

Florida Center for Reading Research

Ready, Set, Leap!

What is Ready, Set, Leap!

Ready, Set, Leap! is a multisensory curriculum designed for whole-class, small-group, and individual instruction in pre-kindergarten classrooms. The goals of *Ready, Set, Leap!* are to provide children a combination of interactive, technology-based materials and teacher-directed activities to develop early literacy and language skills. *Ready, Set, Leap!* provides teachers a choice of two different instructional manuals, one focusing on a literature-based approach and the other on a theme-based approach; as well as a Resource Guide for reproducible materials and Teaching Strategy Cards. The program's scope and sequence varies according to the teacher's choice of manual.

The literature-based lessons are organized by six strands: reading aloud, oral language, basic concepts, phonological awareness, writing, and letter recognition. All lessons in the unit focus on a particular storybook. The theme-based lessons are based on themes about school, the child, home, neighborhood, animals, community helpers, nature, food, and transportation. Each theme has a two-part structure: (1) prior knowledge, new concepts, and songs or poems to reinforce the new concept, and (2) building literacy skills (reading aloud, phonological awareness, and letter recognition strands from the literature-based program).

There are 120 lessons in both manuals. The literature lessons require 1 to 2 days to complete, and the theme lessons require 1 to 3 days to complete. Teachers are provided a list of materials, objectives for assessment, and center time activities for each lesson. Additional assistance in using the program is provided through 16 Teaching Strategy Cards. The emphasis in the program is on exploration and play with center activities providing skill building in content areas. Both approaches fit the overall framework for half day or full day preschool programs utilizing a combination of large-group circle time and small-group centers. One-on-one or small-group interactions are limited because teachers are encouraged to observe the children and only help as needed during center time. Suggestions for additional help or challenging activities provide differentiated instruction within each lesson.

The technology components of *Ready, Set, Leap!* are the same for both manuals. Included in the program are the LeapPad unit, the LeapDesk workstation, the LeapMat learning surface and the Imagination Desk learning center with headphones. Both the LeapDesk and the LeapPad technology have Spanish-language activities for children. The LeapPad and the eighteen books with cartridges are interactive units that operate with a special pen that "reads" the book. By touching specific parts of the book, children listen to the story being read aloud, hear the name and sound effects of objects, listen to the pronunciation of words or respond to story questions by touching a part of the picture to indicate understanding. Feedback is given in the form of a simple response ("yes, that's right" or "try again"). Different LeapPad storybooks are recommended for use during center time to reinforce the skills being taught. As one part of the Home Connection, children use a Leap Frog backpack to take these units home. In this way,



parents can share in the story reading experience with their child. The other part includes Little Take-Home books that introduce an alphabet letter and related activities for the family.

The LeapDesk has four modes (i.e., Learn, Admin, Assess, Adapt), learning cards, and an electronic LED Writing Pad for writing the letters. In the "Learn" mode, the children use Alphabet Cards to hear letter names, Short Vowel and Consonant Cards to make three letter phonetic words, Number Cards to learn the symbol and name for numbers and Sight Word Cards to hear and see words in a sentence. The "Assess" mode evaluates the child's knowledge of letter names, letter sounds, and phonemic awareness (rhyming, beginning and ending sounds, and blending). Teachers print the assessment report in the "Admin" mode with a LeapPrinter or compatible printer. In the "Adapt" mode, children insert their student ID card that they used during the "Assess" mode to practice independently on letter names and sounds not mastered. Mastery is established when a child responds correctly to a letter on two consecutive assessments.

The LeapMat is another tool intended for learning letter-sound and letter-name associations by combining sound and touch on a large plastic mat. A separate teacher's manual includes activities for using the six different modes on the mat with or without letter and picture cards. While using any of the technology tools, children receive positive reinforcement for correct responses and a sour note for incorrect responses. The "help" button on the LeapMat guides children to the correct choice.

The fourth component, the Imagination Desk, includes four interactive coloring books and two templates with coloring pages, songs, and number and letter games. Activities within each of the 3 modes (i.e., Learn, Game, and Music) typically ask the child to touch a letter, number, or object to hear its name or sound accompanied by a short tune. These additional sounds may be entertaining to the children but they can also make it difficult to hear the letters and numbers clearly, especially when several technology units are being used. Teachers are encouraged to use the technology components in centers for independent or small group activities although they are also applicable to one-on-one and large groups. For all applications, teacher assistance becomes critical when the spoken phrases of the unit do not match the pictures on the page or children may become confused by the instructions. For example, in the LeapPad storybooks if the child does not press the green go button on each page of the story, the voice is not synchronized with the page. Methods to assure that each child has adequate opportunities with the different technology components are not mentioned. The *Ready, Set, Leap!* curriculum also includes the following classroom materials: speaking puppets, poem posters, music CD and cassette, flip book, 4 Big Books and 19 Read-Aloud Books for the 21 units.

Teachers are provided two types of assessment for monitoring children's progress. Formative assessment delivered by the LeapDesk workstation determines the child's knowledge of letter names, letter sounds, and phonological awareness. The results lead to a program of extra practice using the LeapDesk, a report of skills mastered, or a narrative report for parents that includes at-home activities. Observational forms for teachers to assess children informally at the end of each unit are also provided. However, there is no listing of skills based on the objectives in the unit that a teacher can use to assess whether a child has mastered the skills and is ready to go forward or whether the child needs remediation.

How is Ready, Set, Leap! aligned with Current Reading Research?

Ready, Set, Leap! contains age appropriate instructional procedures and activities to support growth in the following areas: oral language, phonological awareness, and print knowledge. The introduction to the literature-based manual has detailed suggestions on how to develop these areas throughout each lesson. For example, the manual suggests that teachers promote the development of language skills by modeling correct language and expanding upon the children's responses; by using and discussing new vocabulary words throughout the day; by engaging the children in conversations by asking open-ended questions; and by creating activities where the children can express themselves. However, this information is not provided in the theme-based manual and it is not reinforced in the individual lesson plans.

The literature-based lesson plans focus oral language experiences on the storybook selected for that unit. During whole group read aloud, the teacher pairs an initial reading of the story with discussions of the unfamiliar vocabulary words, background information, and opportunities for the children to participate in the story. The type of participation changes with each lesson and subsequent readings of the story (e.g., picture-reading the story, repeating a rhyming part, predicting, answering questions, or role playing parts of the story). The theme-based units change the storybook in each lesson and vary the way in which the children participate. It is not clear that children have adequate opportunities to become familiar with the story and its vocabulary to develop their expressive language skills especially within the large-group setting. The program does not incorporate guidelines for teachers to create small-group instruction and to use scaffolding techniques for expanding the child's responses. During center time, LeapPad storybooks are intended to help children develop listening comprehension and vocabulary related to common interactions at home and school. Children listen to a story being read aloud, touch an object or word to hear it pronounced, or follow directions to find objects on the page. Through this process children become aware of a large number of vocabulary words--an important issue given the link between vocabulary size and early reading ability (Snow, Burns, & Griffin, 1998).

Phonological awareness instruction follows a hierarchy of difficulty that proceeds from words in sentences, to rhyming, to syllables in words, to onset-rime units, to individual phonemes. Even though the program follows a logical sequence, the introduction to the program is confusing because it states that these "skills do not have to be introduced in that sequence" (p.xliv, Literature Manual). Every lesson includes a teacher directed activity to address one of these skills. For example, while the children sing a song from the "Little Ears" music CD the teacher helps them tap their thighs for each word in the song. In another lesson, children play a game to identify the rhyming words. The center activity for that lesson reinforces the skill by selecting a LeapPad book that includes rhyming games. A valuable teaching strategy within the teacher's manual is a suggestion to provide examples and nonexamples of the concept being taught.

Many components of the *Ready, Set, Leap!* program expose children to print and the alphabetic principle. The goal of the program is for children to understand that letters represent the sounds in words and not necessarily to learn the sound for particular letters. Each lesson includes a letter recognition activity where the uppercase and lowercase form of the letter name and sound are given. These letters

are introduced in a specific order (i.e., letters that begin like their names [B,D,J,K,P,T,V,Z], end like their names [F,L,M,N,R,S,X], vowels [A,E,I,O,U], soft or hard sounds [C,G] and difficult letters to learn [H,Q,W,Y]. Over the course of a unit, two or three letters are introduced and practiced using the LeapMat, the LeapDesk, the Imagination Desk, and the Interactive Puppets. These multisensory tools encourage children to touch three-dimensional letters, color letters, and trace letters on the light-emitting diode (LED) pad while they hear the letter name as often as they wish. Furthermore, the LeapDesk word cards enable the children to hear letters blended together to form a word if they touch the letters in a left to right sequence. Print awareness is fostered through a variety of literature in the form of four big books, 19 trade books, and 18 interactive LeapPad books; words in the technology components; a large Flip Book; and poem and alphabet posters. These components, in English and Spanish, are integrated into the daily lesson to convey concepts of print.

Professional development consists of one full day of training for up to 15 people. During this time, LeapFrog representatives explain the purpose of all the components in the program and how to set up centers. Follow-up assistance is available through the local representative or the technical help line; however, given the magnitude of the program's components and the importance of teacher education, districts should consider requesting additional days for training.

Research Support for Ready, Set, Leap!

The *Ready, Set, Leap!* preschool program, developed by LeapFrog SchoolHouse, was first published in 2002. The curriculum was developed according to current research on important early literacy predictors of future reading success in addition to being aligned with the 1998 joint IRA/NAEYC position paper and the National Head Start Act (Section 640A(b)) recommendations for early literacy program.

To determine the program's effectiveness, LeapFrog collaborated with RMC Research Corporation to conduct a randomized control study of the theme-based approach of *Ready, Set, Leap!* during the 2002-2003 school year. The results presented here are based on a preliminary report from Leap Frog. The study involved 42 classrooms from 30 preschools within the Newark, New Jersey public school system. Fifteen schools were assigned to classrooms using High Scope plus *Ready, Set, Leap!* and 15 schools to High Scope only. Randomization at the school level was accomplished by first creating matched pairs (on demographics, location, and school reform) and then randomly assigning one member of each pair to the experimental or control group. From these groups they randomly selected ½ of the children in each classroom to be included in the assessments. It should be noted that only non-IEP and non-ESL children were included in the analysis. The data show that the blocked randomization was successful and that there were no differences in gender and age between groups, although the *RSL!* Group had a greater number of minorities and students on free-reduced lunch than did the control group. Seven measures were assessed on the Woodcock-Johnson III-Form A (WJ III; Woodcock, McGrew, & Mather, 1998), the Comprehensive Test of Phonological Processing-Blending subtest (CTOPP; Wagner, Torgesen, & Rashotte, 1999), the Dynamic Indicators of Basic Early Literacy Skills- Reading Fluency Monitor subtests (DIBELS; Good, Kaminski, & Kame'enui, 2000), and an unspecified Phonemic Awareness test from the LeapFrog program. Results from this study showed that the experimental group was significantly higher than the control group at end of year testing on CTOPP Blending, WJ Rhyming, and

Phonemic Awareness skills when the Ready, Set, Leap! curriculum was adequately implemented. There were no significant differences on the WJ Letter-Word Identification, and the DIBELS Letter Naming Fluency, Initial Sounds Fluency, and Letter Identification Tests. More detailed information on the preliminary study results described here will be available in Leap Frog's final report.

Several quasi-experimental studies using similar technology and teacher combinations in prekindergarten and kindergarten have shown significant findings on reading and phonemic awareness measures. Whereas these studies provide preliminary support for the instructional methodology, they do not provide evidence for *Ready, Set, Leap!*.

In sum, the instructional content and design of the *Ready, Set, Leap!* program are aligned with current reading research. There is evidence that *Ready, Set, Leap!* can be an effective instructional program for non-ESE children, particularly in the area of blending, rhyming and phonemic awareness. However, additional studies are needed to confirm its efficacy for all children.

Strengths & Weaknesses

Strengths of *Ready, Set, Leap!*:

- Within each unit, the curriculum specifies and integrates its objectives across content areas.
- Children are able to engage in language and reading activities at home if the school has enough take-home LeapPads and books.
- There are positive results of the theme-based approach on children's early literacy skills in a well-designed randomized trial of the program.

Weaknesses of *Ready, Set, Leap!*:

- It is possible for the child to be given incorrect information when the cartridge does not align with the activity sheet or when a child forgets to touch the green "go" button on the page. Therefore, teacher involvement is necessary.
- It is important that the professional development include extensive assistance to teachers to integrate all the components of the program.
- Additional research is needed to support the efficacy of this program for children with special needs, and provide evidence for the efficacy of the literature-based approach.

Which Florida districts have schools that implement *Ready, Set, Leap!*?

Citrus	352-726-1931	Orange	407-317-3202
Hamilton	386-792-1228	Osceola	407-870-4008
Holmes	850-547-9341	Polk	863-534-0521
Lake	352-253-6510	Pinellas	727-588-6011
Liberty	850-643-2275	Santa Rosa	850-983-5010
Marion	352-671-7702	St Johns	904-819-7502
Okaloosa	850-833-3109		

For More Information

http://www.leapfrogshouse.com/Products/Ready_Set_Leap.asp

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