Florida Center for Reading Research

Edmark Reading Program

Because this program is designed for students who are cognitively impaired and in Special Education, the FCRR Summary Table is not relevant.

What is Edmark Reading Program?

The *Edmark Reading Program*, first published in 1972, uses a whole-word approach to reading instruction that was specifically designed for students with mild to moderate cognitive disabilities. The publishers state that it may be used as a core reading program or a supplement to a school's core reading program. The goal of *Edmark Reading Program* is to teach 150 sight words including endings –s, -ed, -ing in Level 1, and 200 sight words including compound words in Level 2. Sight words taught within the program represent varying parts of speech. After the completion of Level 1 of the program, the intent is for students to read at approximately a 1.0 reading level, and after Level 2, students may achieve a 2.0-3.0 reading level. Lessons are delivered daily by a teacher in a one-to-one instructional format. Each lesson lasts 5-15 minutes and more than one lesson per day may be taught, depending upon the student. Paraprofessionals, volunteers, or peer tutors may deliver instruction with management provided by a teacher. In order for students to fully participate in these lessons, they must be able to point when selecting a choice from a multiple choice array, be able to repeat or sign back words when given a cue by the teacher, and have enough receptive language to follow teacher cues.

Level 1 of the *Edmark Reading Program* contains five instructional formats: Pre-Reading, Word Recognition, Direction Card, Story Book, and Picture/Phrase Card Lessons, and Level 2 uses three of these formats. The Pre-Reading Lessons teach visual discrimination and require students to match identical configurations such as a shape, a letter, a group of letters, or a word. No verbal response is necessary since the student is asked to point in this format. The Pre-Reading Lessons prepare the student for the Word Recognition Lessons and provide practice in left to right and top to bottom eye tracking. These lessons are followed by a Discrimination Test that is similar to yet more difficult than the Pre-Reading lessons in which the student matches letters, groups of letters, numbers, and words. This test may be administered before the Pre-Reading Lessons if the teacher feels the student's skills are strong enough to start immediately with the Word Recognition Lessons.

The first 60 Word Recognition Lessons teach one word per lesson and the remaining lessons teach two words per lesson. A lesson consists of many frames. A frame is a line of words that is made visible with a type of display mask. Each frame contains the word to be learned and two distracters. Initially, the distracters are non-words with no similarity to the word being learned. Gradually, the distracters become more visually similar to the target word, and eventually, the distracters are other words. Direction Card lessons reinforce the Word Recognition Lessons by teaching the student the meaning of the word and how to follow instructions that over time, increase in complexity. The student has a direction card that contains phrases and sentences and a set of illustration cards. First, the student reads a phrase or sentence from the direction card and then finds an illustration card that best corresponds with the phrase and places the card with its matching phrase. Students follow the directions literally by

placing a card "in," "on," or "under" other cards. Story Book Lessons provide the opportunity to systematically practice and review all of the words previously learned. Stories are brief with colorful illustrations and consist of controlled text that gradually increases in difficulty. The Picture/Phrase Card Lessons offer the student practical reading experience with words, phrases, and sentences as he/she chooses a word/phrase card and matches it to its corresponding illustration on the picture card. The card illustrations represent a variety of settings as well as people from diverse backgrounds. A pre-test is given before the first Word Recognition lesson, and posttests are given after every 10 words taught. Word recognition and identification are the only reading skills assessed by these pre- and post-tests.

The Edmark Mastery Test (EMT), published in 2008, can be used for continuous progress monitoring, to determine the student's mastery of the program, and to identify targeted reading objectives for the student's Individualized Education Program. The EMT is available in Levels 1 and 2 of the *Edmark Reading Program*, and is purchased separately.

Materials for the *Edmark Reading Program* are well-organized, teacher-friendly, and all materials needed for teaching, as well as pre- and post-tests are included with each level. The Teacher's Guide includes an overview of the instructional formats, explicit information about teaching procedures and correction procedures, specific wordings to use during instruction, as well as learning objectives, classroom activity ideas, and research references. Student Record Books assist teachers in tracking a student's performance throughout the program as well as providing the sequence of instruction. A software version of the program is available for both levels and may be used separately or in conjunction with the print version. The lesson structure and sequence of the software program is the same as the print version. A signing manual for nonverbal students is included with Level 1. The Edmark Functional Word Series may be used in conjunction with the *Edmark Reading Program*.

How is Edmark Reading Program aligned with Current Research?

The *Edmark Reading Program*, originally called the Rainier Reading Program, was developed during the 1960s through a series of research studies funded by the National Institute of Mental Health. Principals of behavioral psychology such as errorless discrimination, response shaping, and selective reinforcement have been applied to the program. The *Edmark Reading Program* specifically focuses on developing a functional sight word vocabulary for students and includes aspects of fluency and comprehension instruction as well.

Instruction within the *Edmark Reading Program* is explicit and systematic. The instructional formats are integrated into the lesson sequence and provide a combination of introduction, practice and evaluation. A specific criterion for mastery is included with each of the instructional formats and previous lessons must be re-taught if the student continues to make errors. Each lesson is structured to lead the student to the correct response, promote independence, and minimize errors. This is accomplished by providing instruction that is broken into small steps using repetition, positive reinforcement, and teacher prompting that is gradually faded. An example of teacher prompts within an instructional sequence during a Word Recognition Lesson follows this pattern: *Point to the word horse*. (The student points to the word.) *Read the word horse*. (The student reads the word.) *Read.* (The student reads the word horse.) Levels of teacher assistance include the least assistance to the most: allowing the student to respond independently, giving a verbal cue, giving a demonstration cue, and finally, physically assisting the student if necessary. Independent practice with the

Direction Card and Picture/Phrase Card lessons is encouraged once students are familiar with these lesson components.

While the instructional delivery used within the *Edmark Reading Program* is explicit, definitions of the words and comprehension strategies are not explicitly taught. Additionally, there is no explicit instruction on how to incorporate and use the words in varying contexts throughout the day. Rather, the student learns to recognize and read words, and the Direction Card and Picture/Phrase Card Lessons provide the student with the opportunity to demonstrate understanding of those words through picture/word matching in the following manner. On a Direction card, a student might be asked to *put a girl, a red airplane, and a car in a box*, or, to place *a yellow horse and a bluefish* on the appropriate picture. On a Picture/Phrase Card, the student places the word *ball,* on a picture of a ball, or, places the phrase *a horse and a boy* on the matching picture. Concrete words such as *car, ball, fish* are represented by a variety of shapes, sizes and colors and the student must choose the appropriate illustration. In Level 2 of the program, comprehension questions are asked after story reading that require simple yes/no answers. Gradually, questioning includes stating the main idea, giving opinions, and drawing conclusions. To facilitate answering the questions, students may have the story to refer to; or, if more direct assistance is needed, the teacher may point to the sentence with the correct answer.

Elements of fluency are addressed by the instructional design of the *Edmark Reading Program* due to the multiple repetitions of words and phrases in varying formats. During story book reading, students are prompted to read line by line, and individual words are isolated if accuracy is a problem. Therefore, word accuracy is addressed within the program, but there is no specific instruction on reading rate during story reading, or reading with expression.

For schools considering the *Edmark Reading Program*, it may be helpful to embed the program within a more comprehensive approach to literacy instruction giving the student access to oral language instruction and all of the important components of reading. While the research literature has been clear that sight word instruction is beneficial to students with significant cognitive abilities, these students miss the opportunity for a broader literacy experience and the chance to develop phonic analysis skills and greater comprehension of functional sight word use if they do not have the chance to participate in the type of reading instruction found in the general education classroom (Browder, Courtade-Little, Wakeman, & Rickelman, 2006). Historically, parents and schools have had low expectations for literacy outcomes for students with moderate to significant cognitive disabilities and this has deprived them of a rich literacy experience and the chance to develop their oral language skills; additionally, there has been limited research in the area of phonemic awareness, phonics, fluency and comprehension for these students (Browder, Courtade-Little et al., 2006; Browder, Wakeman, Spooner, Ahlgrim-Delsell, & Algozzine, 2006; Houston, Al Otaiba, & Torgesen, 2006). However, there is emerging research that suggests students with moderate to severe cognitive disabilities can learn phonics skills (Houston et al., 2006), especially if a pattern rather than rule-intensive approach to phonics is used (Foorman, Francis, Fletcher, Winikates, & Mehta, 1997). Browder, Courtade-Little et al. (2006) suggest the importance of integrating sight word instruction with other literacy activities.

There is no specific professional development for the *Edmark Reading Program*. However, the explicitness of the teacher's guide facilitates the implementation of the program. The company provides technical assistance if needed and would offer trainings when requested.

Research Support for Edmark Reading Program

One study of the *Edmark Reading Program* was found to have large effects in alphabetics, (i.e. word reading skills) for students designated as trainable mentally retarded. Several studies were conducted by the program's developers as well as by outside investigators. Two of the studies by outside investigators, one experimental and one quasi-experimental will be summarized below. See FCRR's standards for research designed to examine program effectiveness:
http://www.fcrr.org/FCRRReports/PDF/Research_Criteria.pdf

One study examined whether instruction with reading programs can affect the development of word recognition in students with mental retardation (Vandever, Maggart, & Nasser, 1976). Students participating in the study (n=107) were designated as educable mentally retarded. Fifteen elementary school classrooms were randomly assigned to one of three reading programs: *Edmark Reading Program* (1972), Merrill (Fries, Wilson, & Rudolf, 1966), and Sullivan (Buchanan, 1968). The *Edmark Reading Program* is described in the body of this report. The Merrill linguistic series emphasizes word families and requires students to master the alphabet and practice hearing words in sentences. The Sullivan series emphasizes sound-symbol relationships. Students were pretested with the first 150 words from the program used in their particular treatment condition. A second 50-word pretest was administered using 15 words that were common to the first 150 words of each program, and, 35 words from the Dolch list. These same tests were administered as posttests. Analysis of covariance on the 50-word posttest indicated no significant differences between the treatments for words learned. Although an analysis of variance on the 150-word posttest revealed significant differences in favor of the *Edmark Reading Program*, we have no means of determining whether the first 150 words from each program were equivalent. Thus, our confidence in these results is limited because of the possible differences in words among the three programs.

A quasi-experimental study in a northeastern state compared the effectiveness of two methods of teaching sight word vocabulary to students designated as trainable mentally retarded (Walsh & Lamberts, 1979). In the picture fading method by Dorry and Zeaman (1975) words are taught through association with pictures and gradually faded after a series of repetitions. The Edmark (1972) errorless discrimination method is described in the body of this report. Thirty students participated in the study with 3 students randomly chosen from one of the ten self-contained classrooms within the school district. Pretesting involved four tests: word identification, picture identification, word recognition, and picture-word matching. Students were chosen for the study if they were unable to identify the words on the pretest. Additionally, the words chosen for teaching were 20 words that all students included in the study were unable to identify. A repeated-measures design was used with double counterbalancing to control for word lists and treatment order. Students in each treatment were individually instructed for 10 minutes each day for 5 successive days. At the end of instruction, posttests involved the word identification, word recognition, and picture-word matching tasks. An analysis of covariance indicated that students in the Edmark errorless discrimination treatment performed significantly better than students in the picture fading treatment, with word identification producing the largest results (p≤ .0001).

Conclusion

In sum, the *Edmark Reading Program* provides instruction in sight word vocabulary that is consistent with the principles of behavioral psychology and direct instruction. One study produced large effects for word identification but more well-designed experimental studies with randomized treatment and control groups are needed to verify this beginning level of support. Future studies should include measures of comprehension.

Strengths & Weaknesses

Strengths of *Edmark Reading Program*:
- Positive reinforcement is consistent throughout the program.
- The small steps within the instructional format may minimize memory demands and the possibility of making errors.
- Teacher materials are explicit and provide enough information to facilitate the program's use for teachers and paraprofessionals without the need for extensive professional development.
- The program's multisensory approach may assist in holding students' attention.

Weaknesses of *Edmark Reading Program*:
- The program is not comprehensive enough to be considered a core reading program, given that it was designed for students with cognitive impairments.

Which Florida districts have schools that implement Edmark Reading Program?

Lee   239-337-8301
Orange   407-317-3202
Santa Rosa   850-983-5010

For More Information

http://www.proedinc.com/customer/ProductView.aspx?ID=1068

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Important Note: FCRR Reports are prepared in response to requests from Florida school districts for review of specific reading programs. The reports are intended to be a source of information about programs that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction. Whether or not a program has been reviewed does **not** constitute endorsement or lack of endorsement by the FCRR.

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