



FRP



The Fundamental Reading Process

Formation of the Process

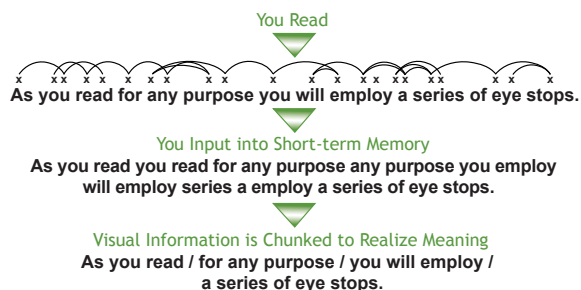
When you first approach learning to read, you do not possess Fundamental Reading Process skills. You bring to this stage of learning your vision, visual/functional skills, and certain acquired habits of observation. None of these competencies adequately prepare you to cope with the physically unnatural and perceptually demanding near-point visual activity of reading, which requires intricate discrimination of letters and words.

Over a period of years, you adapt to the activity of reading more or less successfully. Although all individuals strive to learn to read effectively and efficiently, there are many conditions in beginning reading that typically result in a rather inefficient and ineffective process of reading. For example:

- A lack of visual/functional competency affects comfort and accuracy of perception.
- The sheer number of new words typically introduced each week without automaticity training can result in a slow and halting manner of reading that interferes with understanding.
- The considerable amount of slow oral reading experienced combined with limited silent reading practice inhibits the development of fluency in silent reading.
- Sometimes decoding (word attack) is overstressed and not balanced by “instant sight recognition” practice, which ensures fluent comprehensive reading.
- If an individual lacks the skills required for fluency in reading, this contributes to a lack of confidence in the capability to read with understanding.

During the years when you are learning to read, you acquire, through trial and error adaptation, your Fundamental Reading Process, which is the basic manner in which you approach all reading tasks. This process reflects the manner in which you have adapted your visual coordination to reading, acquired directional (left to right) control, and developed accuracy in visual tracking across lines of print. These relatively involuntary behaviors interact with your personalized manner of perceiving words and set in motion a “loosely” intercorrelated feedback process between the manner in which you perceive words, input them into short-term memory, recognize syntax, and achieve literal understanding. By the time you reach the intermediate grades, this Fundamental Reading Process has become habitual, and the characteristics of this process will either facilitate or inhibit your effectiveness in reading to learn and will ultimately influence your enjoyment of reading.

As an adult, when you open a book to read you are engaged, in less than a second, in a process involving split-second functions and responses of which you are unaware and cannot consciously control. Although your reading may take many directions to achieve various goals, all reading begins with basic subliminal functions which encompass visual/functional competence, high speed word perception, and short-term memory processes. All of these are components of your Fundamental Reading Process.



Visual/Functional Competence

- Binocular coordination
- Ocular motility
- Accuracy in tracking

Underlying and influencing the reading activity is the adequacy of one’s visual acuity (ability to see clearly), binocular coordination and fusion (use of the two eyes in a coordinated manner that produces single vision), ocular motility (the ease with which the eyes move), and accuracy in tracking (the ability to stay on lines of print and move accurately and sequentially across each line). These visual capabilities impact on the accuracy with which words are perceived and affect feelings of ease and comfort during reading.

The near point activity of reading is not a natural human act. We were basically designed for distance viewing. Unfortunately, most people do not possess the visual competence required for reading. Present estimates are that 30% to 60% of students and adults suffer, in varying degrees, from a lack of adequate visual coordination skills, poor ocular motility, and inaccurate visual tracking. Those classified as underachievers suffer more dramatically from a lack of such visual competence and desperately need visual retraining. Possibly 6% to 8% of these students may require specialized visual training by a vision specialist.

Perceptual Efficiency

- Letter recognition
- Letter cluster awareness
- Letter order in words
- Visual memory

As a person reads, there is an awareness of a flow of words and ideas, but the reader is unaware that this flow of information is created through a series of extremely brief visual impressions received each time the eyes pause during reading. Without conscious direction, the eyes shift position across each line of print, pausing three to five times per second to accomplish word perceptions.

The reader experiences what seems to be a continuous flow of words, in part because these visual impressions overlap each other so rapidly that they create the feeling of an uninterrupted flow of words. Further, eye movements and pauses are not detected because vision drops dramatically just prior to the movement

of the eyes and quickly recovers when the eyes become stationary again. This prevents the reader from seeing the blur that would occur during eye movements that might suggest separate impressions.

Although we read through a series of small glimpses of print, no one is aware of any real limitations as to the number of words seen at any one time. Many people mistakenly feel that they can see phrases (or even complete lines of print) at a single glance. However, from each eye pause, vision and perceptual limitations dramatically restrict what can be seen and saved to a typical average of just a single word, more or less.

While reading, one may be aware of rereading content that was not understood, but a reader is seldom, if ever, aware of regressions (reverse eye movements). Most readers employ a multitude of split-second right-to-left eye movements that are immediately followed by recovery of left-to-right eye movements.

These regressions and their recovery return movements can consume one-third or more of total reading time and up to one-half of a beginning reader's total reading time. Regressions do not aid understanding. Rather, they inhibit and confuse perception of what is read and steal time and energy in the process. The nature of the ocular-motor activity employed when reading, the number of eye pauses per word(s), the degree of habitual regression, and even the average length of eye-pause time are behaviors acquired by "trial and error" during the learning-to-read years. In addition, a lack of perceptual efficiency will also affect spelling as well as fluency in silent reading.

Information Processing Effectiveness

- Rapidity of word recognition
- Sequence of visual input

The series of word impressions received during every second of reading are processed through short-term memory in the order in which they are perceived. These word impressions are either realized as properly sequenced expres-

sions of language or they are resequenced (not consciously) if they are received out of order as a result of regressions. Individual words are quickly chunked (associated) into larger units of language, which are finally realized mentally as phrases, complete sentences, and eventually as larger messages. If understanding is not achieved, there will be a conscious need to reread to clarify meaning.

The function of short-term memory is to deliver an accurate literal message to the mind. However, this is not a process that can be controlled and/or directed. The reader can only be aware of the outcome of this process.

There are limitations to the capability of short-term memory that affect retention and literal understanding. Typically, short-term memory can hold only a maximum of five to seven items (perhaps partial impressions of words) at any one time and only for intervals of three to four seconds. Beyond these limits, loss of items occurs. These limitations make it vital that the reader be able to recognize words rapidly and accurately in proper sequence and then quickly chunk words into larger syntactical units to minimize the number of items in short-term memory so retention can be maintained and be comprehensive.

Average adult readers, reading at approximately 250 words per minute, input four or more impressions per second into short-term memory. They chunk words fairly rapidly and realize sentences ranging from 12 to 24 words in four to eight seconds. If some words are lost in this process, these readers will compensate by using their greater capability with context to complete meaning with relative accuracy. By contrast, a very accomplished reader (450-500 words per minute) will realize the same sentences in just two to three seconds. However, the beginning reader may require up to 15 seconds to process a 12-word sentence. Beginning readers will lose many impressions as they pass through short-term memory because they do not possess the contextual capability to salvage meaning as well as a more advanced reader.

The question logically arises as to whether a reader really does need to see all the words to read. For complete accuracy, the answer to this question must be “yes.” The fact that all words must be seen does not mean that the same attention will be devoted to each and every word. However, recognition of the meaning and significance of individual words (and later chunked words and phrases) occur many seconds after the words have been perceived and are being processed through short-term memory. Your long-term memory (experiential background) will finally interpret the meaning, significance, and importance of the words read and the literal messages derived.

Improving the Fundamental Reading Process

Those who are concerned with reading development and improvement mistakenly focus almost exclusively on comprehension and the development of the higher-level skills (understanding, interpretation, appreciation, and problem solving) with the conviction that the more fundamental basic reading behaviors and skills will fall into line and develop on their own. Unfortunately, this does not typically occur. Although these basic skills and behaviors do improve and mature to some degree, the fact remains that the average adult is not truly a very efficient or effective reader. Whether a school is involved with a basal reader, whole language, or a combination approach to beginning reading, a consideration of the Fundamental Reading Process is critical. All facets of learning to read, from the moment of sensory impression through cognition, must be considered in a truly comprehensive reading curriculum.

The guidance and direction of a good teacher and the stimulus of good literature are essential ingredients in any beginning reading program. But the subliminal and more basic skills involved in forming every child’s Fundamental Reading Process must be considered and

carefully developed. This does not mean that this basic process can be improved by conscious direction or attention to how one reads.

Because this process transcends awareness, improvement can only be achieved through training techniques that allow the reader to focus on the message of the reading content under viewing conditions that will alter and improve the process through which the reader perceives and the manner in which short-term memory functions. When words are perceived more rapidly and accurately, and are fused into meaning more quickly and in a more orderly fashion, an individual will read with an increased rate that will provide a greater awareness of total context and, therefore, increased understanding.

In addition to improving the manner in which information is processed, extensive practice and mastery of the 25 major comprehension skills is crucial and must be provided so students can learn to read in a global comprehensive manner using a wide array of cognitive processes during reading.

As the Fundamental Reading Process is improved through Reading Plus® fluency development, the reader becomes more aware that it is possible to read with greater ease and comfort, with increased rates while maintaining thorough comprehension and understanding. Additionally, through eye movement recording with the Visagraph™, it is possible to record and objectively analyze the oculomotor changes that occur as the Fundamental Reading Process is improved. Through Guided Reading™ training, visual coordination improves, the amount of visual activity (fixations and regressions) required to read is reduced, and the regularity of performance denotes more successful input into short-term memory. Dramatic changes in the efficiency of reading can be accomplished with most individuals in approximately 40 lessons.