### Spalding Graduated Schedule of Reinforcement The Secret of Teaching Rauding (Fluent Reading)

by Donald L. Potter March 28, 2010

### First Week Graduated Schedule of Reinforcement

Word	Day 1	Day 2	Day 3	Day 4	Day 5
1	Word 1	Word 7	Word 13	Word 19	Word 25
2	Word 2	Word 8	Word 14	Word 20	Word 26
3	Word 3	Word 9	Word 15	Word 21	Word 27
4	Word 4	Word 10	Word 16	Word 22	Word 28
5	Word 5	Word 11	Word 17	Word 23	Word 29
6	Word 6	Word 12	Word 18	Word 24	Word 30
7		Word 1	Word 1	Word 1	Word 1
8		Word 2	Word 2	Word 2	Word 2
9		Word 3	Word 3	Word 3	Word 3
10		Word 4	Word 4	Word 4	Word 4
11		Word 5	Word 5	Word 5	Word 5
12		Word 6	Word 6	Word 6	Word 6
13			Word 7	Word 7	Word 7
14			Word 8	Word 8	Word 8
15			Word 9	Word 9	Word 9
16			Word 10	Word 10	Word 10
17			Word 11	Word 11	Word 11
18			Word 12	Word 12	Word 12
19				Word 13	Word 13
20				Word 14	Word 14
21				Word 15	Word 15
22				Word 16	Word 16
23				Word 17	Word 17
24				Word 18	Word 18
25					Word 19
26					Word 20
27					Word 21
28					Word 22
28					Word 23
30					Word 24

Second Week Graduated Schedule of Reinforcement

Word	Day 6	Day 7	Day 8	Day 9	Day 10
1	Word 31	Word 37	Word 43	Word 49	Word 55
2	Word 32	Word 38	Word 44	Word 50	Word 56
3	Word 33	Word 39	Word 45	Word 51	Word 57
4	Word 34	Word 40	Word 46	Word 52	Word 58
5	Word 35	Word 41	Word 47	Word 53	Word 59
6	Word 36	Word 42	Word 48	Word 54	Word 60
7	Word 7	Word 13	Word 19	Word 25	Word 31
8	Word 8	Word 14	Word 20	Word 26	Word 32
9	Word 9	Word 15	Word 21	Word 27	Word 33
10	Word 10	Word 16	Word 22	Word 28	Word 34
11	Word 11	Word 17	Word 23	Word 29	Word 35
12	Word 12	Word 18	Word 24	Word 30	Word 36
13	Word 13	Word 19	Word 25	Word 31	Word 37
14	Word 14	Word 20	Word 26	Word 32	Word 38
15	Word 15	Word 21	Word 27	Word 33	Word 39
16	Word 16	Word 22	Word 28	Word 34	Word 40
17	Word 17	Word 23	Word 29	Word 35	Word 41
18	Word 18	Word 24	Word 30	Word 36	Word 42
19	Word 19	Word 25	Word 31	Word 37	Word 43
20	Word 20	Word 26	Word 32	Word 38	Word 44
21	Word 21	Word 27	Word 33	Word 39	Word 45
22	Word 22	Word 28	Word 34	Word 40	Word 46
23	Word 23	Word 29	Word 35	Word 41	Word 47
24	Word 24	Word 30	Word 36	Word 42	Word 48
25	Word 25	Word 31	Word 37	Word 43	Word 49
26	Word 26	Word 32	Word 38	Word 44	Word 50
27	Word 27	Word 33	Word 39	Word 45	Word 51
28	Word 28	Word 34	Word 40	Word 46	Word 52
28	Word 29	Word 35	Word 41	Word 47	Word 53
30	Word 30	Word 36	Word 42	Word 48	Word 54

On the 6<sup>th</sup> day Words 1-6 will be dropped and six new words will be added. This continues through the school year. All words are kept in a *Spelling Notebook* for permanent reference. The spelling rules are also kept in the front of the *Notebooks* after the first year. For maximum results, the program should be followed for no less than four years. New words are in *italics*. Concerning Meaning: Remember that either the teacher or student gives a sentence containing the word so that meaning is NEVER neglected with the Spalding method. Spalding wrote in 1957, "It seems silly to mention but critics of phonics seem to assume tht if sounds of the language are taught the meanings of individual words and sentences is overlooked. Experience with our phonics is quite the reverse and such criticism quite unfounded. (WRTR, p. 131). There is some overlap each year.

# Spalding Graduated Schedule of Reinforcement for the 70 Phonograms

Word	Day 1	Day 2	Day 3	Day 4	Day 5
1	Phonogram 1	Phonogram 5	Phonogram 9	Phonogram 13	Phonogram 17
2	Phonogram 2	Phonogram 6	Phonogram 10	Phonogram 14	Phonogram 18
3	Phonogram 3	Phonogram 7	Phonogram 11	Phonogram 15	Phonogram 19
4	Phonogram 4	Phonogram 8	Phonogram 12	Phonogram 16	Phonogram 20
5		Phonogram 1	Phonogram 1	Phonogram 1	Phonogram 1
6		Phonogram 2	Phonogram 2	Phonogram 2	Phonogram 2
7		Phonogram 3	Phonogram 3	Phonogram 4	Phonogram 3
8		Phonogram 4	Phonogram 4	Phonogram 5	Phonogram 4
9			Phonogram 5	Phonogram 6	Phonogram 5
10			Phonogram 6	Phonogram 7	Phonogram 6
11			Phonogram 7	Phonogram 8	Phonogram 7
12			Phonogram 8	Phonogram 9	Phonogram 8
13				Phonogram 10	Phonogram 9
14				Phonogram 11	Phonogram 10
15				Phonogram 12	Phonogram 11
16					Phonogram 12
17					Phonogram 13
18					Phonogram14
19					Phonogram 15
20					Phonogram 16

This five-day cycle is repeated until all 70 phonograms have been introduced. Practice continues until student has achieved full automaticity writing and identifying the phonograms. Letter names and pictures are avoided in order to assure a direct, unencumbered link between the symbol and sounds.

Italics represent the first time a phonogram is introduced. Non-italicized phonograms represent repetition. Four phonograms are introduced everyday until all 70 phonograms are introduced. All the single-letter consonants and five vowels are introduced in seven days of first-grade. Teaching the spelling of words from the Ayres list begins after the first 54 phonograms are introduced in about 14 days.

The writing and sounds of the phonograms are introduced simultaneously to develop the association (link, bond, connection) between the phonemes and graphemes. Flashcards are used daily to strengthen and reinforce the bond. Manuscript letter formation is specially designed to enhance visual perception of the letters and prepare the student for an easy transition to cursive, which is not neglected in this program.

For older student, phonograms can be introduced much faster than a mere four per day since they usually already know some of them. Some student will know the first 26 phonograms from previous experience with other methods. Just teach the proper method of writing the letters and move on as fast as the student's ability will allow.

#### Spalding's Writing Road to Reading

## Viewed Through the Lenses of Ronald P. Carver's Rauding Theory and Paul Pimsleur's Graduated Interval Recall

by Donald L. Potter March 28, 2010

Romald Spalding's *Writing Road to Reading* has proven itself as an excellent method for teaching reading **when the directions are followed to the letter**, which is why Romalda insisted on 40-hour workshops for anyone teaching her method.

Her method was, and continues to be, revolutionary. The revolutionary nature means that how-to-teach-it is not instinctive. It is very liable to poor teaching and catastrophic failure in the hands of teachers incapable or unwilling to follow Spalding's directions.

An essential factor in the success of the program, as designed, is the graduated-interval-of-recall, which leads to high level, automated mastery of English orthography. The Graduated Schedule of Reinforcement Chart above shows in graphic form how Spalding helped student learn core vocabulary to the student's rauding rate through intensive writing and spelling. By rauding rate, we mean the student's ability to read print with understanding at the same speed they can understand spoken language, reading words in their recognition vocabulary.

Note that each word is spelled five times. The spelling each time includes the coding marks. The word is written only once in the Spelling Notebook, to form a permanent glossary. The student can use the Notebook for reference throughout the year. The second year the students review the first grade words quickly. Over 700 words were mastered in the first grade. The words came from the Ayres Spelling Scale of high-frequency words in print in order of spelling difficulty. This meant that the words that occur most often in print were raudized during the process of learning the spell the words.

Here are Carver's Rauding Rates through  $8^{th}$  grade. The *McCall-Crabs Reading Tests* can be used as testing instruments. GE = Grade Equivalent. Wpm = words per minute.

Rauding Level (GE units)	Rauding Rate (Wpm units)	Rauding Level (GE units)	Rauding Rate (Wpm units)
1.5	112	10.5	227
2.5	125	11.5	238
3.5	137	12.5	251
4.5	150	13.5	263
5.5	162	14.5	277
6.5	175	15.5	289
7.5	188	16.5	302
8.5	201	17.5	315
9.5	213	18.5	326

Future publications will investigate in-depth the relationship between Spalding's method and Carver's Causal Model of High and Low Reading Achievement. I believe we will find that every Cause, in the Causal Chain of High Reading Achievement, is addressed adequately in Spalding's method when it is taught exactly as Spalding explained in her 40-hour training sessions.

Sylvia Farnham-Diggory investigated the cognitive aspects of the Spalding method in the light of modern information processing theory. A speech she gave concerning the Spalding Method at a *Reading Reform Foundation Conference* is available on my website: <a href="https://www.donpotter.net">www.donpotter.net</a>

http://donpotter.net/pdf/farnham-diggory\_1987.pdf

The "Graduated Schedule of Recall" is an absolutely essential aspect of the successful implementation of Spalding's method. Students who are taught by the method should easily attain Carver's Rauding Level for their grade level. It is hoped that these theoretical predictions will be investigated by competent reading researches.

#### http://jackcheng.com/assets/pimsleur.pdf

I also believe that Spalding's Schedule of Reinforcement answers the requirements of Ogden Lindsey and Carl Binder's Precision Teaching Model of Learning. "In *Precision Teaching* parlance, once a performance demonstrates **retention**, **endurance**, and **application**, it is *fluent*. As a metaphor, performance fluency is **flowing**, **flexible**, **effortless**, **errorless**, **automatic**, **confident**, **second nature** and **masterful**. When performance is fluent, it becomes a **highly probably activity**. Fluent performance is **fun**, **energetic**, **naturally reinforced** behavior." *Morningside Model of Generative Instruction* (2004) by Ken Johnson and Elizabeth Street.

http://special.edschool.virginia.edu/papers/Binder-et-al\_Fluency.pdf

Spalding's method is available from www.spalding.org.

"A Memory Schedule" (1967) Paul Pimsleur.

http://files.eric.ed.gov/fulltext/ED012150.pdf

For the most recent research on distributed-practice pace "Spacing Effects in Learning: A Temporal Ridgeline of Optimal Retention," by Harold Pasher, et. al.

http://www.pashler.com/Articles/Pashler.Rohrer.Cepeda.Carpenter\_2007.pdf

http://laplab.ucsd.edu/articles/Cepeda%20et%20al%202008 psychsci.pdf

Here is an article by Frank N. Dempster explain why spacing of learning is neglected.

https://pdfs.semanticscholar.org/a59f/da0eaecfa15a51c672a9ee6fc0ec4d526fae.pdf

"Spacing Learning Events Over Time: What Research Says" by Will Thalheimer, PhD

http://wp.phase-6.com/wp-

content/uploads/2013/06/Spacing Learning Over Time March2009v1 .pdf

This document was last revised on 3/31/13, 11/21/2/15, 12/31/17.