A diagnostic evaluation was conducted on Thomas, a fifth-grade student, to identify levels of reading and major word identification strategies. Initial testing conducted at Thomas' home revealed that he appeared to have an unusually positive attitude toward reading, considering the difficulties it had presented him since kindergarten. Learning Experience Approaches have proved successful with Thomas, while phonic approaches have had limited success. Results of administration of an informal reading inventory indicated that Thomas was able to perform at the maximum instructional level of primer on the graded word lists, word identification in context, and comprehension. During oral reading, Thomas exhibited a highly top-down word identification process. Consequently, two monitoring issues should be addressed to Thomas when he is exhibiting his pattern of thinking about the meaning of a word, using the first letter or two as a cue, then incorrectly guessing: (1) what would make sense? (his strength); and (2) look closely at the letters, or syllables (his weakness). (Informal reading inventory data, a writing sample, descriptions of traditional and contemporary models of reading disabilities, a diagnostic teaching model, and a list of literacy instructional methods categorized according to strategic process are attached.) (RS)
An International Schools Perspective on
Diagnosis and Treatment of Reading Disabilities

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Paper presented at the Association of International Schools in Africa
Background

Initial testing was carried out on 10-12-xx. The primary purpose of this session was to identify levels of reading and major word identification strategies. Testing took place in Thomas’s home, at the kitchen table. Thomas was friendly and at ease, very willing to participate. His Mom sat at the table. At one point, as the oral reading became more difficult, she encouraged him.

According to his parents, Thomas has had problems with reading since initial phases. In kindergarten, he had difficulty learning his letters. He did not have a clear concept of coloring and drawing at that time, though his drawings seem average in detail and creativity at present. Thomas was promoted to grade 1 despite teacher concerns. He repeated grade 1. In grade 3, he began receiving supplemental help in language arts and mathematics. His Mom reported that in grade 3 he was unable to learn his telephone number. At present, he does not know the multiplication tables.

His Mother said that Thomas has a problem with concentration,
especially in group work and cooperative learning situations. He seems to be able to learn more difficult words (e.g., "fluorescent") easier than shorter words.

A literacy interview was carried out. It was apparent from the interview that Thomas has received instruction in recommended reading strategies. For example, he was able to explain a step-by-step process in phonetically analyzing a word. He was aware of the importance of context usage in identification of unfamiliar words. His parents are very supportive, and his Mom works with him a lot in his reading and writing. His Mom also frequently reads aloud to him. Thomas appears to have an unusually positive attitude toward reading, considering the difficulties it presents to him.

Thomas’s Mom has read Treasure Island aloud to him, as well as other books such as The Lion, The Witch and The Wardrobe. She says that he is able to understand the imagery and analogies used in the books.

A consultation with the Learning Disabilities Specialist with whom Thomas has worked for the past several years confirmed the parents’ reports. Thomas has had serious problems with reading since the earliest grades. He is basically a nonreader, at least as far as classroom-level performance is concerned. Language Experience Approach lessons, with
Word Banks, have been particularly successful with Thomas, and the LD Specialist has used them as a centerpiece of instruction. Phonics approaches have had limited success.

Informal Reading Inventory Results

Results are attached. Thomas was able to perform at the maximum Instructional Level of Primer on the Graded Word Lists, Word Identification in Context, and Comprehension. His Listening Capacity Level was tested and at the highest level used, sixth grade, he performed at the Instructional Level. Thomas was able to do equally well on both types of comprehension tests used, the short identification questions listed in the test manual and on requests for summaries. His summaries were well organized, showing a fine understanding of story structure. He exhibited excellent recall during both oral reading and listening comprehension sessions, frequently using the exact words of the target text to answer questions.

Comprehension fell dramatically at the first grade level, apparently due to poor word identification. Thomas's understanding of the first grade passage in oral reading was almost nonexistent, though he clearly was trying to make sense out of the story. In the grade 1 passage tested by a request for a summary, Thomas constructed a story that used what he was
able to understand from his reading--very limited in scope--and actually made sense as a story, though it bore little resemblance to the target story.

During oral reading, Thomas exhibited a highly top-down word identification process. He did not attempt to sound out words, to any significant degree. He seemed to be identifying words using a single strategy, a “whole word” approach, noting some limited graphic similarity in most cases and making a meaningful guess as to the word. 20 of 26 miscues were semantically acceptable and 15 of 26 were syntactically acceptable, indicating a strong reliance on meaning and grammar to decode words. Only 10 of the miscues were judged to be graphically similar to target words, though frequently minor components of the miscues matched components of the target words ("said" for “has”, “it” for “that”, “and went” for “the window”).

Some key diagnostic issues arising from the IRI are as follows:

1. How close was the reader's interpretation (i.e., how much meaning change resulted from the miscues)?

Most miscues were semantically and syntactically acceptable up to and including the target word in a given sentence. The large number of miscues at the 1st grade level, however, seriously affected Thomas's
interpretation of the story, though he was clearly trying to make sense of
the story.

2. Does the reader monitor oral reading (i.e., does he self-correct miscues
that do not fit the context)?

Yes, at the instructional level (Primer). There were 5 self-corrections in the passage and the great majority of other miscues made
sense in the story. At the frustration level, semantics seemed to bog
down. There were relatively few self-corrections (only 3 in a much longer
passage with many more miscues).

3. Does the reader use top-down or bottom-up strategies to regain
meaning?

During oral reading, Thomas exhibited a highly top-down word
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components of the target words ("said" for "has", "it" for "that", "and went" for "the window").

Very few words were mispronounced (as opposed to substituted). In one story about skating, for example, Thomas pronounced "skating" as "skatting" several times, then used the story's context to self-correct in later occurrences. One interesting substitution involved Thomas in saying "play dough" instead of the target "play people". The substitution made sense in the context, though it changed the passage meaning somewhat.

Thomas made relatively little effort to "sound out" words during his readings. Even in the frustration-level passage (1st grade), he did not Thomas typically stop to sound out or break into syllables. When he did, he often took guesses at whole words rather than analyzing words phonetically. For example, with the target word "Alfred", he stated, "A flown...A flared>"

4. How has previous instruction influenced the child's miscue pattern?

Thomas appears to be using a word identification approach that is heavily based on top-down, context dependent reading. This would seem to fit the LEA approaches that are used in his LD classroom. It also fits his description of the process he uses to identify unfamiliar words, as he described in his interview. This strategy appears to be a real strength of
Thomas's, a conclusion that is verified by his LD specialist. This strength will need to be reinforced in instruction, and work will be needed to better integrate the graphophonemic cueing system into his word identification strategy.

Diagnostic Hypotheses

Thomas appears to be a heavily top-down reader. He will often guess at words but fail to check if they match the words on the page. He will continue to read material at his frustration level, but will change the story to fit his miscues rather than adequately monitoring his print processing. Methods should focus on "sense-making" (his strength) and the letters and letter-groups in the text (a weakness) at the same time. Since Thomas is not appropriately using the graphophonemic cueing system, methods should emphasize use of print processing in combination with top down strategies he already uses.

During reading sessions, when Thomas is exhibiting his pattern of thinking about the meaning of a word, using the first letter or two as a cue, then incorrectly guessing, two monitoring issues should be addressed to him:

1. What would make sense? (This is his strength.)
2. Look closely at the letters, or syllables. (This is his weakness.)
   a. In saying this, it was helpful in instructional sessions to cover parts of the target word with a file card to force sequential letter identification. For example, in the word "that", one might cover the "at" to elicit a /th/ sound, then uncover the word.
   b. At that point, if Thomas still could not decode the word, it was helpful to print out a familiar word with a similar ending, such as "bat". Thomas would identify this second word, and then the instructor might suggest, "Take the sounds at the end of the word "bat" at put them after the /th/ sound."

Informal Reading Inventory Data

**Graded Word Lists**

Independent: None
Instructional: Primer
Frustration: First

**Word Recognition in Context**

Independent: None
Instructional: Primer
Frustration: First
Comprehension (tested by questions and requests for summary)

Independent: Preprimer
Instructional: Primer
Frustration: First

Listening Comprehension

Instructional at highest level tested, 6th grade

Miscue Analysis in Context

26 total: 3 mispronunciations
17 substitutions (2 were semantically unacceptable)
4 insertions (0 semantically unacceptable)
2 omissions (1 semantically unacceptable)
0 reversals, 0 refusals to pronounce

Graphic Similarity: Yes: 10
No: 10

Syntactic Acceptability: Yes: 15
No: 10

Semantic Acceptability: Yes: 20
No: 6
Writing Sample

Sharks are dume

More pepel diy frum be stings sen frum sharks

Wut sharks eat derends on wut th are

All Sharks ar difarent.

Phonics Skill Test

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<td>22. spov</td>
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15. suge sus
16. nep x
17. hak hek-x
18. fing fig
19. gaj jag
20. gest jus
**Traditional Models:**

1. Regular Education:

   - Diagnosis of Subskills -- Criterion-referenced Tests
   - Individualized Remediation of Subskills
   - (Recreational Reading--50%)

   Problems:
   - 1. Unreliable CRTs
   - 2. Focus on weaknesses—demotivating—already proved not to work

2. Special Education

   - Diagnosis of Underlying Cognitive/Perceptual Processes
   - Individualized Remediation of Cognitive/Perceptual Processes

   Problems:
   - 1. Unreliable tests with many false positives
   - 2. No transfer of training in cognitive/perceptual processes to actual reading ability
   - 3. Little of practical value for classroom teacher—more interest in cause than in cure
     As if diagnosis of "poor auditory perception" is at all helpful to teachers trying to help their students read social studies material

**Contemporary Models**

1. Awareness that earlier test-based assessment was too simplistic and mechanical for accuracy and effectiveness. Individually administered diagnostic teaching is necessary for accurate diagnosis and prescription.

   A teacher who is sensitive to needs must work with a student in instructional situations to determine what methods of instruction are effective.

2. Recognition that reading must not be fragmented and that time-on-task in real reading is crucial.

   Instruction occurs in whole, meaningful settings—not subskill drills.
   True remediation does not occur when a child loses an hour of classroom reading instruction and gains an hour of instruction in the remedial reading room—the net gain is zero.

3. Recognition that assessment is on-going, and that it must provide information of direct value in instruction.
Assessment takes place informally in real reading settings. An important part of assessment involves trials of various methods.

4. Concern for role of cueing systems (graphophonemic, syntactic, semantic) in the reading process.

Renewal of interest in IRI's, oral reading as insight into process and miscue analysis

5. Concern for integration (language arts and subject areas) and social aspects of education, to put reading into a meaningful, holistic perspective:

Core Experiences for Whole Language Thematic Unit (Dorothy Strickland):

Inquiry Activities  Shared Reading & Writing
Read Aloud and Response  CONTENT  Independent Writing
       to Literature  THEME
Sharing  Independent Reading
DIAGNOSTIC TEACHING MODEL

BACKGROUND INFORMATION GATHERING

LITERACY EVENT

Assessment ➔ Instruction

DIAGNOSTIC HYPOTHEIZING

DIAGNOSTIC INSTRUCTIONAL LESSONS

EVALUATION OF GROWTH

no significant growth ➔ RECYCLE

significant growth ➔ DEVELOP INSTRUCTIONAL PLAN

# Literacy Instructional Methods
## Categorized According to Strategic Process

### Print Orientation (Bottom-Up)

<table>
<thead>
<tr>
<th>Predicting—(Before and During Reading)</th>
<th>Guessing what the author is going to say.</th>
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<tbody>
<tr>
<td>Echo Reading</td>
<td>Cloze instruction</td>
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<tr>
<td>Neurological Impress Method</td>
<td>Directed Reading-Thinking Activity</td>
</tr>
<tr>
<td>Language Experience Approach</td>
<td>Graphic Organizers</td>
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<tr>
<td>Message Writing</td>
<td>Experience-Text Relationship</td>
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<td>Predictable language reading</td>
<td>K-W-L</td>
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<td>Talking Books</td>
<td>ReQuest</td>
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<td></td>
<td>Self-generated questioning</td>
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<td>SQ3R</td>
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<td></td>
<td>Vocabulary Maps</td>
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### Monitoring—(During Reading)

| Checking the text or one's experience to see if the reading makes sense. |
|-------------------|----------------------|
| Chunking          | Directed Reading-Thinking Activity |
| Language Experience Approach | Herringbone Method |
| Predictable language reading  | Prediction maps |
| Readers Theater   | Reciprocal Teaching |
| Repeated Readings | Self-generated questioning |
|                   | Story maps            |

### Elaboration—(During and After Reading)

| Relating new information to what is known in order to remember it. |
|---------------------|------------------|
| Readers Theater     | Experience-Text-Relationship |
| Repeated Readings   | Herringbone Method   |
| Word Cards          | K-W-L               |
|                     | Literature Circles  |
|                     | Prediction maps     |
|                     | Question-Answer Relationships |
|                     | Self-generated questioning |
|                     | Reading logs        |
|                     | Reciprocal teaching |
|                     | Retelling           |
|                     | Story drama         |
|                     | Summarization       |