

Why Pictures in Reading Instruction Are Harmful

By Samuel L. Blumenfeld

There is much puzzlement these days over why so many children can't seem to become proficient in reading. A letter in the New York Times from one Lee W. Anderson on Oct. 8, 2007 summed up the general public frustration. He wrote: "The goal of universal math and reading proficiency by 2014 may be harder to reach than the moon, which simply means that we have to get more serious about providing schools, teachers and students with the tools they need."

Curiously enough, the needed tools were available well before the Progressives took control of public education in the 1930s. These educational reformers decided to change the way reading is taught in the schools. They got rid of the traditional phonetic method and adopted a new picture method known as look-say. The switch from sound to image meant that children would be taught to read by looking at each printed word as a little picture, sometimes alongside of an actual picture, instead of a group of letters standing for speech sounds. The result has been massive reading failure among American children. Indeed, by 1955 the situation was so bad that Rudolf Flesch was compelled to write his famous best-seller, *Why Johnny Can't Read*.

In that book, Flesch wrote: "The teaching of reading – all over the United States, in all the schools, in all the textbooks – is totally wrong and flies in the face of all logic and common sense." He then explained how imposing an image methodology on a phonetic writing system would lead to reading failure, generally known today as dyslexia or functional illiteracy.

Back in 1973, I wrote *The New Illiterates*, in which I researched the origin of the look-say method and discovered that it had been invented in 1837 by the Rev. Thomas H. Gallaudet, teacher of the deaf and dumb in Hartford, Connecticut. He juxtaposed printed words with their pictorial equivalents which the deaf were able to memorize to some extent. He thought that this method could be adapted for use by normal children. And so his method was adopted by Boston's primary schools, and it produced a literacy disaster. It proved beyond a shadow of a doubt that a phonetic writing system must be taught phonetically if the learner is to become a fluent, proficient reader.

Today, primary reading instruction still relies heavily on pictures as the means of training children to look at printed words. Children are still required to memorize a "sight vocabulary." And that is why we still have large numbers of children unable to achieve proficiency in reading. They are given more phonetic information than in previous years, but they are not sufficiently drilled in the letter-sound combinations so that they can acquire the needed phonetic reflex – the automatic ability to see the phonetic structure of the written word so that they can sound it out. In other words, the pictures produce a holistic or image reflex, which becomes an obstruction to seeing the word in its phonetic structure.

That is why pictures in reading instruction are harmful. Indeed, in 1983, I produced *Alpha-Phonics*, a reading program without pictures, which has been used by thousands of homeschoolers very successfully. The learners acquire the needed phonetic reflex, and thus become proficient, fluent readers. I proved that pictures are not necessary in learning to read.

There is another important reason why reading should be taught without pictures. Every child learns to speak his or her native language without pictures. The left side of the brain – the verbal side – contains the language learning faculty. When children learn to read without pictures, the left side of the brain expands its language learning power. However, picture reading is a faculty of the right side of the brain which deals with images and space. You cannot train the right brain to do the left brain's job. In fact, you create internal cognitive conflict by imposing an image methodology on a phonetic system. Thus, picture reading retards the growth of the language faculty.

The importance of the spoken word over the image cannot be exaggerated. For example, if you watch television and click on mute, you cannot understand what is going on. People are talking but you can't hear them. On the other hand, if you listen to a radio talk-show without any images, you are easily engaged in what is being said. And that is why talk-radio has become so successful. The message is conveyed in spoken language, not image.

Spoken language appeals to the innate logic of the human mind. The image appeals to the emotion. That is why the average listener learns more from talk-radio than from watching the TV news where the appeal of the image is to the emotions and language is used to enhance the emotional impact of the image. Of course, the spoken language can be used to influence the emotions and also to convey falsehoods. But a good reader will be better equipped to discern truth from falsehood than a non-reader dependent mostly on the image.

Black children, in particular, need to be taught to read without pictures. Picture reading has largely destroyed high literacy among blacks. That is why they have such high rates of academic failure and are inclined to drop out. We don't know why sight-reading is so harmful to black children, all we know is that it is. Unless we change the way reading is taught in our schools, the cognitive skills of black children will continue to be greatly damaged, with tragic consequences.

For more information about Blumenfeld's *Alpha-Phonics* reading program, visit the Samuel L. Blumenfeld Reading Clinic webpage on the www.donpotter.net website.

Extracts from an Article by Dr. Robert Calfee Commenting on the Use of Pictures In Beginning Reading

These select extracts were taken from Dr. Robert Calfee's 1974 article, "Memory and Cognition in Reading Acquisition." *Reading Perception and Language, Papers from the World Congress on Dyslexia*, Sponsored by The Orton Society in Cooperation with the Mayo Clinic. (New York Press, 1975, pp. 79-91). (Endnotes were renumbered for this extract).

Pictures, Meaningfulness, and Learning to Read

An effective way of improving a young child's "memory" performance is to assure that he has selected cues that carry the critical information. Contrariwise, one of the best ways to decrease performance is to present competing, salient, irrelevant information. The use of pictures to accompany printed text in beginning reading is one of the most distressing examples I know of this latter practice. If the goal in a particular lesson is to teach a child something about the correspondence between letters and sounds, a surefire way of distracting the student from the printed stimulus is to flash an attractive, four-color picture. Samuels^{1,2} has reviewed this literature, and the evidence from this conclusion is very convincing. In a recently published study, Samuels, Spiroff and Singer³ replicated earlier findings, and showed that presenting words in "meaningful sentential context" also slowed down acquisition of decoding knowledge. If the intention is to teach a student to pronounce a set of target words, the best approach is to eliminate all extraneous cues – present the words plain, in isolation.

The use of familiar, high-frequency words in beginning reading series is another instance where the situational cues probably are counter to acquiring the desired generalizations. It is well known that spelling-sound irregularities are more typical of high-frequency words – *of, was, said* and *don't* are samples. Many such words are easily accessible in memory. They come easily to mind with minimal information. Byers put it well, "[High-frequency words] may facilitate reading acquisition, but only at the cost of the child's early texting response being controlled by single-letter clues. he may even learn a rather generalized set that attention to the whole word (i.e., all the letters) is *not* important for word recognition."⁴ The salient meaningfulness of familiar words may in itself sidetrack attention (and consequent analysis and storage) from cues vital to the acquisition of decoding knowledge. The alphabetic principle may be the best-kept secret about reading for many beginning readers. McNeil and Stone's data⁵ suggests that semantic associations should be minimized when the goal is to instruct a student about decoding.

In Figure 9 (a picture typical of a phonics workbook then and now, Don) is an example from a workbook in current use in California schools. I visited a first-grade classroom recently in which the students were cheerfully filling in the blanks with letters. I asked one child if he could read any of the words – he said, "No," as did his partner. A boy on the other side of the table then said, brightly, "I can read the words." And he proceeded to do so, including some that he had not printed; in one instance his response had no relation to the graphemic clues, though it matched the picture. The other children caught on quickly, and suddenly all the students at the table became "readers" – that is, they could name the pictures.

I am not categorically opposed to pictures. Concrete representations are often the best way of communicating with someone, particularly with the young and those unused to handling abstractions. But curriculum developers, testers and teachers need to consider more carefully the effects of the cues presented to children during reading instruction. A principle of “least effort” makes sense to most learners – select those cues that are most salient, familiar and instinctive in a situation. They will be the easiest to remember. But eventually the piper must be paid: reading is not just picture-naming, and at some point the student must learn something about translating from graphic clues to spoken forms.

Separability of Curriculum Components

One of the implications of an information-processing approach to memory and cognition is that instructional techniques should match the cognitive requirements of an educational goal. The simple generalizations that grace the path of “how to teach reading” manuals are then seen to have limited generality. In their place can be proposed a more rational principle: organize educational goals into separate domains where the cognitive requirements within a domain are reasonably coherent, and between-domain differences are large. Teach together those topics that go together in the child’s thinking; do not force him to keep shifting cognitive gears.

Word Familiarity and Comprehension

For instance, acquisition of basic decoding skills comprises a markedly different domain than improving comprehension skills. The conditions that facilitate learning to decode English writing stand in the way of comprehension and vice-versa. Earlier it was argued that for several reasons high-frequency, familiar words were poor materials to use in teaching decoding. If comprehension were the instructional goal, then choice of familiar words becomes a critical requirement. If a student is to grasp the meaning of a passage with ease, then it is important that the vocabulary make sense to him, that is consist of words represented in the “subjective lexicon,” to use Miller’s term.⁶ People remember concrete things much better than abstractions. Human memory is quite unlike a computer memory in this respect; not logically simplicity but concreteness counts.”⁷ [Three paragraphs skipped here.]

Memory, Comprehension and Decoding Speed

Another reason for separating instruction aimed toward decoding skills from that aimed toward comprehension also relates to the characteristics of human memory.

[Three paragraphs skipped here.]

.....If a student is asked to read prose that makes substantial demands on his existing decoding skills, so that his production of words is slow, error-prone and faltering, it seems unreasonable to expect that he will understand very much of what he has read. Short-term memory capacity will not allow it nor is there any need to place a child in such a position.

[One paragraph skipped here]

Many experts have suggested that a beginning reader must find meaning in what he reads, or he will lose interest. This is taken to mean that primer prose should be meaningful, that the child should read only meaningful materials, and should be directed from the earliest experience in reading to seek to understand what he reads. My analysis of the situation as a researcher and my experience with young children suggests that this is **bad advice**. Young children are quite willing to work at developing skill in a specific and limited task on the promise that it will pay off in a larger context – “meaningfulness” inheres in the very performance of the act. Working on phonics is an acceptable task to most children, if they understand what is to be done and have a reasonable chance of success when they attempt it.

Comprehension skills can be developed without doing any reading at all. Being read to, being asked to explain something you have seen or heard, being asked to create a story, are all reasonable activities for young children that will enhance their skill at organizing prose of a “schoolish” character. As skill at translating letters to sounds begins to develop, then it makes sense to ask the child to read connected prose for meaning – to combine two skills.

References

1. Samuels SJ: Attentional process in reading: the effects of pictures in the acquisition of reading responses. *J Edu Psychol* 58:337-342, 1967.
2. Samuels SJ: Effects of pictures in learning to read, comprehension and attitudes. *Rev Educ Res* 40: 397-407, 1970.
3. Samuels SJ: The effect of letter-name knowledge in learning to read. *Am Edu Res J* 9: 65-74, 1972
4. Samuels SJ: Visual recognition memory, paired-associate learning, and reading achievement. *J Educ Psychol* 65: 160-167, 1973
5. Samuels SJ, Spiroff J, Singer H: Effects of pictures and contextual conditions on learning to read. Occasional paper no. 25. Minneapolis, Minnesota, Research, Development and Demonstration in Education of Handicapped children. 1974.
6. Senf CM, Freundl PC: Memory and attention factors in specific learning disabilities. *J Learning Disabilities* 4: 97-106, 1971.
7. Shankweiler D, Liberman IY: Misreading: a search of causes. *In Language by Ear and by Eye.* Edited by JF Kavanagh, IG Mattingly, Cambridge, Massachusetts, MIT Press, 1972.

A Quote from Rudolf Flesch’s 1981 *Why Johnny Still Can’t Read Concerning Pictures in Beginning Reading Books*

How did they do it? Mainly by turning the competition for textbooks into an annual beauty contest. Almost every other year, each of the competitors comes out with “new, improved” models, renamed, refurbished, and, if possible, newly and more gaudily illustrated. There’s no other country in the world where children learn to read from such handsome books.

Does that improve their reading skills? It wasn’t until 1967 that a researcher, Dr. S. Jay Samuels, got curious as to the answer to that question.

It turned out that pictures not only don’t help students, but are an actual hindrance. Somewhat surprised, Dr. Samuels repeated his original experiment with another, more classroomlike setting. The result was the same. The simple truth was that a child, when confronted by a word and a picture, will look at the picture *first*. The more attractive the picture, the more it will interfere with word learning.

After Samuel’s innovative research, nineteen – yes, nineteen – more researchers followed in his footsteps. Eventually Samuels summarized the whole series of studies in an article in the *Review of Educational Records*¹.

Dr. Samuels’ summary was devastating. He wrote.

- 1 The bulk of research findings on the effect of pictures on acquisition of sight-vocabulary was that **pictures interfere with learning to read.**
2. There was almost unanimous agreement that pictures when used as adjuncts to the printed text, do not facilitate comprehension.

¹Samuels, S. Jay., “Effects of Pictures on Learning to Read, Comprehension and Attitudes.” *Review of Educational Research*, Vol. 40. No 1, 1967, pp. 297-407.

Note from Internet Publisher: Donald L. Potter

www.donpotter.net

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Sam Blumenfeld sent me this article on February 4, 2008, with the following comment, “I thought you might want to add this article to your educational website.” I am delighted to add another eye-opening article from Sam’s pen. I will not add much here except to say that I have personally used Sam’s *Blumenfeld’s Alpha-Phonics Reading Program* in beginning reading classes, remedial classes, and bilingual classes for Spanish speaking children. There are no pictures whatsoever in Sam’s method, yet my students learned to read all 3,500 words and 600 sentences.

I should like to add that I have taken the opportunity to teach Rudolf Flesch’s little phonics program in his 1955 *Why Johnny Can’t Read and what you can do about it*. The last half of the title is much more than a promise; and I have reams of test scores to prove its **amazing effectiveness**. Blumenfeld and Flesch did far more than just complain about defective teaching methods, they took up arms against the darkness and gave us reading systems that have **proven** themselves over and over with every type of student.

For some reason, teachers tend to be impressed with beautiful artistic productions in books, especially beginning readers. In fact, there seems to be a direct relationship between the number and centrality of the pictures and the perceived desirability of the method. I cannot count the times that I have seen children carrying their little predictable (picture rich, sight-word readers) storybooks down the hall, smiling under the delusion that they can actually read. This probably explains why they remain so popular in beginning reading methods in spite of their **notorious failure**. Since we cannot expect any commercial publishers to produce the needed picture-free beginning reading method, it will remain for independent authors like Mr. Blumenfeld and myself to provide the desideratum.

I highly recommend my inexpensive paperback edition of Hazel Loring’s *Reading Made Easy with Blend Phonics for First Grade* and my *Blend Phonics Lessons and Stories*. They are available from Amazon and Barnes & Noble. My beginning phonics reading materials are all free of pictures.

I highly recommend the *McCall-Harby Tests Lessons in Primary Reading* and *McCall-Crabbs Test Lessons in Reading* as excellent reading material without pictures or predictable text, for students who are well along in their decoding skills.

It is my experience that children make more rapid and secure progress with beginning reading when all pictures and other distractions are totally eliminated. The same is especially true with remedial reading.

The excerpts from Robert Calfee’s article “Memory and Cognitive Skills in Reading Acquisition” and Rudolf Flesch’s reference to Jay S. Samuels’ research were added as an appendix to Dr. Blumenfeld’s paper on 8/18/08. Edited on 4/18/09. Last edited on November 2, 2019. I resigned from the Odessa Christian School on May 21, 2019 to dedicate more of my time to promoting intensive phonics and tutoring more students in need of help with reading and writing.

Samuel L. Blumenfeld passed away on June 1, 2015 at the age of 89.

Here is S. Jay Samuel’s important 1974 paper, “Effect of Pictures and Contextual Conditions on Learning to Read.”

<https://files.eric.ed.gov/fulltext/ED101307.pdf>

Here is a paper S. Jay Samuels delivered at the 1978 Reading Reform Foundation Conference.

http://donpotter.net/pdf/samuels_automatic_decoding.pdf

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