

# Florida Center for Reading Research

Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech  
(LiPS)

## What is LiPS?

In its first and second edition, the Auditory Discrimination in Depth (ADD) Program was created by Charles H. Lindamood and Patricia C. Lindamood of Lindamood-Bell Learning Processes. The third edition was revised in 1998 by Patricia C. Lindamood and Phyllis D. Lindamood and renamed the *Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech (LiPS)*. The *LiPS* program is one of three reading programs offered by Lindamood Bell Learning Processes: the other two are Seeing Stars and Visualizing and Verbalizing. (See individual FCRR Reports on Seeing Stars and Visualizing and Verbalizing for further information).

*LiPS* is a supplemental/intervention program designed to instruct and improve phonemic awareness, phonemic decoding, orthographic processing, sight word knowledge and spelling through the development of an oral-motor, visual, and auditory feedback system that enables individuals of all ages to identify, sequence and map letters to phonemes. The goal of *LiPS* is to develop fluent readers and competent spellers. *LiPS* can be utilized in whole group, small group or individual settings as a preventive tool or intensive intervention. When utilized as a preventive measure, *LiPS* can supplement the core reading program or stand alone as the phonemic awareness/phonics instruction. When used as an intensive intervention it is recommended individuals receive instruction two to four hours a day, five days a week for eight-twelve weeks. Classroom teachers, specialists, speech-language pathologists, tutors, and paraprofessionals could provide instruction using this program.

*LiPS* is a multisensory program created to teach individuals the articulatory features of the speech sounds of English. Through guided discovery techniques, individuals are able to hear, see, and feel the speech sounds of English and use the multiple modalities as a self-check for accuracy. Mnemonic labels are given to phonemes that occur in similar positions in the mouth (e.g., "Lip Poppers" to the plosives /b/ and /p/) to assist in retrieval and production. Fifteen vowel sounds are uniquely taught and labeled according to their place of production in the mouth and then placed on a vowel circle to visually represent each sound. All vowels are categorized as either "smiles, open, round, or sliders". This program moves from phonemic awareness to sound/symbol associations in the context of simple syllables, multisyllabic words, and instruction in orthographic expectancies. Once sound/symbol associations are presented, *LiPS* maintains a focus on reading and spelling practice of newly acquired skills. Structural analysis is explicitly taught as the culminating activity in this program. The goal of *LiPS* is to quickly move into reading in context and expository writing with support to make the transition to independent reading and writing tasks. The scope and sequence can be described by five steps: 1) Setting the Climate for Learning, 2) Identifying and Classifying Speech Sounds, 3) Tracking Speech Sounds, 4) Associating Sounds and Symbols, 5) Spelling and Reading. There are multiple activities within each step and the authors have delineated two "paths" to move through the program: Horizontal and Vertical. The Horizontal Path presents all consonant sounds before moving to vowels, and presents all vowel sounds before moving to tracking, spelling, and reading of syllables and words. The Vertical Path



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presents only three consonants and three vowels and then uses them in tracking, spelling, and reading simple syllables. In additional lessons, the rest of the consonants and vowels are introduced and practiced in a similar manner.

The *LiPS* program is available for purchase in a classroom or clinical kit. Both kits include the teacher's manual, an audio cassette for teacher use, static cling symbols and mouth picture sets, colored felt 4-inch squares, nose and ear felt squares, colored blocks, letter symbol tiles, and an overview video and program research booklet.

The classroom kit contains a larger quantity of these materials in addition to large mouth pictures, felt squares with consonants and vowels, and playing cards of each for continued practice. Due to the cumulative nature and precise terminology used in this program, all students start at the beginning. The pacing is determined by individual student performance. New skills in this program build upon previously learned skills; therefore it is necessary to teach each skill to the level of mastery.

### How is LiPS aligned with Current Reading Research?

*LiPS* aligns with current reading research in its explicit and systematic presentation of phonemic awareness and phonics instruction. Sound identification in isolation is introduced first with phonemic awareness activities, such as blending and segmenting, added in a sequence of easy to difficult tasks. Phoneme-grapheme correspondences are taught once phonemic awareness has been mastered. *LiPS* builds on previous knowledge to introduce new skills and frequently spirals back to review until mastery. Teachers are guided in the teacher's manual to provide corrective feedback when an error is made using the Socratic method of questioning.

In 2000, the National Reading Panel (NRP) published its findings and recommendations regarding which instructional components are essential to becoming a competent reader. Explicit and systematic instruction in phonemic awareness and phonics were identified as necessary to prevent and remediate reading skills. In the NRP, research studies incorporating the *LiPS* program were cited as well designed, high quality research that highlighted the effectiveness of direct instruction in phonemic awareness and phonics (p. 2-36, 2-127).

Lindamood-Bell Learning Processes offers a three-day workshop in the implementation of *LiPS*. A listing of the dates and locations of these workshops can be found in their catalog or on their website. The workshop is not a requirement nor included when the program is purchased. The teacher's manual is written in clear and concise language to facilitate accurate implementation with sufficient content knowledge.

### Research Support for LiPS



In one study (Torgesen et al., 1999) students from 13 schools were provided instruction from second semester kindergarten through grade 2 in a longitudinal experimental design in which students were randomly assigned within school to one of four groups. Eligible students were included according to the following criterion: lowest combined scores on a letter naming task and a phoneme awareness task, and an estimated Verbal Intelligence score above 75. An extensive battery of pretests was given to the students in the treatment groups. The groups were not significantly different from each other and matched on age, estimated Verbal IQ, letter name knowledge, phoneme elision, gender and race. The four groups were identified as the Phonological Awareness Plus Synthetic Phonics (PASP, N=33)

group who participated in the ADD (*LiPS*) intervention program. The Embedded Phonics (EP, N=36) group was provided less explicit phonics instruction than the PASP group along with more work on sight words, and reading and writing text. The Regular Classroom Support (RCS, N=37) group consisted of students participating in individual tutoring in activities and skills taught in their regular classroom reading groups. The fourth group was the No Treatment control group (NTC, N=32). Intervention training was provided in 20 minute sessions, four times per week, individually, for 2 ½ years. Two of the four weekly sessions were led by certified teachers and two were led by aides who followed the teachers' written directions.

Results indicated that students in the PASP group scored significantly higher than the NTC and RCS groups on real word reading and significantly higher than the EP group in phonological awareness, phonemic decoding, and untimed, context-free word reading. No significant differences were noted between the PASP and EP groups in passage comprehension, although the PASP group obtained slightly higher scores.

Another study (Torgesen et al., 2001) compared the ADD (*LiPS*, N=26) program with the Embedded Phonics program (EP, N=24) in remedial intervention for students with severe reading disabilities. Students were randomly assigned to the two treatment groups. They were matched on age (8-10 years old), Full scale IQ, Verbal IQ, word attack, word identification, the LAC (Lindamood & Lindamood, 1979), gender, and race. Treatment for both groups was provided on a 1:1 basis for two 50 minutes sessions five days a week for eight weeks. Overall each group received 67.5 hours of instruction. Teachers who provided the instruction in both groups had experience using a direct, synthetic phonics approach to teach children with reading disabilities. In this study, more explicit and systematic phonics instruction was provided to students in the EP group than in the prevention study described earlier. However, students in the EP condition spend considerably more instruction time (50%) reading text under the guidance of the tutor than did students in the LIPs group (5%).

Results indicated that students in both groups made dramatic improvements in their phonemic decoding ability, text reading accuracy, and reading comprehension. Students in the ADD (*LiPS*) group demonstrated significantly greater growth in word attack on the WRMT-R (Woodcock, 1987) test at immediate posttest, but these differences were not maintained at the 1 and 2 year follow up period. In general, students in both groups maintained, or slightly improved, their reading gains during the two year follow-up period.

Kennedy & Backman (1993) conducted a study at a nonprofit residential school for students with severe learning disabilities. The authors compared the ADD (*LiPS*) program with the regular reading and spelling curriculum of the school. In this quasi-experimental study, students were matched on pretest according to age (11-17 years old), gender, and scores on the WISC-R (Wechsler, 1974), the LAC, SORT (Slosson, 1963), and SAT-Sp (Stanford Achievement Test, 1940). Ten students were in the experimental group and received ADD (*LiPS*) instruction for three 50 minute sessions per day for 6 weeks for approximately 75 hours of instruction. After the 6 weeks students transitioned into the school's reading and spelling curriculum for the rest of the school year. The control group consisted of 10 students who received instruction in the school's reading and spelling curriculum for the entire school year. The reading and spelling curriculum consisted of individual tutorials (50 minutes per day) in which students are taught spelling and sound-symbol relationships through a phonetic approach. Class sizes for each group ranged from four to six students, except for the 50 minute one-on-one tutorials. Both groups received approximately the same amount of instruction time.

Students in the experimental group showed no significant difference at the end of the intervention period compared to the control on measures of spelling, word recognition or reading comprehension as measured on the GORT (Gray, 1955). The experimental group did show significantly greater gains on the LAC and phonetic accuracy in real and nonword spelling.

As has been mentioned in other reports on the Lindamood- Bell programs, Sadoski and Willson (2006) conducted a six year study in one school district where with each passing year additional schools gradually implemented the three Lindamood-Bell Learning Processes (LBLP) programs. The study began in one school and by the end of the six years 31 schools were included. The state mandated reading comprehension test, Colorado Student Assessment Program (CSAP), served as the instrument to assess program effectiveness in pretest and posttest administrations for grades 3-5. Implementation included teacher training in the LBLP programs with on-site consultants to provide additional training and monitor the fidelity of program usage. Schools were used as the units of analyses in all analyses. Four covariates: school size, school minority student percentage, socio-economic status, and number of years in LBLP intervention were used in analyses. Grade by grade analysis using the CSAP indicated significantly greater performance for schools using the LBLP programs than the state average, once student demographic factors were accounted for. Another positive outcome of the results is that scores increased each year on the CSAP over grades 3-5, with the most growth seen in grades 3 and 4. Our conclusion from reviewing this study on the LBLP programs is that while it is consistent with the idea that the programs can be used effectively to help "close the gap" in reading skills for struggling readers; it is difficult to know which of several aspects of the total school intervention program were responsible for the improved performance of the students.

In sum, the instructional content and design of *LiPS* and the research base supporting its efficacy is strong. Independently gathered research studies evaluating its use have employed control groups and standardized measures of reading.

## Strengths & Weaknesses

Strengths of *LiPS*:

- Systematic and explicit instruction.
- Organization of the vowel circle to assist in sound discrimination among vowels is helpful.
- Sessions designed to build skills to mastery.
- Comprehensive teacher's manual.
- Discovery Dialogues in each section of the teacher's manual facilitate accurate implementation by teacher.

Weaknesses of *LiPS*:

- Training may not be offered at a convenient location, and training requirements for the LIPS program are relatively intense.

## Which Florida districts have schools that implement LiPS?


Lindamood-Bell Learning Processes currently has a contract with Hernando County (352-797-7001) to implement their programs based on their diagnostic, intervention and professional development protocol. Lindamood-Bell Learning Processes also has Learning Centers where individuals may inquire for additional information.

Coral Gables	786-552-6470
Tampa	813-253-0453
Weston	954-349-1688

### For More Information

<http://www.lblp.com/programs/phonemiclips.shtml>

### References

- Gray, W.S. (1955). *Gray Oral Reading Paragraphs Test*. Austin, TX: PRO-ED.
- Kennedy, K.M. & Backman, J. (1993). Effectiveness of the Lindamood auditory discrimination in depth program with students with learning disabilities, *Learning Disabilities Research & Practice*, 8(4), 253-259.
- Lindamood, C.H. & Lindamood, P.C. (1979). *The LAC Test, Lindamood Auditory Conceptualization Test*. Hingham, MA: Teaching Resources Corporation.
- National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. NIH Publication No. 00-4754. Washington, DC: National Institute of Child Health and Human Development.
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- Sadoski, M., & Willson, V. L. (2006). Effects of a theoretically based large-scale reading intervention in a multicultural urban school district. *American Educational Research Journal*, 43, 135-152.
- Slosson, R.L. (1963). *Slosson Oral Reading Test*. East Aurora, NY: Slosson Educational Publications.
- Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Stanford Achievement Test*. (1940). Yonkers-on-Hudson, NY: World Book.
- Torgesen, J.K., Alexander, A.W., Wagner, R.K., Rashotte, C.A., Voeller, K.K.S., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, 34(1), 33-58, 78.
- Torgesen, J.K., Wagner, R.K., Rashotte, C.A., Rose, E., Lindamood, P., Conway, T., & Garvan, C. (1999). Preventing reading failure in young children with phonological processing disabilities: Group and individual responses to intervention. *Journal of Educational Psychology*, 91(4), 579-593.

Wechsler, D. (1974). *Manual: Wechsler Intelligence Scale for Children-Revised*. New York: The Psychological Corporation.

Wiederholt, J.L., & Bryant, B.R. (1992). *Gray Oral Reading Tests-III*. Austin, TX: PRO-ED.

Woodcock, R.W. (1987). *Woodcock Reading Mastery Tests-Revised*. Circle Pines: American Guidance Service.

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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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