A Case Study of Reading Diagnosis, Instruction and Remediation

Chin-cheng Huang

ABSTRACT

The purpose of this case study is to investigate whether a diagnostic reading test and diagnostic teaching can help students who encounter reading difficulty to solve reading problems and promote reading competence and potential. The tests in this study consisted of informal reading inventory, the Stanford Diagnostic Reading Test, the El Paso Phonics Survey, the Slosson Oral Reading Test, and the Repeated Reading. The objectives of diagnostic teaching included increasing sight vocabulary, improving the ability to decode vowel diphthongs, increasing his reading rate and fluency and connecting the process of reading and writing. Through three-month tutoring, the student improved five grade levels in both word recognition and oral comprehension. The research suggests that diagnostic reading test and diagnostic teaching can be applied to help ESL/EFL students overcome reading problems and improve their reading competence and potential.

Key words: reading diagnosis, reading instruction, reading remediation, reading comprehension
A CASE STUDY OF READING DIAGNOSIS, INSTRUCTION AND REMEDIATION

Introduction

There is no question that we have to go to see doctors when we are sick. Doctors will diagnose our symptoms, identify the causes, and offer a prescription. This is the inevitable procedure for one to get well. However, a lot of students confront high frustration when they read. They don’t know how to deal with reading problems and recover effective learning. It’s difficult for them to find a suitable reading teacher to diagnose their reading difficulties and to offer correction and prescription. The researcher presents a case report of using diagnostic reading tests and diagnostic teaching to help students improve their reading problems.

What is a diagnostic reading test? A diagnostic reading test differs from an achievement test in three major ways: (1) it has a large number of subtest scores and items, (2) those items are designed to measure specific skills, and (3) its difficulty should be lower to offer adequate discrimination among students with reading problems (Gillet & Temple, 1994; Gronlund, 1985; Lipson & Wixson, 1997). It may consist of standardized tests, and/or teacher-made tests, and/or an informal reading inventory. The rationale underlying diagnostic reading tests is that the instruments have to aid teachers/tutors to clearly assess students’ specific strengths and weaknesses.

What is diagnostic teaching? Salvia and Ysseldyke (1988) define diagnostic teaching as “the practice of systematic trial and evaluation of a variety of instructional strategies (including materials, methods of presentation, and methods of feedback) with individual students as part of their everyday educational program” (p.525). It is sometimes called “trial teaching” (Gumming, 1998; Harris & Sipay, 1985). The major purpose of diagnostic teaching is: (1) diagnostic since it collects the additional information to clarify and check the previous hypotheses generated regarding the initial results of the assessment-instruction process, and (2) instructional because teachers/tutors have opportunities to examine the instructional methods and materials that may be successful alternatives for working with a student (Lipson & Wixson, 1997). A teacher/tutor thus has to continuously assess students’ reading problems with diverse diagnostic instruments and inventories.
According to students’ responses, he/she then adapts the optimal instruction methods to focus on the student’s unique problems or special needs.

Although the student in this case study is an English as a second language (ESL) speaker, hopefully, teachers who teach English as a foreign language (EFL) in Taiwan can apply the concepts, methods, techniques and strategies used in this study to help their students solve reading problems. The research indicates that EFL students need more diagnostic reading tests and diagnostic teaching when they have reading problems since English native speakers increasingly call for reading tutoring around the United States.

Student’s Background

Student name: Exodus (anonym)  Age: 8 years old (from Morocco)

School: Homeschool  Grade: Third grade

Instruction period: From January 26 to May 13, 1998

Identification: Exodus is a bright, outgoing eight-year-old boy who is homeschooled. His mother teaches him everything at home. He has ever gone to regular school and does not have any school record to decide his grade. According to his age, he should be a third-grade student.

Exodus lives with his mother and a younger sister, Eden who is five years old, is homeschooled, and reads on a seventh-grade level. The family is together all the time because home is the children’s school. They enjoy reading, playing games, cooking, going to the park, and so forth. The mother reads aloud to her children every day at least thirty minutes. There are more than 2000 books in the home. Exodus likes to read books where he gets to choose the book. The family also spends at least thirty minutes each day on the couch or each every evening in bed reading.

Throughout the testing sessions Exodus was willing to cooperate, although he has a slight tendency to reverse letters at home and has difficulty reading anything that he is not interested in. He loves to read science-related materials whenever possible. He wants to be a physicist or an expert on aerodynamics. During the testing of reading comprehension of expository passages, he always answered the critical/creative questions with his rich prior knowledge and high interest. He is aware that he is not a good reader because he only reads what are his favorite things. He hopes...
that he can become a good reader like his younger sister.

Affective factors

Exodus’s motivation level apparently varies with the topic under discussion. If the topic is interesting to him, he is highly motivated and performs well. However, if the topic does not appeal to him, he keeps silent or finds something to play with. In such a situation, his concentrating on the activity is a problem. His ability to concentrate seems to be related to his motivation level.

1. Interest. Exodus likes to play with Legos and computer games, especially Sim Copter. I usually found that he was building something with Lego sets when I visited his family. He still likes someone read to him long storybooks. When I read a storybook to him, he happily predicted the plots. Apart from those he also likes to take things apart and does a great deal of experimenting by constructing things together. His deep interest in reading anything about astronomy, inventions, explosions, and technology is shown in his ability to talk extensively on topics such as weather, planets, and so forth. His favorite subjects are math and science. He enjoys science because he realizes that it can help him answer many interesting questions. For instance, he could express a great deal of knowledge of weather when we discussed the questions in The Magic School Bus: Inside a Hurricane.

2. Attitudes. Exodus is very positive toward learning to read. His willingness to cooperate and put in effort in the activities that we did is very encouraging. His goal to be able to read better (i.e., to read more fluently) is a commendable one which should be strongly supported and encouraged.

Physical factors

1. Visual activity. Exodus has very good eyesight. He has his eyes checked by a doctor every year and his exam in the summer of 1997 indicated that his eyes were fine. During the first day we met together, he could read out the tiny printed materials on the wall of reading center. In addition, from the reading activities that we had done together, he didn’t appear any visual difficulty. He tends to protect his eyesight very seriously. When I provided him with books with smaller printed-material, he told me that he didn’t like that because the printed letters were small. It is, however, recommended that Exodus should be examined regularly by an eye doctor to be sure that vision problems are not contributing to his reading difficulties.

2. Auditory acuity. Exodus showed no indications of hearing difficulties. He was able to correctly distinguish where the bell sound came from when I struck the bell behind his right or left
In addition, from the reading activities that we have done together, Exodus showed that he has no indications of hearing difficulties.

3. Other factors. Exodus didn’t show any other physical limitation except that he usually has nasal congestion from allergies.

4. Conclusion. Exodus appears to be physically in good condition. This means there are no obvious health-related reasons for his reading difficulties.

**Reading Assessment**

**Informal reading inventory**

Informal reading inventory is a useful instrument to diagnose English native speakers’ (Leal et al., 2004) and EFL learners’ reading problems (Leal et al., 2004; Lituanas et al., 2001). Exodus was given the Informal Reading Inventory on January 26 and 28, 1998. Selections were used from Form B in Graded Words in Context, Form A in Oral Reading, and Form C in Listening Comprehension of The Stieglitz Informal Reading Inventory, by Ezra L. Stieglitz, 1997, Boston: Allyn and Bacon. The Stieglitz Informal Reading Inventory (SIRI) includes “two forms of a Graded Words in Context Test, two forms of a Graded Words in Isolation Test, a Dictated Story Assessment Strategy, and four forms of a Graded Reading Passages Test for evaluating reading performance” (p. 2). First, the result of a Graded Words in Context Test supplies valuable information for estimating the beginning level in the Graded Reading Passages Test. Second, the outcome of a Graded Words in Isolation Test provides data needed to determine test takers’ level of sight words and decoding capability. Third, a Dictated Story Assessment Strategy provides an opportunity to check emergent and initial readers’ reading behaviors. Finally, the Graded Reading Passages Test, which consists of critical- and creative-level questions, measures students’ reading performance and insights into their ability to function as reflective thinkers.

**Summary of placement sentences**

To determine at which grade level the reading inventory should begin, Exodus was given a list of sentences to read aloud. The tutor started Exodus at level one. He was able to read level one with no problems, missed one at level two, and missed seven at level three.
Oral reading summary

For the second part of the IRI, Exodus orally read selected IRI passages. This part of the test determines the independent, instructional, and frustration levels in both word recognition and reading comprehension. We began at level one to ensure a measure of success. Exodus was able to read, retell, and answer questions for reading passages up to level two before the oral reading became too hard at level three. After the passages became too hard, the tutor read aloud the stories to him and asked him to retell and answer questions to see if his listening comprehension was greater than his reading comprehension. Table 1 demonstrates pretest in informal reading inventory.

<table>
<thead>
<tr>
<th>Reading Level</th>
<th>Comprehension</th>
<th>Word Recognition</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Independent</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 2</td>
<td>Instructional</td>
<td>Independent</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 3</td>
<td>Too Hard</td>
<td>Too Hard</td>
<td>Instructional</td>
</tr>
<tr>
<td>Level 4</td>
<td>N/A</td>
<td>N/A</td>
<td>Instructional</td>
</tr>
<tr>
<td>Level 5</td>
<td>N/A</td>
<td>N/A</td>
<td>Too Hard</td>
</tr>
</tbody>
</table>

The result shows that Exodus’ reading comprehension is greater than his ability to decode words. The fact that the listening comprehension wasn’t too hard until level 4 indicates that Exodus has a good capacity to understand and explain written material. This is a positive reading strength that needs to be encouraged. However, these results also indicate that Exodus is reading below grade level.

Table 2 presents types of miscues that Exodus made when he read in the IRI test. The tutor could understand his reading progress through miscues analysis. During his reading, he never used nonword to substitute the words in the text and never reversed any word in the text that he read. He made a lot of (15) self-correction. That is, he knew that he mispronounced some words and could correct his miscues immediately. Meanwhile, he changed word meaning for nine times.
Table 2  Types of Miscues that Exodus Made in the IRI Test

<table>
<thead>
<tr>
<th>Characteristics</th>
<th># of Miscues</th>
<th>Specific Examples</th>
<th>Patterns and Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonword Substitutions</td>
<td>0</td>
<td></td>
<td>Exodus does not have any nonword miscues.</td>
</tr>
<tr>
<td>Whole Word Substitutions</td>
<td>7</td>
<td>Summer for some</td>
<td>Exodus usually substitutes syntactically acceptable words, but they change the meaning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My for many</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pick it off for bite it off</td>
<td></td>
</tr>
<tr>
<td>Insertions</td>
<td>4</td>
<td>The long cold for the cold</td>
<td>His insertions do not change the meaning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The flowers for flowers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taking a good care for taking good care</td>
<td></td>
</tr>
<tr>
<td>Omissions</td>
<td>1</td>
<td>Cut off for cut it off</td>
<td>Exodus rarely omits words and when he does, it does not change the meaning.</td>
</tr>
<tr>
<td>Reversals</td>
<td>0</td>
<td></td>
<td>He never reverses words.</td>
</tr>
<tr>
<td>Self-Correction</td>
<td>15</td>
<td>Grown-up for grown-ups</td>
<td>Exodus uses a lot of self-correction and repetitions when he reads. This is good and means he is trying to monitor his reading.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hang for hangs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tired for tired</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Villy for village</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sky for skin</td>
<td>His self-correction pattern is that he always neglects or changes the final letter or syllable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bring for bother</td>
<td></td>
</tr>
<tr>
<td>Meaning Changes</td>
<td>9</td>
<td>Do you for Don’t you</td>
<td>Some of the above problems lead to meaning changes and a lack of comprehension. The others do not lead to meaning change.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pick it off for bite it off</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>My children for many children</td>
<td></td>
</tr>
</tbody>
</table>

When reading aloud, Exodus would resort to finger pointing, sometimes reading word-by-word, and reading with a monotonous tone. This, however, did not impede his comprehension of the passage. The only problem that Exodus had was his lack of attention to some details that was evident in his retelling of the passage. During retelling, he might forget the setting, problem resolution, and events. He often generated the details using his prior knowledge of the topic. However, based on his prior knowledge, he was able to provide information in the expository
Comprehension summary

Exodus also summarized each passage he read and answered questions about each selection. These questions were coded according to three levels: literal, interpretive, or critical/creative. Table 3 is a summary of Exodus’ ability with each of these question types.

<table>
<thead>
<tr>
<th>Question Type</th>
<th># of Specific Patterns/Observations</th>
<th>Miscues Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literal-Level Question</td>
<td>2.5</td>
<td>A raining day for sunny day (Exodus did not remember some details or only remembered part of the detail. Cut it with scissors for dry nail)</td>
</tr>
<tr>
<td>Interpretive-Level Question</td>
<td>0.5</td>
<td>Because it gets sore for He rarely had miscues in interpretive-level questions. because the skin is red and sore from rubbing against something</td>
</tr>
<tr>
<td>Critical/Creative-Level Question</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

These findings indicate that Exodus does well with interpretive-level and critical or creative level questions, but he has more difficulty with literal level questions. He appears to have answers for literal level questions, but sometime forgets some detail information.

Stanford Diagnostic Reading Test (SDRT)

Stanford Diagnostic Reading Test (SDRT4) is a version of broadly used diagnostic test (Karlsen & Gardner, 1995; Lipson & Wixson, 1997). This test that has two equivalent forms includes 4 domains: word decoding, vocabulary, reading comprehension and reading rate. This test consists of 6 levels from 1st grade through junior college: Red (grades 1.5 and 2.5), Orange (grades 2.5 and 3.5), Green (grades 3.5 and 4.5), Purple, (grades 4.5 to 6.5), Brown (grades 6.5 to 8.9), and Blue (grades 9 to 12.9). The Red Level (for end of Grade 1 to low-achieving pupils in Grade 3),
Form G, of the SDRT (Karlsen, Madden and Gardner, Harcourt, Brace, Jovanovich, Inc. Publishers, 1987) was given to Exodus in four sections, on February 2, 9, and 11, 1998. Table 4 shows the results of the skills tested are given in stanines, percentiles, and grade equivalents.

- Stanines indicate Exodus’ relative standing within his peer group of other three graders. A stanine of 4-6 means that the child is handling the materials required at his grade level. A stanine below 4 means that the child is performing below what is expected. Above 6 means that the child is performing above what is expected.
- The reported percentile ranks Exodus among all third graders taking the SDRT.
- The Grade Equivalent included is not intended for placement purposed, but is useful in showing competency by grade level.

<table>
<thead>
<tr>
<th>Skill Tested</th>
<th>Stanine</th>
<th>Percentile</th>
<th>Grade Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory Vocabulary</td>
<td>6</td>
<td>62</td>
<td>4.6</td>
</tr>
<tr>
<td>Auditory Discrimination</td>
<td>6</td>
<td>68</td>
<td>7.6</td>
</tr>
<tr>
<td>Phonetic Analysis</td>
<td>5</td>
<td>55</td>
<td>4.5</td>
</tr>
<tr>
<td>Word Reading</td>
<td>3</td>
<td>15</td>
<td>2.3</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>6</td>
<td>64</td>
<td>4.4</td>
</tr>
<tr>
<td>Comprehension Total</td>
<td>5</td>
<td>40</td>
<td>3.0</td>
</tr>
<tr>
<td>SDRT Total</td>
<td>6</td>
<td>61</td>
<td>4.7</td>
</tr>
</tbody>
</table>

The scores on the SDRT indicate that Exodus scored at grade level in all but word reading. It is interesting to note that while Exodus’ comprehension on the IRI was strong, it appears to be weaker area on the Stanford. This can happen when the student’s decoding skills are not strong enough to read the required passages and questions.

EL PASO Phonics Survey

The EL PASO Phonics Survey (Eldon E. Ekwall, Allyn and Bacon Inc., 1979) that includes 90 test words is a survey used to assess sound and symbol correction. The survey is divided into three main sections: initial consonant sounds, initial consonant clusters, and vowel teams, and special letter combinations. Ekwall and Shanker (1993) argued that the EL PASO is an easy and good instrument for assessing students’ knowledge of the relation between letters and sounds, basic sight
words, vowel rules and syllable principles. Table 5 presents the results of this survey indicated that Exodus nearly mastered all initial consonant sounds, but still has difficulty in two of initial consonant clusters. He, however, performed that he has much difficulty in vowel teams and special letter combinations. An analysis of this survey suggests that he is having problem in blending the vowels and the letters together.

Table 5  The Results of EL PASO Phonics Survey

<table>
<thead>
<tr>
<th>(Initial consonant sounds)</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Exodus said</th>
<th>PEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>gup</td>
<td>grup</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>gin (jin)</td>
<td>gin</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Initial consonant clusters)</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Exodus said</th>
<th>PEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sch</td>
<td>scham</td>
<td>cham</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>dw</td>
<td>dwin</td>
<td>drin</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Vowels, vowel teams, and special letter combination)</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Exodus said</th>
<th>PEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>ï</td>
<td>tipe</td>
<td>tip</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>oo</td>
<td>oot</td>
<td>oat</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>oo</td>
<td>oot</td>
<td>ute</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>oe</td>
<td>poe</td>
<td>poet</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>oi</td>
<td>doi</td>
<td>do</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>ou</td>
<td>tou</td>
<td>tju</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>oy</td>
<td>moy</td>
<td>my</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>au</td>
<td>dau</td>
<td>dayu</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>

* PEK  points at which phonic element is expected to be known.

Slosson Oral Reading Test (SORT)

Slosson Oral Reading Test (Richard L. Slosson, Slosson Educational Publications, Inc., 1963) is to be given individually and is based on the ability to pronounce words at different levels of difficulty. The words have been taken from standardized school readers and the reading level obtained from testing represents median or standardized school achievement. The test ranged from
easy to difficult words has ten lists from list P (primer) to high school and each list has 20 words. There are totally 200 words in this test. It is an appropriate instrument for assessing children’s oral reading performance (Erickson et al., 1996; Parmer et al., 1997).

Exodus was given Slosson Oral Reading Test to see how many important basic words he was able to recognize immediately. He stopped on List 7 and got 69 words correct. Changing his raw score to reading level, he stands on 3.4 that is the 4th month of 3rd grade. It seems a little lower than his grade. Table 6 is a list of words that he missed.

<table>
<thead>
<tr>
<th>Test words</th>
<th>Exodus said</th>
<th>Blank (He didn’t read.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>List P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Want</td>
<td>wait</td>
<td></td>
</tr>
<tr>
<td>can</td>
<td>wait</td>
<td></td>
</tr>
<tr>
<td>dark</td>
<td>drak</td>
<td></td>
</tr>
<tr>
<td>basket</td>
<td>bakeset</td>
<td></td>
</tr>
<tr>
<td>List 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>came</td>
<td>can</td>
<td></td>
</tr>
<tr>
<td>large</td>
<td>lank</td>
<td></td>
</tr>
<tr>
<td>sheep</td>
<td>sleep</td>
<td></td>
</tr>
<tr>
<td>heavy</td>
<td>heaven</td>
<td></td>
</tr>
<tr>
<td>List 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>across</td>
<td>artist</td>
<td>Station</td>
</tr>
<tr>
<td>ocean</td>
<td>organ</td>
<td></td>
</tr>
<tr>
<td>bench</td>
<td>beach</td>
<td></td>
</tr>
<tr>
<td>timid</td>
<td>time</td>
<td></td>
</tr>
<tr>
<td>List 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>evening</td>
<td>everything</td>
<td>Stream, desire, delicious</td>
</tr>
<tr>
<td>bench</td>
<td>beach</td>
<td></td>
</tr>
<tr>
<td>timid</td>
<td>time</td>
<td></td>
</tr>
<tr>
<td>List 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>price</td>
<td>picture</td>
<td>harness, develop, promptly, courage, forehead, distant,</td>
</tr>
<tr>
<td>serious</td>
<td>science</td>
<td>vacant, appearance, speechless, future, claimed, common,</td>
</tr>
<tr>
<td>region</td>
<td>regain</td>
<td>dainty</td>
</tr>
<tr>
<td>List 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>extended</td>
<td>excited</td>
<td>cushion, generally, gracious, dignity, terrace, jungle,</td>
</tr>
<tr>
<td>tailor</td>
<td>table</td>
<td>fragrant, interfere, marriage, profitable, define, obedient,</td>
</tr>
<tr>
<td>applause</td>
<td>apples</td>
<td>ambition, merchant</td>
</tr>
<tr>
<td>presence</td>
<td>press</td>
<td></td>
</tr>
<tr>
<td>List 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installed</td>
<td>medicine</td>
<td>Installed, medicine, rebellion, infected, responsible, liquid,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tremendous, customary, malicious, spectacular, inventory, yearning, imaginary, consequently, excellence, dungeon,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>detained, abundant, compliments</td>
</tr>
</tbody>
</table>
The results show that Exodus has difficulty to read some words that have two parts and most of the words that have more than three parts. In addition, he missed some simple words that he can read when he encountered in some of the other activities that we did. The possible reasons may be because he felt difficult to recognize those words isolatedly, and he was in hurry to get through the list.

Reaped reading strategy

Many researchers (Fuchs et al., 2001; Kastner et al., 2000; Leal et al., 2004; Marchand-Martella et al., 2000; Meyer & Felton, 1999; Tyler & Chard, 2000; Wheldall, 2000) advocate that repeated reading is an excellent strategy to improve students’ reading fluency, reading accuracy and reading comprehension. This strategy was used to find if Exodus has the potential for reading fluency. Exodus was given a book, *My Place in Space*, to read aloud for one minute. As he read, the number of words and the number of errors that he made were recorded and plotted on a graph. The errors that he made were then taught to him before he read the same passage again. Figure 1 presenting Exodus’ performance shows that he has great potential for fluency in reading.

![Exodus' Repeated Reading](image)

**Figure 1**

Results

Exodus is a strongly self-confident boy. He never double-checked his answers when he did IRI and Stanford Diagnostic Reading Test. He felt high interest in challenge that makes him show
concentration and motivation to succeed. During the repeated reading activities, he was enjoyed his progression in reading fluently and correctly. He was very excited about reading scientific materials. As I provided him a lot of books to choose to read aloud, he always chose the science books. He presented enthusiasm to read the related materials and to help while we did experiments. The followings are his reading strengths and reading weaknesses.

Reading strengths
1. Exodus shows great potential to become a good reader. His ability to self-correct words and sentences he has misread indicates that he monitors his reading and realizes the mistakes he has made. When he reads, he sometimes skips the words that he does not understand and keeps going to the end of the sentence, and then he goes back to see if he can get more sense about the words. This indicates that he is aware of what a good reader does, i.e., going back to the beginning of the sentence in order to correct it.
2. Exodus is able to use context and syntax to identify unfamiliar words in some settings. When he is reading, he usually uses context clues to guess at some unknown words. It seems that he also uses syntax to help identify unknown words.
3. Exodus has the capacity to understand and explain written material. His performance on the IRI, indicating a higher listening comprehension level than reading comprehension, suggests that Exodus has difficulty in decoding words. Since he didn’t reach frustration until level 3, it is clear that he has the capacity to understand and explain written material but lacks decoding skills necessary for reading comprehension.
4. Exodus’ interest in science has helped him obtain a rich knowledge of science. As long as we talk about astronomy, weather, and so forth, he fluently expresses much of what he knows. It indicates that he possesses strong prior knowledge of science. It is very useful for me to apply such advantage to improve his problematic area in reading.

Reading weaknesses
1. Exodus’ weak area lies in phonetics, specially blending sounds together. Although he can read most single-syllable sight words, he usually shows difficulty to read long words that are more than three parts. He should be provided suitable materials and encouraged to practice repeated reading. He still needs to learn and master the skill of blending with initial consonant clusters and vowel teams.
2. Exodus possesses a limited sight vocabulary. In IRI and Slosson Oral Reading Test showed that
the level of Exodus’ sight words is lower than his grade. This indicates that Exodus needs further instruction in sight vocabulary.

3. He cannot write a lot of words. During testing, I found that he even could not completely write down his last name. Writing is a good way to express his ideas and to practice the words that he has learned. I hope that he can try to write to quickly increase his word bank.

4. Finger-pointing when he is reading aloud, although an aid in helping him focus on his reading, is an area that needs to be worked on. This is because of his tendency to cover some of the words in the passage as he does this.

Posttest in informal reading inventory

Table 7 indicates that Exodus made a great deal of progress in the area of word recognition and oral comprehension. During this three-month period he has improved five grade levels in both areas and his ability to read higher level materials has moved closer to his listening comprehension. This means that Exodus has done an excellent job and has the potential for continued reading improvement with one-on-one reading instruction.

In January, the IRI revealed that Exodus was weakest in word recognition. He had particular problems with blending sounds together, dividing words into syllables, vowel diphthongs, some consonant digraphs, and limited sight vocabulary. The most recent IRI indicates that Exodus has improved in every area. Based on the IRI test, although he did an excellent job on answering interpretive and critical/creative questions, he still had difficulty remembering some details in reading comprehension.

<table>
<thead>
<tr>
<th>Reading Level</th>
<th>Comprehension</th>
<th>Word Recognition</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Independent</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 3</td>
<td>Instructional</td>
<td>Independent</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 4</td>
<td>Instructional</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 5</td>
<td>Instructional</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 6</td>
<td>Instructional</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 7</td>
<td>Instructional</td>
<td>Instructional</td>
<td>N/A</td>
</tr>
<tr>
<td>Level 8</td>
<td>Too Hard</td>
<td>Too Hard</td>
<td>Too Hard</td>
</tr>
</tbody>
</table>
It was incredible that Exodus could improve five grade levels in both word recognition and oral comprehension during three-month tutoring period. Except the effective and efficient tutoring that promote his reading competence and potentials, the possible reasons might be that Exodus didn’t really understand the procedures and regulations of IRI and/or he could not understand and cooperate with the tutor who is an English native speaker. Therefore, he did present his potential ability during pretest. During posttest, he has learned more IRI procedures and regulations and presented his potential reading competence. In addition, he cooperated well with the tutor who is a non-native speaker. Enough communication might elicit his potential reading ability during posttest.

Summary of initial strengths and areas for growth

Based on all Exodus has done so far, the following is a list of his reading strengths.
1. His great potential to become a good reader
2. His rich prior knowledge
3. His ability to comprehend when he is able to pronounce the words
4. His ability to use context and syntax to identify unfamiliar words in some settings
5. His wonderful imagination and creativity in science
6. His interest in doing experiments

The following lists Exodus’ areas for growth.
1. His reading rate and proficiency
2. His limited sight vocabulary
3. His vocabulary size
4. His weak decoding of vowel diphthong words and consonant digraphs
5. His ability to divide long words into syllables
6. His weak area of blending sounds together

Instructional Strategies and Evaluation of Student Progress

Based on Exodus’ performance on the initial administration of the Informal Reading Inventory, the Stanford Diagnostic Reading Test (Karlsen, Madden & Gardner, 1984), the El Paso Phonics Survey (Ekwall, 1979), the Slosson Oral Reading Test (Slosson, 1963), and the Repeated Readings (Samuels, 1979), objectives were developed to focus intervention on word recognition and decoding skills, sight vocabulary, and reading rate and fluency. These objectives are listed below and then
each one is discussed in greater detail along with the strategies used to achieve them.

Instructional objective 1: Exodus will increase his sight vocabulary of words that have two or more syllables.

Instructional objective 2: Exodus will improve his ability to decode vowel diphthongs.

Instructional objective 3: Exodus will increase his reading rate and fluency.

Instructional objective 4: Exodus will enjoy the process of the connection of reading and writing.

The descriptions below summarize what Exodus accomplished in three areas:

- Instructional Objectives
- Strategies Used
- Evaluation of Accomplishments

Instructional Objective 1

Instructional objective 1: Exodus will increase his sight vocabulary of words that have two or more syllables.

Strategies Used:

1. Sight Word Bingo. This game was used to build Exodus’ sight vocabulary through reading a book in which he showed interest. In this strategy, the following steps were followed: (1) Exodus chose a book or the tutor selected a book in which Exodus was interested. (2) Exodus read the book. (3) The tutor drew a form for playing Bingo and wrote the target sight words on pieces of paper. Those words had two or more syllables. (4) Exodus read the words as he drew them out of a pile.

Evaluation: A passage was selected that Exodus read in order to do experiments in which he showed high interest. Since he didn’t have a problem in reading monosyllabic words, this strategy focused his sight vocabulary on the words that had two or more syllables. Bingo was a very good activity to encourage his motivation to learn sight words. He sometimes could not say the words that he had drawn out of the pile. However, when I indicated the words in the passage, he could say those words immediately. Obviously, context is an important method in teaching vocabulary. Exodus can increase his sight vocabulary through practicing the sight words in context and in isolation.

2. Word bank. This strategy was used to build Exodus’ sight vocabulary. Since sight vocabulary knowledge is closely related to comprehension, words not known were taught to demonstrate proper usage of words in context. In this strategy, the following steps were used: (1) The tutor wrote 700 instant words on note cards. (2) Exodus read 100 words every time. His errors
were recorded. (3) He practiced some of those words in context every session. (4) If he could say
the words in isolation at the end of every session, the words would put into his word bank.

Evaluation: The tutor made 700 word cards adopted from Elizabeth Sakiey and Edward Fry’s
(1984) *3,000 Instant Words* (2nd ed.). In the two hundred words he read during the first session,
Exodus made six errors. They were “drink,” “far,” “laugh,” “that,” “ride,” and “are.” After
practicing in context, he still found it difficult to say “far” in isolation. In the second session, he
read one hundred instant words (201-300). He made nine errors. They were “left,” “began,”
“white,” “thought,” “carry,” “limit,” “example,” “color,” and “music.” After practicing in context,
he still found it difficult to say “white” and “thought” in isolation. He only made 2 errors in the third
session when he read one hundred instant words (301-400). Those words were “music” and “color.”
After practicing, those two words were recorded into his word bank. When he read one hundred
instant words (401-500) in the fourth session, he made 26 errors. Those errors were “system,”
“built,” “include,” and so forth. He can practice those words in context. Apparently, he found it
more difficult when he read the instant words from 401 to 500. Finally, since we did not have
eough time, we only practiced 650 instant words.

3. **Compound match:** This strategy was used to provide Exodus the opportunity to identify
inflectional endings, root words, contractions, possessives, and plurals. Exodus learned to say
compound words with two or more parts. It was a good activity for him to practice long word
recognition. In this strategy, the following steps were followed: (1) The tutor prepared a short
passage. (2) The tutor printed compound words (less than 10 words) on strips of construction paper
and cut the strip of paper into two small words using a zigzag motion. (3) Exodus read the passage.
(4) He selected two pieces from the pile and fit the halves together to form a compound word. (5)
After the word was formed, he pronounced the word aloud. (6) If he could not say the word, the
tutor encouraged him to find it in the passage.

Evaluation: We did this activity twice. The first time, Exodus spent much time trying to
successfully compose a compound word with two parts. Finally, he learned to use the zigzag as a
cue to correctly make a compound word. The second time, he spent less than three minutes to finish
combining nine compound words and pronouncing all the words. Exodus learned to recognize small
words in compound words and identify words through inflectional endings, root words,
contractions, possessives, and plurals.
Instructional Objective 2

Instructional objective 2: Exodus will improve his ability to decode vowel diphthongs.

Strategies Used:

1. Literature links to phonics. When two vowels appear together and form an unsegmentable, varying, but single sound, it is called a diphthong. A diphthong is an important part of word decoding. Diphthongs are best learned by discovering word patterns. The instruction focused on word patterns in a meaningful context. That is, Exodus learned the target vowel diphthongs in context, not in isolation. The tutor selected a book or passage that had many target vowel diphthongs. Using the words with target vowel diphthongs, the tutor prepared cards for playing Bingo. In this strategy, the following steps were followed: (1) The tutor introduced only one diphthong sound at a time. (2) The tutor offered a book or a passage that had numerous words where target vowel letters came together to make a diphthong. (3) Exodus read the text. (4) Exodus indicated the words that had target vowel diphthongs and said the words. (5) Using those words that had target vowel diphthongs, we played Bingo.

Evaluation: The tutor used a passage describing an experiment to teach Exodus vowel diphthongs. Exodus learned that vowel diphthongs often do not have the same pronunciation as single vowels. Through the word patterns, he got the idea of how to pronounce vowel diphthongs correctly. When we played Bingo, Exodus still found it difficult to say some isolated words with target vowel diphthongs. As the tutor indicated the words in context, he could say all the words correctly. Obviously, he needs more practice to subconsciously acquire vowel diphthong patterns.

2. Diphthong owls. This strategy was used to provide Exodus the opportunity to identify vowel diphthongs. Exodus practiced diphthongs in a fun way. In this strategy, the following steps were followed: (1) The tutor decided on target diphthongs and wrote them on owl-shaped pieces of papers. (2) The owls were placed in a pile and the players took turns selecting an owl. (3) After Exodus selected an owl, he had to pronounce the word and identify the vowel diphthong in the word. (4) If he correctly pronounced the word and identified the diphthong, he thumbtacked the owl to a branch of the tree that had the same vowel diphthong printed on its trunk. (5) If a word was mispronounced or if a diphthong was incorrectly identified, the owl was placed at the bottom of the pile. (6) At the conclusion of the game, Exodus read the words attached to each tree to reinforce the sound of each vowel diphthong. (7) Exodus practiced the words that he had mispronounced or could not say.

Evaluation: The tutor selected the vowel diphthong words from Rosen’s (1995) book Can You
Catch a Falling Star? Exodus did not have any difficulty categorizing the words into vowel diphthong groups (oa, oe, oi, oo, ou, and oy). However, he had difficulty saying some vowel diphthong words such as “through,” “thought,” and “asteroid.” When the tutor indicated those words in context, Exodus could say them correctly. Obviously, the best way to teach him vowel diphthongs is to practice all target words in context.

3. Concentration/Memory: This game was used to provide Exodus the opportunity to search for and practice vowel diphthong words either in context or in isolation. In addition, this activity could train Exodus’ memorization ability. In this strategy, the following steps were followed: (1) The tutor chose a short passage and prepared two sets of word cards of vowel diphthong words (maximum 10 words). (2) Exodus read this passage and searched for the vowel diphthong words in context. (3) The tutor placed two sets of target words arranged face down. (4) Exodus flipped over two cards trying to make a match.

Evaluation: Exodus told me that he liked this game. He could say all the vowel diphthong words on the word cards except one. After I indicated the word that he couldn’t say in the passage, he could read the word in the sentence immediately. However, I was wondering why Exodus turned over the words, “could” four times and “tools” two times. The reason might be that he didn’t pay too much attention to this game at that time. When we played this activity in the next week, I found that he could remember most words and he did a good job.

Instructional Objective 3

Instructional objective 3: Exodus will increase his reading rate and fluency.

Strategies Used:

1. Repeated Reading (Samuels, 1979). This strategy was used to develop Exodus’ reading fluency. The objective of this strategy was to raise Exodus’ reading rate and to decrease the numbers of errors made. In this strategy, the following steps were followed: (1) The tutor chose a 150- to 200-word passage which interested Exodus. (2) Exodus read the passage for one minute (recorded and plotted on a graph). (3) The errors that he made were discussed. (4) Exodus read the same passage for one minute again. (5) The errors were discussed and corrected again. (6) He reread the same passage again.

Evaluation: The tutor used this strategy three times to improve Exodus’ reading fluency. He completely understood the process of repeated reading and had confidence that this strategy could make his reading more fluent. He did this activity cooperatively. He learned to skip the words that
he couldn’t say to save time. The following graphs present the number of words he read per minute and the number of miscues that he made.

Time 1: The passage was adopted from Rosen’s (1995) book Can You Catch a Falling Star? Based on Fry’s Readability Graph (1977), the readability of this passage was 4th grade. In three readings Exodus’ words per minute went from 57 to 99. This meant in just reading the passage over two more times he read 42 more words and his miscues decreased from four to one. His progression was apparent.

Time 2: The passage was adopted from the book Can You Catch a Falling Star? The readability of this passage was 4th grade. During the three times he read the same passage, Exodus’ words per minute went from 78 to 105. That is, in reading the same passage two more times he read 27 more words, and his miscues remained at two.
Time 3: The passage was adopted from Rosen’s (1995) book *Where’s the Big Dipper?* The readability of this passage was 4th grade. During the three times he read the same passage, Exodus’ words per minute went from 87 to 123. That is, in reading the same passage two more times he read 36 more words, and his miscues decreased from three to one. In the last time, his only miscue was to skip “that.” His progression in reading fluency was clearly apparent.

![Exodus' Repeated Reading (3)](image)

**Figure 4**

Instructional Objective 4

Instructional objective 4: Exodus will enjoy the process of the connection of reading and writing.

Strategies Used:

1. Science experiments. This strategy elicited Exodus’ interest, strengths, experiences, and background knowledge to understand the process of reading and writing. Through appreciation of the relationship between author and reader, he improved his writing and began to look at reading and writing as a process. In this strategy, the following steps were followed: (1) The tutor chose a science passage or article from a book. (2) Exodus read the procedure and/or instructions in the passage. (3) He did the experiment by himself (the tutor prepared the materials for the experiments). (4) He dictated the procedures for the experiment and the tutor recorded his words on Exodus’ Experiment Sheet. (5) Exodus drew the pictures or diagrams of his experiments on an 8 1/2 x 11” sheet of typing paper. (6) He decided the topic of his experiment for the next session.

Evaluation: Since he is interested in science, Exodus showed very high motivation to do this activity. He read the passage and did his experiments successfully except for one failure the first time. Apparently, he could understand what the author wanted him to know and he could synthesize
the information from the text and picture to do the experiment. When he recalled and dictated the experimental procedures orally, he systematically organized his thoughts and clearly expressed the procedure in his own words. He learned the process of the connection of reading and writing. Not only did he like to do experiments, but also he critically thought through the details of the instruction and sometimes offered his own unique solution to a problem, such as suggesting that the hole in the plastic bottle should be higher.

2. Write an information book. This strategy was used to improve Exodus’ reading and writing ability. Through this activity, Exodus learned the conceptualization: “What I can think about, I can talk about. What I can say, I can write (or someone can write about). What I can write, I can read. I can read what others write for me to read.” In this strategy, the following steps were followed:

A. Brainstorming: Using Exodus’ experiments collected from Exodus’ Experiment Sheets, Exodus read them and brainstormed for a possible title and format for a book.

B. Researching and revising: Exodus read other science books and materials about his topic. He took notes to revise his previous experimental sheets or to add some important information to them.

C. Sharing and conferencing: Exodus shared his information book with Angie and me. We gave him some feedback and information to make his concepts clearer.

D. Illustration: Exodus used the pictures that he drew in the experimental activity. He checked those pictures and made some alterations. He drew or found some other pictures that he could use in his information book.

E. Editing: Exodus, Angie, and I worked together to edit Exodus’ book. We looked through Exodus’ information book and decided the sequence of the chapters.


Evaluation: Exodus edited his information book during the last two weeks. The tutor designed a form--Exodus’ Book Ideas Sheet--to record Exodus’ ideas for his information book. In the discussion, he mentioned that his audiences would be 9- or 10- year-old children. Exodus gave his information book a title--Science Experiments. He drew all of the illustrations for each chapter. He read and revised some details of his information book. Finally, with the tutors’ help, he put his information book in book form. Exodus learned not only how to edit a children book, but also the process of the connection of reading and writing.
Summary

This study yielded the following valuable facts:

1. Through three-month tutoring, Exodus improved five grade levels in both recognition and oral comprehension.
2. Exodus increased his sight words through practicing the target words in content and in isolation.
3. The strategy, compound match, actually helped Exodus identify inflectional endings, root words, contractions, possessives, and plurals.
4. In this study, the activities, like literature links phonics, diphthong owls, and concentration, helped Exodus improve his ability to decode vowel diphthongs.
5. Repeated reading was an effective strategy to improve Exodus’ reading fluency, reading accuracy and reading comprehension.
6. Based on Exodus’ interest, strengths, experiences, and background knowledge, the strategy of connection of reading and writing activated his motivation to read and improved his reading and writing simultaneously.

Recommendations

Exodus has made great progress and should be encouraged to continue working with the strategies listed below. He should also be encouraged to work in materials on his instructional level of level 7. When materials are selected at this level, Exodus’ age and interests should also be kept in mind so that the information will be appropriate and meaningful.

Since Exodus is capable of using these strategies and shows improvement after they are applied to content area reading, he should be encouraged to use these strategies on his own and learn to self-monitor his own comprehension. Additional and varied strategies to aid Exodus in content area reading should also be tried as these areas are the greatest concern in Exodus’ progress in homeschooling.

Recommendations for Exodus

1. Sustained silent reading/ DEAR (Drop everything and read) time
   Drop everything, pick up a good book, magazine, or newspaper, and spend some time devoted
to reading every day. Try to get Mom and/or your younger sister, Eden, to do this with you. The more reading you do, the better at it you will become. I’ve included a list (Appendix A) of more good books for you to start with. They are all about The Magic School Bus or science. I chose these since I know how much you like The Magic School Bus and science Experiments and since you wrote about experiments in your information book.

2. Memory/Concentration

Play this activity on your own, with Eden, or with your friends. Only, instead of using pictures, use the sight words or instant words we have been practicing. This way you can play and learn the words at the same time.

3. EGRP: Elaborated guided reading procedure

This strategy is particularly useful since it will help you monitor your own comprehension in a challenging and fun way. You can even keep points to see how many predictions were correct and questions were answered in his reading. Perhaps you could ask your mom to establish a reward system for a number of correct predictions and questions answered.

This strategy can be used with fiction or content area material. Look at the title or heading of the chapter and make predictions and ask questions about the reading materials. Then, read to confirm or refute predictions.

4. Vowel diphthong owls

Play this game on your own, with Eden, with your mom, or with your friends. While we were reading *Can You Catch a Falling Star?* by Sidney Rosen (1995), we played this game. Each time you only focus on the vowel diphthong words that have the same initial vowel, such as *oa, oe, oi, oo, ou,* and *oy.* This strategy is useful because it offers you a good opportunity to practice the skill of word decoding.

5. Cut up story

Once we read *The Magic School Bus: In the Haunted Museum: A book About Sound,* by Joanna Cole (1995), we played this strategy in the City Library. Play this strategy on your own, with your mom, with Eden, or your friends. In this activity, you may cut long words into syllables, or choose a part of your favorite story to cut into a descending order of sentences. This cut-up activity provides practice with assembling sentences, one-to-one correspondence of words spoken and written, directional, checking, and monitoring behaviors, breaking oral language into segments, and word study. In addition, it will help you link sounds to letters, acquire word analysis procedures, develop fluency, and so on.
Recommendations for Home

1. Repeated reading

Choose a 150-200-word passage that Exodus likes and create a graph to record the numbers of words and the numbers of miscues (like Figure1, 2, and 3). First, give Exodus one minute to read and plot the numbers of words read with the number of errors on the graph. Remedy Exodus’ errors and give him another minute to read from the beginning. Continue this three or more times. This strategy will help Exodus improve his reading fluency and accuracy.

2. Paired reading

This is where you and Exodus would sit down and read a book, cover to cover together. He will stumble along as you read rhythmically through the book. Eventually, he will begin to include many of the words into his sight vocabulary and read them with you.

3. Read aloud

The more you read to Exodus, the better of a reader he will become. By reading aloud to Exodus, he will build a larger oral vocabulary. By reading the same books over and over, he will begin to associate new words with their spellings and pronunciations. Meanwhile, this activity provides quality time between you and Exodus.

4. Sight words or instant word flashcards

This would be a great nightly activity for Exodus. Simply run through a list of sight words or instant words that you have made into flashcards. Perhaps before he goes to bed, you could go through them with him repeatedly, making sure he knows what each one means. After he has mastered a list, move on to the next higher list. The more words he learns by sight, the better he will be able to read. These are very important, and flashcards are a quick way for you to help him learn the words.

5. Dialogue journals

Exodus still has some problems with writing. However, writing is one of the important language process skills. It is necessary for him to write what he wants to communicate. This strategy can be incorporated into Exodus’ lifebooks, or they can remain a separate activity. By writing letters, notes, comments, and suggestions to Exodus in a response journal, communication is open and relevant to what he is studying. To begin, I would suggest asking Exodus to read his lifebook to you, or to give you permission to read selected passages from his lifebook. In his lifebook, he will have commented on books he is reading, experiences he is having, and so forth. Once you have read his comments and reflections, return the book to him and have him comment
on your comments. Sometimes, it is easier to speak to one another through writing than through spoken words.

At the outset of writing his journals, Exodus may have difficulty in handwriting. You can encourage him to use the computer to finish his lifebooks and journals. Therefore, he does not need to worry about spelling or editing, which creates an environment that is less inhibiting for him. By seeing your comments, he will understand the value behind the action.

6. Experiments

Exodus loves to do science experiments. You may prepare the experiments that he likes to do. Copy the passages and prepare the materials for him. First, he has to read the directions for the experiments. Then, he does the experiments following the directions. Finally, you can dictate his procedures and findings of the experiments. This strategy is very useful to elicit his interest in exploring the connection of reading and writing.

Recommendations for School/Tutor

1. Syllabication

Any activity involving the introduction of syllables would be great for Exodus. I suggest using the generalizations dealing with affixes, compound words, two consonants between two vowels, one consonant between two vowels, the final *le*, and vowel diphthongs. The best way to approach syllabication with Exodus would be to give him plenty of examples of the words you are trying to separate into syllables. Also, use the words from his texts and favorite books.

2. Literature links to phonics

Since Exodus still has some difficulty saying vowel diphthong words correctly, I suggest that a teacher should offer the opportunity to enhance his vowel diphthongs. The best way to teach vowel diphthongs is to teach them through meaningful context. This strategy suggests that teachers use books that have many vowel diphthong words. Learning through meaning context rather than remembering isolated words or rules, Exodus will be able to say vowel diphthongs correctly.

3. Question-Answer Relations (QARs)

QARs (Raphael, 1982) is a good strategy to develop Exodus’ ability to answer comprehension questions by giving him a systematic means for analyzing task demands of different question probes. Since Exodus could not answer some literal questions when he did the IRI test, it is apparent that he neglected some important details of the passages. This instructional strategy can help Exodus to find and remember the important details of the text as he reads expository or narrative
Acknowledgement

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References


An interactive approach (2nd ed.). New York: Longman.


Appendix A: Suggested reading list

   In order to explore hurricanes, Ms. Frizzle’s class experienced a hurricane firsthand, from air, sea, and land. They learned what makes hurricanes.

   Through the magic school bus turned into a spaceship, Ms. Frizzle and her class were on their way to the moon and beyond! They explored the solar system.

   Ms Frizzle and her class took a trip to visit ocean. Using this strange trip, the author introduced children to the newest discoveries about ocean, including a look at animal and plant life on the deep ocean floor, in a hot-water vent, and on a coral reef.

   Sliding into a furnace of flames, Ms. Frizzle and her class experienced how electricity is produced and delivered. They also explored how electricity made machines or motors work.

   In the beginning of this book, Ms. Frizzle took her class to a dinosaur dig to look for Maiasaura nests. Then, the magic school bus turned into a time machine and transported them back to prehistoric times. They experienced the life in the dinosaur era.

   In order to study earth science, the kids in Ms. Frizzle’s class dug through the earth’s crust, then traveled straight to the center of the earth and out the other side-through the mouth of a volcano! Finally, they finished their great rock collection.

   It’s Broadcast Day in Ms. Frizzle’s class. Ralphie was sick and could not come to school. So, everyone climbed aboard the magic school bus and visited him. Join the class as they traveled through Ralphie’s bloodstream to find out how germs made him sick and how his body could make him well again.

   Using question and answer format, this book introduces the difference between a meteorite and an ordinary rock, a comet and an asteroid, and a speck of space dust and the dust in your room.

This book is designed in question and answer format. The author shows how people in the past used constellations to tell time and direction. He also gives a few tips on how you can use star groups today to keep from getting lost-right here on Earth or on a journey through the stars.


This book is a collection of science experiments designed to show that science is more than a list of facts-science is fun! The 200 experiments in this book take science out of the laboratory and put it into our daily life.


This book introduces yesterday’s science and today’s technology. The readers will investigate some of the scientific principles and technology involved in space science. Each chapter contains a number of activities designed to enhance your understanding of the subject.
閱讀診斷、教學和矯正之個案研究

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摘 要

本個案研究旨在探討是否借助閱讀診斷測驗與診斷教學可幫助有閱讀困難的學生解決閱讀問題及提昇其閱讀能力與潛能。本研究的測驗包括非正式的調查診斷、Stanford 閱讀診斷測驗、El Paso 語音測試、Slosson 朗讀測驗和重覆閱讀測試。診斷教學的目標包含增加常用字彙、增進解讀雙母音的能力、增強閱讀速度與流暢和增益結合閱讀與寫作過程之能力。經歷三個月的個別指導，受教者在認字及朗讀兩方面提昇了五個年級的能力。本文建議閱讀診斷測驗與診斷教學可用於幫助英外語學習者解決閱讀問題及提昇其閱讀能力與潛能。

關鍵字：閱讀診斷，閱讀教學和閱讀矯正

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