Learning How to Learn Words

(Learning How to Learn, With a Focus on Words)

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Learning How to Learn Words

Goals of this session

Expand understanding of word learning within a constructivist theory

Understand procedures that are helpful for word learning and learning how to learn words

Help focus attention in observing student performance

Disclaimers

Theoretical? Abstract?

Not much that is different from Clay’s writings

My understanding of Clay’s ideas & kids

Removed from real teaching and examples?

Please download rather than taking notes

www.serrra.org/2007Notes (notice the 3 r’s)
Learning How to Learn Words

Two broad goals of Reading Recovery

- Learn the connections and relationships between oral messages and ideas and written language
- Develop an active, constructive way of learning that will lead to a self-extending learning system

Word learning is an output of the strategic activities a constructive learner uses to solve problems in reading and in writing

What a beginner knows and discovers about words is a valuable tool for discovering more about how print works and for solving problems in reading and writing; i.e., word knowledge contributes to the strategic problem solving that RR children do
On-going knowledge of words and letters

Strategic learning activities on continuous texts - in both reading and writing

Expanded word knowledge
- Expanded language
- Expanded capability & comprehension

More known words
- Words known fluently & automatically
- Knowledge of word parts
- Connections across words

Brief detours to work on words and letters in isolation

Teacher support
Units of oral language

- Phonemes
- Morphemes
- Syllables
- Words
- Phrases – idioms
- Clauses – sentences
- Discourse structures (paragraph, fairy tale, bar jokes, Haiku, novel, etc.)

Units of printed language

- Letter
- Word
- Word-spaces
- Sub-word units (clusters; affixes; compounds)
- Punctuation
- Lines
- Organization on the page
- Paragraphs
- Discourse forms
Word Learning within Clay’s Theory . . .

...A theory of reading continuous texts cannot arise from a theory of word reading. It involves problem solving and integration of behaviours not studied in the theory about analysing words. (Clay 2005a, p. 19)

(A beginner) attends to many different aspects of printed texts (letters, words, language, messages, stories). He will have limited knowledge and primitive early response patterns in each of these areas (which will) change ...as he learns more about each area, and as the child learns to work on the interrelationships of these areas. (Paraphrased from Clay 2005a, p. 19)

To achieve maximum acceleration of children’s progress, teachers must abandon the notion that they must first teach the child to remember words before that child will be able to read or write them. To the contrary, children will remember words because they have met them and worked on them many times. (Clay 2005b p.139)

When the teacher becomes too involved in teaching for detail, the principle of acceleration can be seriously threatened. (Clay 2005a,p. 25)
What Does It Mean to Know a Word?

A literate person’s knowledge of ‘bank’

- The phonology (the sound of the word)
- The spelling (or a close approximate)
- The meaning(s) (denotation & connotation)
- Meaning associations (a web of connections)
- Sound and spelling connections to other words
- Uses of the word alone and in phrases
- Grammatical properties
- Derivative and related forms

Children’s early word knowledge

- Words in their oral vocabulary may be in variant forms; the meaning may be narrow
- Words may be known in reading by unique features
- Words may be known in writing as a motor program or a sequence of letters
- Words known in reading and writing may be different sets
Word Learning Involves Three Journeys

Journey one

New (never seen before)
Just known (seen or worked with before)
Partially controlled (working to get a solution)
Controlled production but with lapses
Controlled, correct (requires attention)
Fast, fluent (almost no attention required)

Journey two

Slow (conscious) to fast (automatic) responding

Journey three:

The word finds its place within the child’s literacy knowledge about similar words the child knows
**Big Ideas Of This Session**

1. Word learning involves the creation of brain connections of several kinds (visual, auditory, linking); learning to track words visually while thinking the sounds gradually develops linking associations.

2. New literacy learning for struggling readers often requires attention to different senses (brain pathways) in isolation – e.g., movement, looking, hearing, checking – for brief periods.

3. Children need to learn how to see parts of words, and use parts they know to solve new words by analogy as they work on continuous texts.

4. What is learned, solved, and/or noticed in one part of a lesson needs to be revisited in other parts of the lesson and in successive lessons.

5. Making connections to similar words is a very important part of learning how to learn words.

6. Following the child in word learning means building upon and extending his growing awareness of words, not teaching what the teacher chooses.
Word Learning in Reading Recovery

Contributing Factors and Procedures

- Development of the visual processing system
  a. Directionality and sequencing
  b. Mastering letter identification

- Word learning through writing
  a. Development of phonological processing
  b. Ways of solving words in writing
  c. Building a repertoire of known words

- Word solving through reading

- Linking sound and letter sequences

- Studying words in isolation (or in continuous text)
  a. Breaking words
  b. Taking words apart
  c. Solving through analogy

- Making connections

- Massive practice on continuous texts
Developing a Visual Processing System

Fast visual processing is the goal

“Speedy access to visual information is of the greatest importance in literacy learning. ...fast visual perception of forms is building up a network of links of what is seen to what is heard, that is, the sounds of language.” (LLDI, Part II, p. 31)

Big Idea #1: Learning to track words visually while thinking the sounds gradually develops associations (brain connections)

Directionality and sequence (Sections 1, 2, 3)
Learning to follow rules about direction
Attend to words in a line in sequence
Use of finger pointing
If needed, use Section 2 (pointing to objects)
Breaking letters out of words (pp. 19-20)
“Slow check” across words
Writing and cut up sentence
Letter identification

The goal: reliable, rapid identification with minimum conscious attention

Letter identification involves discrimination learning, spatial orientation, left-right sequencing, and name-form linking, and visual perceptual learning

(See Big Idea #2)

Learning letters

Introducing a new letter (LLDI-2, p. 24-29)
Extending the set of known letters (LLDI-2, pp. 34-39) including an alphabet book

Letter sorts (magnetic letters)
Sorts to focus attention to features
Sorts to practice recognition of new letter
Sorts for fast recognition of known letters
Sorts to recognize letters in various forms
**Sorts to help link letters and sounds

Letter learning and letter-sound linking in writing
Revisiting letters in reading and writing
Letter sorting with magnetic letters

Sorts to focus attention to features - examples:
  Find all the ones with circles (tunnels, sticks, etc.)
  Put together the ones that are the same (help child understand meaning of ‘same’ and ‘different’)
  Find ones with circle (curves) first (a, g, d, c, o, e, u)
  Find ones with sticks first (b, h, k, m, n, p, r)

Sorts to practice recognition of new letter, example:
  Put new letter into array of known letters, with several examples of each; practice finding letters by name, or practice finding and naming

Sorts for fast recognition of known letters, examples:
  Child pairs or groups letters which are the same
  Teacher names letters, child moves them
  Child moves and names letters

Sorts to recognize letters in various forms, examples:
  Sort letters of different color
  Sort letters of different forms e.g., (g G g)
  Pair upper and lower case letters

**Sorts to help link letters and sounds, examples:
  Sound to letter: T says word, child finds beginning letter within array of known letters.
  Letter to sound: T touches letter, child says word starting with that sound (begin with words from alphabet book)

**Note: Use only for children with special problems
Writing and Word Learning

Writing has much to do with word construction and word learning, but we mustn’t lose sight of the overall goal

“The goal of writing in RR is for the child to compose and write his own stories. Writing in RR involves:
- Composing
- Encoding words (spelling)
- Building a repertoire of known words
- Constructing words from their parts
- Shifting from simple to complex sentences

Structuring sentences in a variety of ways to add interest (LLDI, II, p. 51)

Writing in RR is a co-construction activity, allowing as much independence as the child can assume and moving to gradually increasing independence

Demonstrations, writing for the child, or other interruptions must not take control from the child or “destroy the cooperative tone of the activity”
Ways of Solving Words for Writing

1. Write quickly the words you know
2. Analyze the sound of the word and write the sounds you hear
3. Make it like another word you know
4. Listen to your teacher on special words

Dealing with errors in writing
- Impulsive errors – Anticipate and prevent if possible
- Confusions -- “...Intervene to prevent old errors from occurring”
- Encourage the child to monitor his own performance and make decisions about his knowledge and ways of working on it

Helpful prompts for word solving (LLDI-2, p. 65)

Prompt for the mental operation (or form) you want the child to pay attention to

“Usually the gain is not that the child gets a particular word right but that he has strengthened the range of ways of solving new words he will use in the future.” LLDI 2, p. 61
Development of Phonological Processing

“Becoming aware of phonemes is essential for becoming good at word recognition” (LLDI, II, p. 69)

Boxes and tokens are learning aids that need to be withdrawn gradually so that children hear and think about sounds in words in sequence in their heads without aids. In general, the learning sequence proceeds as follows:

a. Hearing syllables (clapping)
b. Saying words slowly, hearing sounds
c. Sound boxes and tokens
d. Sound boxes, tokens and letters
e. Sound boxes and letters (no tokens)
f. Sequence established
g. Shift attention to spelling sequences
h. Boxes are dropped

Phonological processing needs to be carried into other parts of the lesson consistently also

- “Checking” words built with magnetic letters
- Anticipating a word in reading and checking against the letters in print
- Monitoring the assembly of the cut up sentence
- Thinking sounds signaled by the letters on the page (using visual information for monitoring and searching)
Expanding a Meager Knowledge of Words

Develop fluency and flexibility with ‘known’ words
    (in both reading and writing)
Recognize (locate) known words in texts
Using magnetic letters to break known words (p. 42 ff)
    Foster left-right directionality and sequencing
        Lines of print, words, and letters
    Develop concepts: word, letter, first, last
    Foster visual processing through the word
Introduce ‘new’ words: trace, write, manipulate, look

Words selected for learning activities need to be in the child’s zone of proximal development (ZPD) – words over which he has partial control or productive words that should be easy for him to control

The object is twofold: A) expanding the knowledge of particular words and B) learning how to learn words

Strategic activities with words in reading and writing
    (locate, monitor, check, search, fix)
Making connections across reading and writing
Observing and recording reading and writing vocabularies
Word Solving in Reading

Reading Recovery teachers help change passive struggling into active learners as they help them:
  Try out possible responses
  Learn how to verify their decisions (LLI II, p. 102)

Successful problem-solving in reading can be highly motivational and also highly instructive if done under appropriate conditions (appropriate level and choice of text and skillful tutoring) – NKJ

“When the child can move easily from sounds to letters or from letters to sounds (single sounds or clustered sounds) it is easy for the teacher to prompt him. Knowing what the child controls she can say, Does that sound right to you? Check to see if what your read looks right. Check it! Does it look right and sound right?

...We help children to (coordinate these two things) every time they read texts or write a message. There are no specific RR procedures for fostering this.” (LLI II, p. 124-5)
Supporting Problem-solving in Reading

**What the child knows**

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Language</th>
<th>Print Conventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world</td>
<td>Structures</td>
<td>Letters/Words</td>
</tr>
<tr>
<td>Story meaning</td>
<td>Concept names</td>
<td>Patterns</td>
</tr>
</tbody>
</table>

Monitoring  
Checking  
Searching

**How the child is working on text**

**How Teaching Can Help**

Help the child try out possibilities:
- If he is ignoring what he knows, use a prompt
- If he lacks information, supply just that information
- If he needs a strategic activity (mon, ch, srch), call for it

Help the child learn to verify his decisions
- Prompt for strategic activity on the known M, S, V, Ph
- For what is unknown, supply information, then ask the child to decide if it fits
- Work toward independence in decision-making
Examples

* cement *  * I’m is *
1. I am on the path 2. I am playing

* gerbil, hamster, rat *
3. I am going to feed my mouse

—  said Dad
4. But you did get a shower. 5. Dad said

* under *
6. Have you looked on the table?

—
7. Father Bear went on fishing.

* out *  * Tom *
8. Ben shouted — “Today

* tr- ay- ll — *
9. Mrs Delicious got a trailer of sugar

* across *
10. The frog jumped around the store

* spice *
11. Mom got a pot of pepper
Linking Sound and Letter Sequences

This involves building three kinds of brain connections:

- for a visual processing system for literacy
  - distinguishing and identifying visual forms
  - establishing directionality and sequence in looking
- for developing awareness of sounds in spoken words
- for linking sounds sequences to letter sequences

Procedures that foster a linking of sounds and letters are important; they occur in all parts of the RR lesson and depend upon the teacher’s skill in observing what a child controls and is beginning to notice and her skill in encouraging him to notice and make connections. For example:

- Ask a child to write a known word to prompt recall
- Discuss words seen in reading and used in writing
- Use the “slow check” on words to confirm and search
- Use checking prompts that ask him to think about information of all types (or the type that’s ignored)
- Use a masking card that reveals the word gradually, in left-right sequence (look right? Sound right?)
- Use sound boxes to help a child connect HSIW with solving in reading
Letter-Sound Associations

Clay cautions against teaching that a letter has one sound
• Most letters can represent more than one sound
• Combinations of letters represent sounds (/ch/ /sh/)
• Letters have different sounds in different contexts
• Children’s dialects and pronunciations may differ
• (Discuss: “Tell me the first sound of this.” p. 36)

Confusions

“Usually when a child has a confusion he is dealing with a package of information bound together — he is not distinguishing seeing print, from hearing words (or sounds within words), from order and sequence issues. Teachers often confuse learners when they also work on the ‘package’ and do not help separate our the parts of the ‘package’ clearly in their conversations — the look, the sounds of the spoken word, the order of the letters, or the sequence of words.” (LLDI, part I, p. 40)
Breaking Words
An early sequence with ML’s

- Known words for directionality and sequence (pp. 19-20)
- Known words for word concepts (42-43, & 140-141)
- Known words to learn that words can be broken into parts in more than one way (pp. 43-45)
  - word endings
  - breaks within words (can be onset and rime)
- Known and/or partially known words to begin to see connections across words
  - look for similarities
  - substitute initial letters (pp. 141-142)
  - change onsets and rimes

(Big Idea #3)

A child needs to understand that words can be broken in different ways

Then he is ready to see parts he knows within words

Then the child is ready to start solving words in reading and in writing, using analogies to known words
Solving Words by Analogy

Word solving by analogy involves taking parts from two known words to form a new word (e.g., dog (known) + not (known) = dot)

Solving words by analogy comes later in lessons after hearing sounds and breaking words are well under control

Words used for analogies have to be really well known so that borrowing from them requires little attention

Words used should be productive (members of a large and frequently used set) and consistent in both sound and spelling. Which is better: rug or night? sand or snow?

Demonstrate and show; talk only to point to things. Teacher explanation requires extra attention and gets in the way

Word solving by analogy focuses on the visual and sound (V to V, and Ph to Ph); decisions on correctness in reading need to involve V, Ph, and M(eaning) and S(tructure)

Teacher prompting will be necessary (at the start) to connect to known words

Be clear about prompting for looking (for reading, “Do you know a word that looks like that?”), or hearing (for writing, “Do you know a word that sounds like that?”)
General Principles

When sequential L-R visual processing is established, the brain forms associations between symbols & sounds.

Always work from the known to the new or connect new material to something the child already knows.

Making it easy for to learn – work at a high level of success.

In general, word awareness develops in writing, in word breaking, and in monitoring/checking before children can use it to solve new words in reading.

Work (gently) to help the child see and make connections.
- across reading, re-reading, writing, and word work
- across parts of the same the lesson
- across lessons on successive days

Choose words the child has begun to notice and work on.

Teach on successful solving, though this is often unnecessary.

In choosing prompts, try to ‘unpack’ a child’s thinking.
- What do you think he is focusing on now?
- What do you want him to attend to?
- What language will call attention to what you want?
(See pp. 12-13, 71, 94, 111, 115, 132-133)

Massive practice in reading and re-reading books and in writing helps build up capacity – RR teachers.
Special Problems Linking Sounds/ Letters

Majority of RR children will not need special attention

Most lesson procedures help these abilities develop, but the teacher needs to observe closely and regularly to be sure that these connections are being formed

Difficulty going from sounds to letters
  Use boxes and tokens
  Use the cut-up sentence productively
  Demonstrate checking during reading
  Prompt for checking when established
  Establish independent monitoring

Difficulty going from letters to sounds
  Searching demonstrations during reading
  Searching prompts during reading, for example, 
    “Get your mouth ready for the first sound”
    “What sound do you see?”
  Slow check of words in isolation
  Demonstrations with magnetic letters (use the Scale of Help, pp. 132-133 and p. 94)

Demonstration of accumulating sounds in words (*splash:* write *s*-*, sp, spl, spl – ash*)
Problems with Memory and Retrieval

Teachers need to move beyond the idea that learning to read, or that learning words, is a matter of committing words to memory. Becoming literate is a process of forming complex connections in the brain - an interactive networks of strategies and sub-components through which (the child) learns

- how to process visual information
- how to process phonological information
- to form complex connections between the two

Nevertheless, some children need assistance in using their memory capabilities with respect to literacy (Clay 205b p. 174)

Activities that can help young children establish mental representations and in retrieving information include:

- Tracing activities (letters, words)
- Using verbal prompts or specific associations
- Movement activities (writing, magnetic letters)
- Use of various media, surfaces, and contexts
- Visualizing (seeing with the eyes closed)
- Repetition and over-learning
- Children can also be helped to intend to remember
- Recall, divert attention, recall again
- Massive amounts of reading and writing
Providing support for learning

Opportunities for solving (*non-verbal*)

*In RR learning occurs as an outcome of problem solving through strategic activities in reading and writing texts.* *(Clay 1991, pp. 340-345)*

*Many words are learned entirely or partially through this means. Judicious teaching can build upon and extend the partial knowledge*

*The challenges and opportunities you present are key*

Demonstration (*non-verbal*)

*Much more powerful than explanation. Work slowly. Any accompanying language should be like a pointer – going clearly straight to the mark*

Teaching (*verbal and non-verbal*)

*Most words studied in isolated work should emerge from, or prepare for, the current work going on elsewhere in the lesson.* *(Clay, 2005b, p. 139)*

*Make it very clear to the child what he needs to be attending to -- visual form, sound, letter, word, order or sequence.* *(See Clay 2005a, p. 40)*

Prompting (*verbal*)

*“A prompt is a call for action to do something within his control”  “To much prompting (or help) interferes with the development of independent solving”* *(Clay 2005a, p. 39)*