more time for critical independent decision-making. For instance, when teachers combine finding the error for the child with fixing it, learning may be difficult. Young readers sometimes need to read the whole sentence before realizing that their initial attempt was incorrect as seen in Daniel 'Amira' vs. 'Animal'. If we distracted Daniel's first attempt by fixing the error, we might have avoided him to self-monitor his reading. Teachers' appropriate response to the errors is more important in learning to read, especially when it deals with directional rules or some sense of position and movement on the page (Clay, 2001).

Additionally, Clay (2001) contended that the working system and knowledge source of young readers develop over time with appropriate instruction. Teachers need to provide texts in the child's working system and at the same time challenge him or her to progress. It means that instruction can lift children up by providing materials that are slightly challenging and suitable language of instruction, i.e. prompts. In contrast to this notion, Chall (1983) mentioned that instruction is matched by the stages of children reading development. This view of development puts instruction in limited access to foster learning, that teaching children above their stage level cannot facilitate learning. If Daniel were in Stage 2 and he still needed more works to do to achieve qualitative change in this stage, instruction that lifts him into Stage 3, i.e. reading for learning the new might be impractical. In Stage 3 he might find more difficulty because in this stage children are expected to acquire critical reading skills; abilities to analyze different ideas in reading and respond critically to those ideas. To this end, let us consider the provision of how young readers change from novice to expert.

3.3. Reading Progress from Novice to Expert in Different Path System

Development of children reading can be described at micro level, micro-development. It is based on the underpinning theory of dynamic system in which the processes of change is investigated in moment-by-moment, not only the endpoints. Thelen and Corbetta (2002) argued that micro-development is a study of processes of change and, in particular, the changes on behavior that can be documented over relatively small-time scales" (p. 60). One of the major tenets of dynamic system theory is that there is relative stability of change. "For dynamic systems to change, they must become unstable" (p. 62). The unstable point of development is the heart of micro-development study as it to push the system into new types of behavior. Additionally, "behavior, at any level of analysis, is the cooperative assembly of multiple, contributing components, including both those that are part of the organism and those that constitute the environment in which the organism resides" (p. 61). It explains how components or human behaviors is constructed into variables that make an individual unique. Behavioral configuration can be seen in a system that exist continually in time, and that small changes can occur in one or more elements. It indicates that prediction to change in human development is nonlinear. Micro-development studies then focus on short time scales as a window to predict development into actual mechanism of change.

In line with the theory above, Clay (2001) argued that children take different path systems in their progress from novice to proficient. Change might occur with the increase of exposures to literacy activity, reading continuous texts, and appropriate instruction (Parlindungan, 2017). Clay (2001) underlined that the processing system of young readers is under construction with characteristics of slow working, linking, and deciding, but it is already available. This condition can change into rapid parallel processing by the help of knowledgeable others, particularly the teachers. Teachers need to provide opportunities for students to problem-solve text by building the working system. Teachers can recognize the change by looking at a word read by the students that are typically new, only just known, successfully problem-solved, easily produced, or known in many variant forms. From the example of Daniel's reading below (The big red sled), it can be seen that the processing of

familiar words becomes rapid and yielded simultaneous different features at once. However, when he encountered harder words, the process became sequential.

Daniel	: The big red slid --- sled. ((Holding the book))
Text	: The big red sled
Daniel	: Fred loves his sled.
Text	: Fred loves his sled.
Daniel	: He wants to take his sled to bed.
Text	: He wants to take his sled to bed.
Text	: "I'm sorry, Fred. The sled stays there"
Kid reads	: "I'm sorry, Fred. The sled stay ((stretching out)) stays there.
Text	: Fred is mad. He stomps upstairs
Kid reads	: Fred is mad. He stomps up ((pointing)) upstairs. ((looking at the picture))
Text	: Fred's dad snores while Fred's mom sleeps.
Kid reads	: Fred's dad snores ((stretching out)) while Fred's mom sleeps.

Other examples of slow processing can also be seen in the examples mentioned in previous sections. Clay (2001) suggested that teachers help the students on strategic behaviors to problem-solve difficulty, particularly in dealing with new texts. Novice readers can benefit through "contact with new items in print, new link to known features, new features of grammar, new vocabulary, or new ways of expressing things, grist for the mill of knowledge sources" (p. 129).

Unlike Clay (2001), Chall (1983) hypothesized that "individual's progress through the stages by interacting with their environment – the home, school, larger community, and culture" (p. 11). It indicates that if a child is stuck in Stage 1, initial reading, due to lack of exposure and experience gained from Stage 0, he or she might not be able to cope with Stage 2 or 3. However, if the act of reading is conceptualized as readers' response to the text, what they do during reading can be varied, even when they are at the same stage. What students bring to the text then are also varied if we consider together individual difference in knowledge about literacy and knowledge about the world, especially in early stage of reading. If the students' problem is lack of experiences and exposures to literacy, what we need to do is give them broad opportunities to read and write stories at an appropriate difficulty level, which then will broaden their ways of making decisions in each knowledge source (Clay, 2001; Parlindungan, 2019).

Learning itself is transformed by gaining children's attention and effort, and by providing helpful information in response to what they are able to do. Teachers can teach children to attend to visible items of reading (e.g. printed letters, words) by asking them to read in isolation. Teachers can also prompt children to attend to invisible items (e.g. phonological, structural, semantic) by asking questions, such as 'Would that make sense?' for meaning, or 'Can we say it that way?' for structure. Development in this view does not solely drive instruction. Instead, instruction is the heart of development, which is in line with Vygotskian perspective of development as cited in Wood (1998) that intelligence itself is the capacity to learn through instruction.

To this end, it seems that language used in instruction for Clay (2001) is crucial as it might solidify learning and thought. Language is not only a tool for instruction, but also as a mean by which self-regulation comes about (Wood, 1998). The interaction during reading as mentioned earlier, for example, serves as an instrument for teachers to understand what is happening in the head of the children when reading the text. Teachers' language guide students to attend to various knowledge sources and problem-solve the text they are reading.

In addition, language also plays a role as a medium of learning that reflects what is happening between the heads (the child and the teacher) which then form thinking. For instance, a child might not have the language and strategy of rereading if the teacher does not prompt him or her to do so as a strategy to self-monitor. Again, language and its influence in thinking, which then in development, is the basis for understanding concept during instruction which might become thought.

In the paradigm of sociocognitive model of reading, there is also emphasis that the role of the teacher is critical in negotiating and facilitating meaning construction in the text and social context of the classroom (Rifai & Sandy, 2019; Rudell & Unrau, 2013). One of the major differences of this notion compared to Clay's literacy processing theory (2001) is in the negotiated understanding of where and in whom authority for constructed meanings resides. According to sociocognitive model, the legitimacy of an interpretation can be solely in the text, in the reader, in the teacher, or in the interaction between text, students' meaning, and teacher's interpretation. This notion provides insights on who or what are invested for reading and how reading is examined within the social interaction. However, it might not be able to explain the process of text in the head, what happens when young readers read written texts, and especially in the constellation that reading is problem-solving and decision-making activity involving perceptual knowledge, prior knowledge, and motivation of the readers. An overarching question at this point would be how would sociocognitive model of reading explain the strategic activity a young reader used when find difficulty during independent reading? Consider the excerpts below when Daniel read a book "Eat like a pig".

- Daniel : They talked about man-((stretching out))-ner. Manners. They talked about manners.
Text : They talked about manners.
- Daniel : This time, Poodle used good table man-((stretching out))-ners. manners.
Text : This time, Poodle used good table manners.
- Daniel : "Look, I'm eating like a pig!" Poodle said.
Text : "Look, I'm eating like a pig!" Poodle said.

The above transcript showed how Daniel used strategic activity like stretching out and rereading to problem solve the word 'manner'. In the first attempt, he stretched out the word by segmenting the sound, and then produced it in whole word before then reread the whole sentence to confirm his meaning. In the second encounter, he did not reread the whole sentence, but still stretched out the word, which might indicate he had already grasped the meaning of 'manners.'

This is the evidence that we observed to explain why observing children' reading is critical during reading aloud continuous text. We can observe change of their reading proficiency by looking at how they go back and alter their decisions and correct themselves. We can also see how they are using syntactic, semantic, visual, and phonological information in monitoring their own reading.

This is the evidence that we observed to explain why observing children' reading is critical during reading aloud continuous text. We can observe change of their reading proficiency by looking at how they go back and alter their decisions and correct themselves. We can also see how they are using syntactic, semantic, visual, and phonological information in monitoring their own reading.

4. Conclusion and Suggestions

We have discussed in this paper the theoretical frame of how a child processes a text in a reading activity. We draw from observational data of one-on-one observation with a child's reading to explain what happens when a young reader reads, what changes and how

changes occur, individual difference, and the role of knowledgeable others. We considered those elements as what a good theory of reading should explain. In discussing those elements, we first discussed the definition of reading by considering different epistemological stances affecting the definition. We then discussed those elements in three major themes rooted in one of the definitions: (1) reading is a problem-solving activity involving multiple knowledge sources, (2) self-correction as a sign of progress, and (3) change from novice to expert. In each theme, we provided examples of the case derived from the observational data and referred to various theorists to support the argument we made.

Through one-on-one observation of a child's reading, we have been able to examine reading process and its gradual change over time at a micro level. Since each child takes different path to develop reading skills, it is important to consider individual differences, including different opportunities and experience to literacy a child may have. How much exposures and experience, and what instruction is needed then are also varied. It would be more helpful for students if the teachers focus their instruction on developing working system and strategic activity upon which students can use during independent reading. Additionally, instruction should be broadened to allow children to have massive opportunities to literacy. Providing texts that are slightly challenging and using proper prompts can also benefit young readers to develop.

Finally, the findings of this study suggest some inputs for future researchers. More research is needed to investigate how readers use problem solving activities in different contexts and text types. Would those strategies be the same in the first language and second language contexts? Can readers be trained to use problem solving activities as strategies to improve reading comprehension? Future researchers might also be interested to look at second language readers' progress through a developmental study. If self-correction is a sign of progress, to what extent do readers make self-correction across ages?

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Appendix 1. Observation Guide Sheet Based on Clay’s Observation Survey of Literacy Achievement (2013)

Letter Identification		
Administration	Say	Score
To introduce the task	<ul style="list-style-type: none"> • “What do you call these?” • “Can you find some that you know?” 	Score as correct: <ul style="list-style-type: none"> • Either an alphabet name • Or a sound that is acceptable for that letter • Or a response which says ‘...it begins like...’ giving a word for which that letter is the initial letter or sound • Total the child’s score adding all three types of responses together.
During task	<i>Point to each letter in a horizontal line.</i> <ul style="list-style-type: none"> • “What is this one?” 	
If the child does not respond use one or more of these questions	<i>Try to avoid bias toward any one of these.</i> <ul style="list-style-type: none"> • “Do you know its name?” • “What sound does it make?” • “Do you know a word that starts like that?” 	
Then move on to other letters	<ul style="list-style-type: none"> • “What is this? And this?” 	

Hearing and Recording Sounds in Words		
Administration	Say	Score
To introduce the task	<ul style="list-style-type: none"> • “I am going to read you a story. When I have read it through once I will read it again very slowly so that you can write down the words in the story.” 	<i>Write the text below the child’s version after the task is finished.</i> <p>Score as correct:</p> <ul style="list-style-type: none"> • Substitute letters are acceptable if, in English, the sound is sometimes recorded in that way (ex. s/c, c/k, u/o – cum/come). • Take away 1 pt when a child makes a change in letter order (example: ma/am). • Reversed letters are not correct if they could represent another letter.
During task	<i>Read the sentence to the child at normal speed.</i> <ul style="list-style-type: none"> • “Some of the words are hard. Say them slowly and think how you can write them. Start writing the words now.” <i>Dictate slowly word by word.</i> <p><i>Make notes on the following:</i></p> <ul style="list-style-type: none"> • Any sequencing errors • The omission of sounds • Unusual use of space on the page • Unusual placement of letters within words • Partially correct attempts • “Good” confusions 	
When the child comes to a problem word	<ul style="list-style-type: none"> • “You say it slowly. How would you start to write it?” • “What can you hear?” • “What else can you hear?” 	
If the child cannot complete the word	<ul style="list-style-type: none"> • “We’ll leave that word. The next one is...” 	

Writing vocabulary		
Administration	Say	Score
To introduce the task	<p><i>The child is allowed 10 minutes to complete this task.</i></p> <ul style="list-style-type: none"> • “I want to see how many words you can write.” • “Can you write your name?” 	<p>Score as correct:</p> <ul style="list-style-type: none"> • 1 pt. if correctly spelled. • 0 pt. if it is correctly spelled, but he spontaneously tells you that it is another word. • The formation of individual letters does not influence the scoring except when the letter form represents a different letter. • 0 pt. if the intended letters are not clear (eg ‘run’ that looks like ‘nun’). • 1pt. for words written right to left if actually written from right to left. May include letter reversals. • Capital letters are acceptable substitutions for lower case letters.
If the child says, “No” ask him if he knows any single-letter or two-letter words.	<ul style="list-style-type: none"> • “Do you know how to write ‘is’(pause), ‘to’ (pause), I?” 	
If the child says, “Yes” say:	<ul style="list-style-type: none"> • “Write your name for me.” 	
When the child finishes say:	<ul style="list-style-type: none"> • “Good. Now think of all of the words you know how to write and write them all down.” 	
Give the child up to 10 minutes to write the word he knows. When he stops writing or when he needs prompting, suggest words that he knows how to write.	<ul style="list-style-type: none"> • “Do you know how to write ‘go’ or ‘me’? “ • “Do you know how to write ‘look’ or ‘come’?” 	
<p>✓ The child should not be asked to read the words he has written. ✓ Do not prompt for words in series, or in a rhyming set or a spelling pattern group.</p>		

Running Records
<ul style="list-style-type: none"> • Find three levels of text difficulty: <ul style="list-style-type: none"> -an easy text (95%-100%) -an instructional level (90%-94%) -a hard level (80%-89%)

Concept About Print Observation Guide Sheet			
Page	Test	Say	Score
Cover	1. For Orientation of Book	<p><i>*Avoid adding extra comments when reading the story. Pass the book to the child, holding it vertically by outside edge, spine towards the child.</i></p> <p>“Show me the front of this book.”</p>	1 pt. for the correct response.
2/3	2. Print, not picture, carries the message	<p>“I’ll read this story. You help me. Show me where to start reading. Where do I begin to read?”</p> <p><i>Read the text on page 2.</i></p>	1 pt. for the print. 0 pt. for the picture.

4/5	<p>3. For directional rules</p> <p>4. Moves left to right</p> <p>5. Return sweep</p> <p>6. Word-by-word pointing</p>	<p>“Show me where to start.”</p> <p>“Which way do I go?”</p> <p>“Where do I go after that?”</p> <p>“Point to it while I read it.” <i>Read the text on page 4 slowly but fluently.</i></p>	<p>1 pt. for top left. 1 pt. for left to right. 1 pt. for return sweep to left or for moving down the page. (score items 3-5 if all movements are demonstrated in one response)</p> <p>1 pt. for exact matching.</p>
6	7. Concept of first and last	<p><i>Read the text on page 6. The child must NOT continue word by word pointing.</i></p> <p>“Show me the first part of the story.”</p> <p>“Show me the last part.”</p>	1 pt. if BOTH are correct in any sense, that is, applied to the whole text or to a line, or to a word, or to a letter.
7	8. Inversion of picture	<p><i>Slowly and deliberately</i> “Show me the bottom of the picture.” <i>Do NOT mention upside down.</i></p>	1 pt. for verbal explanation, OR for pointing to top of page, OR for turning the book around and pointing appropriately.
8/9	9. Response to inverted print	<p>“Where do I begin?”</p> <p>“Which way do I go?”</p> <p>“Where do I go after that?” <i>Read the text on page 8.</i></p>	1 pt. for beginning with ‘Leaves’ in Shoes and moving right to left across the lower and then the upper line OR for turning book around and moving in conventional manner.
10/11	10. Line sequence	<p><i>Observer’s position and movements most ensure that the child is attending to the print.</i></p> <p>“What’s wrong with this?” <i>Read immediately the bottom line first, then the top line. Do NOT point.</i> <i>If the child misses item 10 skip</i></p>	1 pt. for comment on line order.

		<i>questions for items 12, 13, and 14.</i>	
12/13	<p>11. A left page is read before a right page</p> <p>12. Word sequence</p> <p>13. letter order</p>	<p>Where do I start reading?</p> <p>“What’s wrong on this page?” <i>Point to the page number 12, NOT the text.</i> <i>Read the text on page 12 slowly as if it were correctly printed.</i></p> <p>“What’s wrong on this page?” <i>Point to the page number 13, NOT the text.</i> <i>Read the text on page 13 slowly as if it were correctly printed.</i></p>	<p>1 pt. for indicating the left page. 1pt. for comment on either error.</p> <p>1 pt. for any ONE re-ordering of letters that is noticed and explained.</p>
14/15	<p>14. Re-ordering of letters within a word</p> <p>15. Meaning of a question mark</p>	<p>“What’s wrong with the WRITING on this page?” <i>Read the text on page 14 slowly as if it were correctly printed.</i></p> <p>“What’s this for?” <i>Point or trace the question mark with a finger or a pencil.</i></p>	<p>1 pt. for ONE error noticed.</p> <p>1 pt. for explanation of function or name.</p>
16/17	<p>16. Period</p> <p>17. Comma</p> <p>18. Quotation marks</p> <p>19. Capital and lower case letters</p>	<p><i>Read the text on page 16.</i> For each item: “What’s this for?” <i>Point to or trace each mark with pencil.</i></p> <p>“Find a little letter like this.” <i>Point to the capital W and demonstrate by pointing to a lower case w if the child does not succeed.</i> “Find a little letter like this.” <i>Shoes: M, I</i></p>	<p>1 pt. for explanation of function.</p> <p>1 pt. if both m, i are BOTH located.</p>
18/19	<p>20. Words that contain the same letters in a different order</p>	<p><i>Read the text on page 18.</i> “Show me ‘was’.” “Show me ‘no’.”</p>	<p>1 pt. for BOTH correct.</p>
20	<p>21. Letter concepts</p> <p>22. Word concept</p>	<p><i>Read the text on page 20.</i></p> <p>“I want you to push the cards across the story like this until all you can see is JUST ONE LETTER.” <i>Demonstrate the movement of the cards, but not the task.</i></p> <p>“Now show me 2 letters.” “Show me just one word.”</p>	<p>1 pt. if BOTH are correct.</p> <p>1 pt. if BOTH are correct. 1 pt. if BOTH are correct.</p>

	23. First and last concepts 24. Capital letter concepts	“Now show me two words.” “Show me the first letter of a word.” “Show me the last letter of a word.” “Show me a capital letter.”	1 pt. if correct.
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