

Letters and Words and Brain Work



Oh MY !!!!!

Joelle Schlesinger Reading Recovery Teacher Leader

Jschlesi@learningcommunity202.org

Ann Smelser Reading Recovery Teacher/ Kindergarten

asmelser@learningcommunity202.org

Plainfield District #202, Plainfield, Illinois

Underlying Principles of our work in Reading Recovery

- Literacy Learning is Complex
- Individuals Actively Construct Their own Learning
- Language Plays a Crucial Role in Literacy Learning
- Reading and Writing are Reciprocal Processes
- Fast Processing is important
- Teachers must attend to Change over time in children's behaviors

- The child must learn to attend to some features of print
- The child must learn to follow rules about direction
- The child must attend to words in a line in sequence, and
- The child must attend to letters in a word left to right in sequence.

Becoming literate involves making the processes of visual perception operate under a new set of arbitrary constraints which apply to the written code of language.

Clay *Change Over Time* p.149~

Proficient Readers

In the first three years proficient readers learned about variations of print and learned how to quickly scan print to help themselves

After three years of instruction the lowest achievers were not as efficient as the proficient readers had been at the end of their first year at school.

Attending in a left-to-right sequence
when reading English is not something already
programmed in the brain.

I t m u s t b e l e a r n e d .

The few words that a child knows will stand out as a pattern that recurs, separated by

white spaces on either side.

To learn these arbitrary rules the brain needs to experience a build-up of consistent events. Lapses must be kept to a minimum. This learning must occur **early** in the child's formal introductions to reading and writing. He has to become consistent as he attends to print so that everything else he learns falls into place. His eyes have to scan according to the serial order rules of written language *without conscious attention. Demonstrations are recommended; talk may increase the confusions.*

At first these neural path-ways are faint, suggesting little myelin buildup, but with repetition myelin grows and the connections become stronger, easier. Repeated firings make successive firing easier and speedier and, eventually, automatic. When this occurs, a memory is formed.

The more work the brain does, the more it becomes capable of doing.

The critical distinction between any two words will be made at the level of letters!

We should not forget, however, that four-year olds often “catch on” to all of this without any problems, usually because some noticing adult gave them a couple of clear demonstrations...

Children make the print-to-language link only when they have learned how to work on the visual features of printed text

The aim is to have a child recognize letters rapidly...end up with a fast recognition response....Be careful to arrange your teaching so that it leads to this

How do we foster fast visual recognition?

- As you begin to engage learners with the earliest literacy tasks their 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. Teaching at this early stage provides the foundation for later progress.

Check on each child entering an early literacy intervention. Even if a child knows many letters and some words and seems to be under way with learning to read....

the teacher cannot take the child's control of the directional schema for granted

Complex movement patterns to be learned

- Attending to a left page before a right page
- Moving from top of the page downwards
- Moving L→R across a line of print
- Returning back to the left of next line
- Using spaces to control attention to words
- Attending L→R across a word
- Knowing “first letter” or “last letter”
- Scanning every letter rapidly in sequence from first to last without lapses

Two ways to read this one!

CORPOLITICALLYRECT

It is as if the brain cells need to be involved tomorrow in what they explored today to consolidate some permanent change in their structure. This is a possible explanation.

It seems likely that if the learner develops
faster responses racing around the neural
circuits in his brain
this will make reading more effective.