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ABSTRACT

The Phonics Demonstration Project was developed through the Ohio Department of Education as a means for introducing systematic, direct phonics instruction in the primary grades. Twenty-one Ohio school districts participated in the program. Initial year evaluation of the project focused on whether systematic, intensive phonics instruction was being integrated in the K-3 curriculum; how useful the phonics program was in developing student literacy growth and independence; whether adequate teacher support was provided for implementing the phonics program; and what student and teacher attitudes were about the phonics program. Findings from a sample of 10 participant schools indicated that systematic, direct phonics instruction was being implemented most consistently in the early primary grades. Instruction in integration and transfer of phonic knowledge across the curriculum was not uniformly delivered throughout participant schools. Preliminary reports indicated that phonics programs which encourage and support integration of phonics with other reading and writing strategies were most successful in promoting reading proficiency and independence. Results also indicated that (1) levels of inservice support differed between programs; (2) additional support was needed for new entrants to the program; (3) most teachers overwhelmingly supported the need for a systematic intensive phonics program; and (4) student attitudes about phonics appeared most positive when teachers creatively applied phonics instruction to promote active student engagement and motivation. Recommendations include: continue support for present programs; augment teacher support in the areas of integration and transfer across the curriculum; continue longitudinal data collection; and analyze data from self-report forms to supplement and extend current analysis of a sample population to an analysis of the entire population of teachers. (Contains a table and 4 figures of data.) (RS)

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EVALUATION OF THE PHONICS DEMONSTRATION PROJECT

**OHIO DEPARTMENT OF EDUCATION
DIVISION OF TEACHER EDUCATION,
CERTIFICATION AND
PROFESSIONAL DEVELOPMENT**

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Report Summary

The Phonics Demonstration Project (PDP) was developed through the Ohio Department of Education, as a means for introducing systematic, direct, phonics instruction in the primary grades. Twenty-one Ohio school districts participated in the program. Initial year evaluation of the PDP focused on four research questions:

- Is systematic, intensive phonics instruction being integrated into the K-3 curriculum?
- How useful is the phonics program in developing student literacy growth and independence?
- Is adequate teacher support provided for implementing the phonics program?
- What are student and teacher attitudes about the district-selected phonics instructional program?

Findings from a sample of ten participant schools indicated that systematic, direct, phonics instruction was being implemented most consistently in the early primary grades. Instruction in integration and transfer of phonic knowledge across the curriculum was not uniformly delivered throughout participant schools. Preliminary reports indicate that phonics programs which encourage and support integration of phonics with other reading and writing

strategies were most successful in promoting reading proficiency and independence.

Levels of inservice support differed between programs, but it was concluded that additional support is needed for new entrants to the program. It was further concluded that more support is needed for content area integration and transfer. Insecurity associated with the need to master a large body of knowledge in a short period of time contributed to teacher frustration levels. Most teachers, however, overwhelmingly support the need for a systematic intensive phonics program. Student attitudes about phonics appeared most positive when teachers creatively applied phonics instruction to promote active student engagement and motivation.

Based on these findings, the following recommendations are submitted:

- Continue support for present programs, concentrating instruction in grades K through 2, with continued training for teachers of older special needs students.
- Augment teacher support in the areas of integration and transfer across the curriculum.
- Continue longitudinal data collection on ten sample schools.
- Provide more access to inservice and on-site support.
- Include participant teachers in the decision-making process.

- Conduct further testing to assess student mastery of phonics principles and their application.

The following recommendations concern proposed extension of the evaluation and additional data analysis:

- Compare passing rates of PDP students on Competency-Based Education (CBE) tests for school years prior to and following program implementation.
- Analyze data from all submitted self-report forms to supplement and extend current analysis of a sample population to an analysis of the entire population of PDP teachers.
- Analyze scores and passing rates of project school students on fourth grade proficiency tests, prior to and following program implementation, through the year 2001. Compare results with those obtained for students from non-participant schools.
- Obtain self-report data through the year 2001 for two populations: all first grade PDP teachers and teachers of students who were in first grade during the project's initial year. Analyze data and note trends.

A credible evaluation of the role of phonics instruction in building student literacy entails considerable planning and resources. Such a study can help educators to more closely ascertain the necessary mix of ingredients for developing literacy independence and growth vital to success in school.

Project Description and Goals

As part of an effort to improve the quality of reading instruction in Ohio's public schools, the Phonics Demonstration Project Fiscal Year 1996-97 was established by the Ohio Department of Education and funded by Substitute House Bill 81. Ohio school districts seeking to obtain funding under the project were required to demonstrate development of a plan for the integration of systematic, intensive phonics into the K-3 curriculum. Project funds were to be used by the school districts for phonics materials and teacher training. Each school district had the option of choosing one of several phonics programs approved by the Ohio Department of Education, in order to achieve consistency with the aims of the program.

School buildings seeking project grants were required to provide evidence of support for the chosen phonics program among all K-3 teachers. Participants also needed to select both a professional trainer and an on-site educator to provide regular ongoing teacher training and support throughout the 1996-97 school year. Finally, participants agreed to share data gathered to assess the program through student testing and observations by project evaluators.

To avoid ambiguity in interpretation, several terms relating to the Phonics Demonstration Project were operationally defined. *Systematic, intensive phonics instruction* was defined as a methodical and sequential program of instruction whereby students built reading, writing, and spelling skills through knowledge of letter/sound relationships. *Systematic* instruction was defined as the effective

introduction, integration, and transfer of useful phonic elements across the curriculum in a logical, thorough, and regular program of instruction. The *Auditory/Verbal* character of phonics instruction was defined as the integration of visual knowledge of the written code of our language with the production and recognition of the speech sounds. It was therefore proposed that students receive instruction in correct articulation of phonemes through teacher/student auditory/verbal interaction. *Intense/succinct* phonics instruction was defined as that which quickly introduces all useful phonic elements while helping students to acquire the habit of integrating phonics with other structural and meaning cueing systems. *Strategic* instruction in phonics is defined as that which promotes development of independent student-initiated literacy strategies, as a means to achieving maximum reading potential.

Introduction to the Evaluation

The purpose of this evaluation was to assess how well instruction in phonics was being implemented in the classroom, grades K-3, of the demonstration projects. No attempts were made to measure effects of phonics instruction upon student achievement variables. The primary purpose of the evaluation is summarized in the following four research questions:

1. 1. Is systematic, intensive phonics instruction being integrated into the K-3 curriculum?
2. 2. How useful is the phonics program in developing student literacy growth and independence?
3. 3. Is adequate teacher support provided for implementing the phonics program?
4. 4. What are student and teacher attitudes about the district-selected phonics instructional program?

The discussion of the evaluation results is centered around these four questions.

A secondary purpose of the evaluation was to provide preliminary planning for continued evaluation of phonics instruction. In the final analysis, the value of any instruction must be reflected by the performance of those receiving the instruction, in this case, the grade K-3, students learning how to read. Learning is a complex phenomenon, impacted by many variables over time. Thus, for a comprehensive evaluation of phonics instruction, the

evaluation should include measures of student performance, certainly in reading and possibly in other content and skills areas. Also, the evaluation should be done over an extended period taking on the characteristics of a longitudinal study.

The evaluation was conducted during the first six months of 1997. Planning for, and scheduling the data collection were done during January and February, 1997. Data were collected during March and April. May and June were reserved for analysis of the data and reporting results. The evaluation was conducted by four individuals: three professors from Wright State University and one from the University of Toledo. Two individuals are specialists in reading instruction (including phonics), and in the preparation of teachers for the elementary schools. The remaining two individuals are specialists in research design, statistics and evaluation.

The primary stakeholders for this evaluation are: 1) the Ohio Department of Education (ODE), and 2) the participants, administrators, teachers and students of the Phonics Demonstration Project (PDP). To a lesser degree, Ohio students of grades K-3 and their teachers are stakeholders as the phonics approach to reading instruction is or is not advocated and extended.

Methods for the Evaluation

The nature of this type of evaluation requires that it be done as a field study. That is, data were collected in the educational setting in which phonics instruction was conducted. In order to ascertain the degree to which initial project goals were being met, two independent examiners gathered data from ten participant school districts, selected as a purposeful sample. The district-selected phonics programs in the ten observed school districts were representative of the most commonly used programs in the total participant population. (See Table 1 in the Appendix for a list of participant school districts and phonics programs in the sample.) Consistency in data collection was enhanced by a three-pronged approach: a) direct classroom observation, b) teacher self-reports, and c) examiner/teacher interviews. Three assessment instruments were developed to facilitate consistency in gathering and reporting data. An Observation Report was developed for use by examiners during 45-minute classroom observations to document ongoing practices in phonics instruction. A classroom teacher Self-Report was developed to supplement the one-time observations with additional information about classroom practices. It was hoped that the information provided by classroom teachers in self-reports would corroborate the purely observational data. Finally, the Interview Report was developed to give examiners and observed teachers the chance to interact directly, establishing a context of background information and allowing teachers to share their own observations and reactions to the phonics programs. (See

Figures 1, 2, and 3 in the Appendix for data collection instruments.) The interview also served to allow teachers and examiners to examine and clarify items on self-reports.

Limitations of time and resources precluded conducting observation at all projects, hence the selection of ten districts. In each selected district, observation took place in one classroom for each of the grades K-3. In some school districts, observed classrooms were located within one building while in others, observed classrooms were located in several of the district's schools. An interview was conducted with each observed teacher.

In order to obtain a measure across all the demonstration projects, the self-report form was completed at each participating district. These forms were completed during a visit by the director of the entire PDP. Additional data for the first grade was obtained by examining randomly selected self-reports of all first grade participant teachers, whether observed or not, since first grade has traditionally been the focus of phonics instruction. As students progress through second and third grades, phonics strategies tend to be supplemented by additional reading strategies with increasing frequency.

Each district was notified in a letter about the projected observation and this communication specified a four-week time period during which the observation would be conducted. This letter was followed by a communication with specific instructions about the observation, including a request for three

observation dates that would be convenient. A copy of this communication is contained in the Appendix, as Figure 4.

The observations required most of one day, on-site at the school(s) in which phonics instruction was observed. Although the instructions for arranging observation and interviewing were quite explicit, the contact person or someone in each of three school districts decided not to follow those arrangements. This deviation caused difficulties with maintaining consistency in the observations across those districts and the other districts observed. Also, the overall project director apparently was confused about the data collection for all participating districts. There was confusion on two points: 1) forms were reproduced and all teachers, about 495, were asked to complete the form; and 2) forms were left at many districts rather than having them completed during a site visit. The result of (1) was that instead of 25 completed forms, there were over 300 completed forms, many more than could be accommodated by the resources for this evaluation. Hence, the random selection of one form from each district completing the forms as indicated earlier. The result of (2) was that several districts did not return forms in time to be included with the data analysis.

Results

The three reporting instruments developed for this study served as vehicles to illuminate findings regarding each of the research questions. Research question #1 focuses on teacher delivery of phonics instruction. Research question #2 focuses on student response to phonics instruction. Research question #3 focuses on teacher preparation and support. Research question #4 focuses on attitudes of both students and teachers toward phonics instruction.

Research Question #1

Is systematic, intensive phonics instruction being integrated into the K-3 curriculum?

Systematic instruction. Self-reports and observation reports were examined to determine if students were receiving methodical, sequential instruction in building reading, writing, and spelling skills through knowledge of letter/sound relationships. At the time of data collection, the majority of teacher participants reported teaching initial, medial, and final consonants. Grade 3 was the only level at which instruction in these phonemes was not reported. Initial consonant instruction generally preceded final consonant instruction, but no consistent sequence was apparent in the introduction of medial consonant instruction. Initial consonant instruction was observed most frequently in grades

K- 2. Medial and final consonant instruction was observed most frequently in grade 2.

Short vowel instruction was reported in all but grade 3 classrooms. In the sequence of phoneme instruction, short vowels were most frequently taught second or third, following consonant instruction. Long vowel instruction was most commonly reported as following short vowel instruction. Either short vowel or long vowel instruction was observed in over two-thirds of the observations. Long vowel instruction was most frequently observed in grades 1 and 2. In grade 3, short vowel instruction was observed three times more frequently than long vowel instruction. R-controlled vowel instruction was observed with equal frequency in grades 1 through 3, but was not observed in kindergarten. This delay in r-controlled vowel instruction was confirmed by teacher self-reports.

Two- and three-letter consonant blends were reported as being taught most frequently in grades 1 and 2. Almost no instruction in consonant blends was reported in grades K and 3. Instruction in two-letter consonant blends was noted in one third of the observed classrooms, while instruction in three-letter blends was observed very infrequently. Most of the instruction in two-letter blends was observed in first grade classrooms; observed three-letter blend instruction was limited to grades 2 and 3.

Self-reports indicated that instruction in diphthongs and digraphs was most prevalent in grades 1 and 2. No kindergarten or third grade teachers reported instruction in either diphthongs or digraphs. Instruction in digraphs was

observed much more frequently than instruction in diphthongs, but digraph instruction was observed in grade 3 just as frequently as in grade 1.

Among observed teachers, self-reports indicated that participants were nearly evenly divided between those who followed their chosen phonics program in the program's recommended sequence and those who deviated from the recommended sequence. Strongest adherence to recommended sequence was reported in grade 2, while kindergarten teachers reported the highest degree of deviation from the recommended sequence.

Intensive, succinct instruction. To ascertain the degree to which participant schools were delivering intense, succinct instruction, three questions were posed: 1) Were students quickly introduced to the basic elements of phonics? 2) Was the application of phonics integrated throughout the curriculum? 3) Were students encouraged to acquire the habit of integrating phonics with other structural and meaning cueing systems?

More than half of the participating teachers reported teaching phonics instruction daily, while slightly over one third of participants reported phonics instruction more than once weekly. Kindergarten classrooms appeared to participate in phonics instruction most frequently, followed closely by first and second grades. Length of a typical phonics instructional session, as reported and observed, ranged from fifteen minutes to ninety minutes. Twenty to thirty minute sessions appeared to be the norm.

Teachers most frequently self-reported integration of phonics in the areas of reading and spelling. Writing, science and social studies were other curriculum areas reportedly integrated with phonics instruction. Teacher interviews corroborated these findings. Observation reports confirmed instructional integration of phonics with reading, spelling, and writing in almost all observed classrooms. A small number of classrooms integrated phonics with music and art. Observation revealed only minimal integration of phonics with any content areas other than reading, writing, and spelling.

The instructional approach used in teaching phonics may influence the degree to which students integrate phonics knowledge with other reading, writing, and spelling strategies when dealing with unrecognized or unknown words. Instruction which focuses on skills-building through memorization of phonic rules and practice with isolated words has been labeled "bottom-up." When encountering unfamiliar words, students instructed in a bottom-up approach are encouraged to apply phonic rules to analyze letter/sound relationships and thence to "sound them out." Methods which focus on common spelling patterns of words have been called "linguistic" approaches. When encountering unknown words, students instructed in a linguistic approach are encouraged to search for familiar spelling patterns within words (e.g., "a-t" patterns, "e-r" patterns, "i-g-h-t" patterns). Sounds of the known spelling patterns are combined with sounds of known phonic elements to decode new words. Bottom-up and linguistic approaches do not, in themselves, stress

integrating phonic analysis with structural and context clues when students encounter unfamiliar or unknown words.

In contrast to skills-building and linguistic methods, "top-down" and "integrated" approaches stress utilization of phonics as one component in an array of strategies for identifying and ascertaining meaning of printed words. Top-down approaches encourage students to distill common phonic elements and spelling patterns by examining whole selections of literature, working from the whole to the part. This contrasts with the part-to-whole approach of skills building in which students learning to read as they work from letters to words to sentences to paragraphs, and finally to whole selections of literature. Top-down approaches focus on the construction of meaning, even if total phonic accuracy is sometimes sacrificed. Top-down proponents may argue that the gestalt of the whole is lost when a skills-building approach is used.

Integrated approaches stress the use of multiple cueing systems and strategies when encountering unknown words. Students are encouraged to cross-check context cues with phonic and structural cues. Proponents of integrated approaches maintain that good readers access the fewest number of cues necessary to quickly gain meaning and develop fluency. Top-down and integrated strategies additionally encourage students to use multiple strategies in spelling and writing. When attempting to write or spell unknown words, students are encouraged to combine phonic knowledge of letter/sound

relationships with known spelling patterns, knowledge of word roots and affixes, and visual memory of word spellings encountered in their reading.

Data on participant teachers' approaches to phonics instruction were obtained through observations, since self-reports indicated a degree of teacher confusion over terms describing instructional approaches. Bottom-up approaches were observed in nearly three fourths of participant classrooms. The next most common approach was linguistic, appearing in just under one fourth of observed classrooms. Top-down approaches, noted in 20% of participant classrooms, were observed most frequently in second grade. An integrated approach, noted in only 9% of participant classrooms, was observed most frequently in first grade. Several teachers combined one or more approaches to phonics instruction.

Different instructional approaches to phonics may emphasize different student behaviors in the application of phonic knowledge. Data regarding the encouragement student behaviors in phonics was obtained from observation and self-reports. Examiners noted that teachers encouraged students to routinely use phonics to decode unknown words in nearly 40% of observed classrooms. Teachers self-reports corroborated this finding. Observations noted this type of encouragement most frequently in grades 1 and 2. Self-reports noted this type of encouragement most frequently in grades K through 3.

The next most commonly observed behavior to be encouraged was the memorization of phonic rules and examples. This behavior was not reported as

frequently in self-reports as in observations. Self-reporting and observational data were in close agreement concerning the encouragement of students to a) repeat given phonic examples and generate new examples and b) integrate useful phonic elements when identifying and analyzing unknown vocabulary. Each of two these behaviors was noted in approximately 28% of observed classrooms. Integrating useful phonic elements when analyzing unknown words was observed and reported most frequently in first and second grade classrooms.

Self-reports and observations differed in noting the degree to which use of multiple reading strategies was encouraged. Over two thirds of teachers completing self-reports noted that they encouraged this behavior in their students, while such encouragement was only noted in 13% of observed classrooms. The encouragement of students to decide when, where, and how to apply phonics was observed in 13% of observed classrooms. While 27% of observed teachers completing self-reports noted such encouragement, 61% of the random sample of first grade teachers self-reported encouraging students to decide when, where, and how to use phonics. Encouragement of phonics application in study skills outside the classroom was noted in only four percent of observed classrooms. Self-reports of observed teachers indicated a 44% incidence of such encouragement.

Research Question #2

How useful is the phonics program in developing student literacy growth

and independence?

In order to become efficient in the use of phonics, students need to be familiar with phonics practices and procedures. In nearly 70% of observed classrooms, students were rated as *very familiar* with phonics instructional procedures. Students were rated as being *somewhat familiar* with phonics procedures in 20% of observed classrooms. Examiners rated student familiarity with phonics instruction as *slightly familiar* or *not familiar* in only 4% of observed classrooms.

Student application of phonics in reading and spelling was analyzed for each of the phoneme groups in both observations and teacher self-reports. Accurate vocal response to written cues for initial consonants was observed in 63% of participant classrooms. Accurate vocal response to medial and final consonants was observed in 26% and 37% of participant classrooms, respectively. Percentages for observed *spelling* of initial, medial, and final consonants closely paralleled those for *reading* of these phonemes. Overall, teachers self-reported that nearly 88% of their students could read and spell initial consonants. This reported figure was only slightly lower for final consonants. Overall medial consonant accuracy in reading and spelling was self-reported for 77% of students. Not surprisingly, grade 3 teachers reported 100% of the students as recognizing initial consonants, while teachers in grades 1 and 2 reported this figure as 93% to 96% for reading and 89% to 93% for spelling. Kindergarten teachers reported a mean of 74% of their students

accurately recognizing initial consonants and 72% accurately spelling initial consonants. Self-reported final consonant percentages for kindergarten closely paralleled those of initial consonants. Kindergarten medial consonant recognition and spelling was self-reported as accurate in 55% and 50% of the students, respectively.

Students were observed recognizing short and long vowels in 50% of participant classrooms. This incidence was highest in grades 1 and 2. Percentages did not differ noticeably between short vowel recognition and long vowel recognition. Observation of accurate spelling for long and short vowels was noted in 26% and 37% of participant classrooms, respectively. Teachers self-reported an overall recognition of both short and long vowels as accurate in 78% of their students. Spelling of long and short vowels was self-reported as accurate in 74% and 76%, respectively. By third grade, teachers reported that 85% of their students recognized long and short vowels accurately, while spelling for short and long vowels was self-reported as 90% and 100%, respectively.

Examiners observed accurate recognition and spelling of r-controlled vowels in 28% and 22% of classrooms, respectively. Accurate recognition and spelling of these phonemes were not observed at the kindergarten level. Students were observed accurately recognizing two-letter consonant blends in one-third of participant classes.

Student spelling of two-letter consonant blends was observed to fall only slightly behind their reading of these phonemes. Accuracy in spelling and reading three-letter consonant blends was observed in only 13% and 7% of classrooms, respectively. Neither spelling nor reading of 3-letter consonant blends was observed at the kindergarten level. Teachers self-reported overall student accuracy for 2-letter and 3-letter consonant blends as 80% and 71% in reading and 79% and 68% in spelling. Self-reports indicated a steady rise in 2-letter consonant blend recognition from 55% of kindergarten students to 95% of third grade students. A similar trend in accurate 3-letter blend recognition was self-reported, beginning with 40% of kindergarten students and rising to 90% of third grade students. Spelling of 2- and 3-letter consonant blends mirrored trends in reading of these phonemes.

Observations revealed that students recognized digraphs more readily than they did diphthongs. Accurate digraph recognition was observed in 30% of participant classrooms, while accurate diphthong recognition was observed in only 17% of participant classrooms. Accurate spelling of digraphs was observed in 20% of participant classrooms, while accurate spelling of diphthongs was observed in only 7% of participant classrooms. Accurate recognition or spelling of digraphs and diphthongs was rarely observed at the kindergarten level. Students' recognition and spelling levels for digraphs and diphthongs remained relatively constant for grades 1, 2 and 3. Self-reports indicated an overall percentage of students who accurately read and spelled digraphs as 65% and 69%, respectively. Self-reports indicated an overall percentage of students who

accurately read and spelled diphthongs as 65% and 62%, respectively.

Teachers' self-reports for their students' accurate digraph recognition ranged from 78% for first graders to 90% for third graders. Teachers self-reported accurate diphthong recognition in 47% of first graders, 65% of second graders, and 90% of third graders. Spelling accuracy in digraphs was self-reported as 42% for first graders, 63% for second graders, and 90% for third graders.

Spelling accuracy in diphthongs was self-reported as 62% for first graders, 63% for second graders, and 90% for third graders.

While teachers of phonics might encourage the use of one or more cueing systems in deciphering unknown words, students may or may not actually access these cueing systems when working independently. Data from observations, self-reports, and interviews were used in determining what cueing systems students in participants' classrooms were likely to use when encountering unknown words. Teachers were asked to rank which cueing systems their students tended to use first, second, and third, when encountering unknown words. Cueing systems were labeled as configuration (shape of the text), graphophonic (phonics), semantic (meanings of roots and affixes), syntactic (sentence grammar), context (surrounding words and sentences), and experiential background (familiarity with content).

Overall, teachers self-reported that most students used graphophonic cueing as a first line of attack on unknown words, followed closely by context. Interview reports revealed that context and graphophonics were used by most

students as a first word attack strategy, with a slight edge to context. Interviewed teachers believed that most students used context and experience as a second word attack strategy, if the first strategy failed. Students were observed using graphophonics as a first or second word attack strategy in the majority of classrooms. Use of semantic and context cues was the next most commonly observed behavior.

Self-reports indicated that kindergarten students did not access syntactic cues, but tended to use any and all other cueing systems randomly. First grade teachers in the observation sample self-reported that their students used graphophonic cueing as the first word attack strategy most of the time. Context was the next cueing system accessed by first graders, followed by random use of other types of cues, if phonics and context failed to help them identify a word. Random sample first grade self-reports corroborated these findings, but indicated that for many students, experience was often used as a second cueing system. Self-reports for second grade students indicated that graphophonics was applied first, followed by context. Third graders were reported as using context cues as a first strategy, with no discernible pattern of usage for other cueing systems.

Student independence in applying phonics was examined in the content areas of reading, spelling, science, social studies, math, music, art, and other content areas such as writing. Interview and self-report data suggested that students independently applied phonics most frequently in the content areas of

reading and spelling, followed closely by science and social studies. Classroom observations confirmed these tendencies, also noting frequent independent phonics application in conjunction with writing activities and writing/artwork activities. Independent use of phonics in content areas tended to decrease as grade levels increased. Highest use was observed in kindergarten classrooms and lowest use, in third grade classrooms.

Research Question #3

Is adequate teacher support provided for implementing the phonics program?

The degree of teacher support needed to assure effective delivery of intensive phonics instruction may well be a factor of teachers' education and experience in phonics pedagogy. Interview and self-report data were vehicles for obtaining this background information. Three sources of education in techniques of phonics pedagogy were identified in self-reports: undergraduate courses, inservice training, and teacher's manuals. Although the majority of participant teachers had masters degrees or near-masters degree levels of education, almost no participants reported graduate instruction in phonics pedagogy.

When interviewed, almost all teachers reported little or no education at the undergraduate level in the teaching of phonics. A few teachers who had taken undergraduate linguistics courses reported learning some phonic rules, while receiving no instruction in how to teach phonics in the classroom. A

prevalent perception among participant teachers was that their undergraduate emphasis on whole language instruction downplayed the importance of phonics instruction. Teachers who had completed courses in special education appeared to be the only participants with any substantial degree of education in phonics pedagogy. The largest single source of education in phonics pedagogy for most participant teachers was the inservice training provided through the newly-adopted district phonics program. Teachers frequently reported that they were presently learning phonics rules along with their students. The inclusion of a phonics component in previously adopted basal reading programs reportedly provided teachers with a minimal degree of preparation in teaching phonics via basal reader teacher's manuals. Despite the dearth of education in phonics pedagogy, teachers reported a mean of 10.9 years experience in teaching phonics.

Data were collected about two-thirds of the way through the first year of what was, for most participants, a newly-adopted phonics program. Most teachers had only attended from 2 to 3 inservice phonics training sessions. While most teachers felt these sessions were quite valuable and helpful, many wished for more on-site support. In a few cases, teachers were unaware of the identity of district teacher trainers and were unsure of where to go with questions about teaching phonics. Some teachers in districts using Modern Curriculum Press, Plaid Phonics Series found that the publisher did not offer inservice support for this particular program. Many teachers commented that they felt they

were still in the learning stage and that they would likely require less support in the basics of phonics during the second year of the program.

Many teachers felt that once the basics of the phonics program were mastered, it would be much easier to integrate phonics into content areas. Interview data indicated that while in-service trainers suggested many ways to integrate phonics with reading, writing, and spelling, little information was conveyed about integrating phonics into science, social studies, or math instruction. Teachers with many years of phonics teaching background found content area integration to be much more natural than those just beginning to teach phonics for the first time.

Another difference was noted between teachers who had just begun phonics instruction and those with years of experience in teaching phonics. Newcomers to phonics instruction were invariably pleased to have a prescribed sequence for daily phonics instruction and for sequential introduction of phonic elements. Veteran phonics teachers often felt constrained by prescribed sequences in daily instruction and most often varied phonics procedures to fit their own teaching styles. Both veteran and novice phonics teachers praised LouAnn Thompson's Logical Phonics program for its adaptability to individual teaching styles. This program was commended for the ease with which it could be integrated into a literature-based approach to reading instruction. Teachers in grades K-3 commended the Workshop Way phonics program for its integration with critical thinking, values, and ready integration with reading and

writing. This program's systematic progression in introducing phonic elements was enthusiastically reported.

Many of the phonics programs in the project supplied teachers and students with visual aids highlighting spelling patterns, phonic rules, and word attack strategies. These were often in the form of wall cards and/or smaller visuals for individual student use. Teachers generally favored the support value of such visual aids for themselves and for their students, although sometimes the amount of classroom space occupied by wall cards and charts was a bit frustrating. Many participant teachers reported seeing students refer to the visuals while working independently.

A problem in the area of support was noted by some second grade and third grade teachers. Apparently, the greatest degree of support was offered for beginning phonics instruction. For advanced phonics instructions, some teachers felt they had to "sink or swim" on their own. Third grade teachers, in particular, felt a lack of guidance at their level of instruction. Several third grade teachers mentioned that they were grateful to the new phonics program for support in dealing with special education students and students with special needs.

Research Question #4

What are student and teacher attitudes about the district-selected phonics instructional program?

An important factor influencing effective implementation of phonics instruction is students' level of motivation to employ phonic skills and strategies. Examiners rated teachers' ability to motivate student interest in phonics as *very effective* in just under one-half of observed classrooms. A rating of *moderately effective* in student motivation was reported in nearly one-third of observed classrooms. Teachers were rated as *minimally effective* or *not effective* in only 8% of observed classrooms.

Almost all teachers responded to interviews by noting an increase in their students' ability to read and write independently. This attitude was most prevalent in kindergarten and first grade and least prevalent in third grade. Difficulties with the program included a reported lack of involvement in the phonics program selection process and a feeling of being overwhelmed at having to grasp a large amount of knowledge in a relatively short period of time. Many teachers were uncomfortable with being observed while still in the "learning phase" of program adoption. Others reported that they did not want phonics instruction to replace successful programs in whole language and literature-based instruction. Most teachers felt that they could successfully integrate phonics instruction with their present programs and practices, but that more time is needed to accomplish this.

Teachers generally look forward to welcoming next year's group of students, anticipating the benefits of working with students who have already had a year of intensive phonics instruction. They feel that good teachers can build upon the knowledge that students have and that a shared background in phonics will enable teachers and students to "speak the same language." One classroom teacher summed up the views of many by stating, "No program in itself makes for good learning. A good teacher is what makes good learning."

Conclusions and Recommendations

Evaluation of the Phonics Demonstration Project draws upon findings from each of the data collection instruments--Self-Report, Observation Report, and Interview Report. Recognizable trends throughout participating school districts are highlighted, with regard to each of the research questions.

Recommendations for the future reflect both strengths and weaknesses in the present organization and implementation of the PDP.

Conclusions

Research Question #1. Is systematic, intensive phonics instruction being integrated into the K-3 curriculum? Any generalizations concerning the degree to which phonics instruction is being implemented must take into consideration the fact that data was collected in the initial phases of the program. Some districts did not receive phonics materials until months after the start of the school year. Other school districts were unable to provide all participants with complete materials in this initial year. Many teachers, and even some on-site teacher trainers, were still in the learning phase of mastering phonics principles. In addition, they were still learning the particulars of their program's organization and implementation. As is true in any discipline, mastery of the subject matter is a necessary, but not sufficient, prerequisite to effective instruction.

While it was apparent that systematic direct phonics instruction was *implemented* in each of the observed districts, the degree to which such instruction was *integrated* into the curriculum varied widely from school to school

and from program to program. The regularity of phonics instruction was most consistent in grades K through 2. Since this was the first year of formal phonics instruction for many students, instruction at the second grade level often focused on the same phonics principles as those covered at the first grade level.

Findings indicate, however, that regardless of the phonics program in use, specific phonic elements appear to have been taught in a fairly consistent sequence, both within and among grade levels. Not surprisingly, more difficult phonic principles and elements were routinely addressed at more advanced grade levels. For example, by third grade, phonics instruction tended to focus on syllabication, root words and affixes, and recognition of phonic principles in words which children already knew how to read.

Within some classrooms, phonics instruction was treated as an isolated subject. In such cases, phonics principles were taught for twenty to thirty minutes daily and then apparently forgotten for the rest of the school day. In contrast, teachers already familiar with the basic principles of phonics appeared most likely to offer encouragement and support for applying those principles outside the context of the regularly scheduled concentrated phonics sessions. Content areas most frequently integrated with phonics were reading, spelling, and writing. Phonics programs themselves differ in the degree to which content area integration is supported and encouraged. Programs most frequently reported by participants as offering support for phonics integration and transfer were Logical Phonics, Modern Curriculum Press Ready Reader, and Workshop Way.

Research Question #2. How useful is the phonics program in developing student literacy growth and independence? To become good readers, students must possess two basic prerequisites: skills and motivation. Phonic analysis is one of the most effective *early* reading and spelling skills, when used strategically and applied judiciously. Practices such as memorizing phonic rules, analyzing vowel-consonant patterns in words, and generating examples do not necessarily lead to independence and growth in reading and writing. To be most effective, phonic principles must be employed in reading and writing, as part of an array of cueing systems. Strategic readers decipher unknown words by applying phonics in conjunction with context, syntax, experiential background, and semantic knowledge. The best readers access the minimum number of cueing systems necessary to maintain comprehension and fluency.

While phonic skills are a major tool for early reading independence, the importance of phonics in relation to other strategies decreases as readers mature. Since meaning construction is the primary goal of reading, fluent readers may skip over unrecognized words and still retain high reading comprehension rates. Oftentimes poor readers have weak phonic skills, yet the opposite extreme is also a noted phenomenon. Teachers of learning disabled students report that these and other students with reading problems may *over-rely* on phonics, to the exclusion of other strategies. As a result, comprehension and aesthetic enjoyment tend to be sacrificed. Students who struggle with reading, painfully decoding word after word, may learn to loathe interaction with the written word. When frustration and tedium replace the joy of

accomplishment, when self-esteem is destroyed rather than bolstered, students will not practice reading and writing willingly. And those who do not practice will not improve.

Findings indicate that Phonics Demonstration Project programs are effectively delivering phonics instruction to early readers and writers. Students in these programs converse knowingly about long and short vowels, about diphthongs and digraphs, about vowel controllers. Many students in the programs can recite phonic rules and analyze consonant/vowel patterns within words. Others can generate word families structured according to similar phonic principles. Many participant students can decode words through application of phonic principles. Others can distill phonic principles from a group of similarly constructed words. Only a portion of students in the program have reached the point where they can decide independently when and where to apply phonic rules, beyond the context of the phonics instructional session.

Research Question #3. Is adequate teacher support provided for implementing the phonics program? An overwhelming majority of participant teachers assert that their own undergraduate and graduate level teacher training has been sorely deficient in providing background in phonics knowledge and instructional techniques. While most teachers see a need for the incorporation of phonics into early reading and writing instruction, many report feeling somewhat insecure or unprepared to deliver effective phonics instruction to their students.

In some districts, teachers report strong inservice support for early implementation of phonic programs, but diminished support for later stages of the program. Similarly, greater support is reported for teachers in earlier grades. Teachers whose districts have adopted Logical Phonics, Modern Curriculum Press Ready Reader, and Workshop Way programs report the greatest degree of satisfaction with the helpfulness of inservice workshops. In most districts, teachers felt that more support was needed to answer questions about phonics knowledge and practices, while they were still in the learning stage.

Many teachers were pleased to be "left on their own" to integrate phonics with content, as they saw fit. Others, however, reported being confused about how to go about encouraging phonics integration and transfer throughout the curriculum. It was generally agreed that teachers just beginning the program require a support system which focuses on development of phonics knowledge and word analysis procedures. Teachers who had mastered this first phase requested support systems which emphasized creative ways of encouraging students to integrate and apply phonics throughout the curriculum. In a few school districts, teachers reported a lack of accessible and knowledgeable on-site support for beginners to the program. Participant teachers in other districts reported the development of excellent on-site support, including provision of demonstration lessons by teacher trainers with their own students.

Research Question #4. What are student and teacher attitudes about the district-selected phonics instructional program? A teacher's enthusiasm or lack of commitment is easily transferred to students in the classroom. Similarly, students whose teachers feel insecure or frustrated with phonics instruction, are highly unlikely to feel comfortable with the subject, themselves. While participant teachers reported several concerns and frustration with the Phonics Demonstration Project, they also reported satisfaction and enthusiasm for many aspects of the program.

One area of frustration reported by some participant teachers was lack of involvement in the decision-making process for evaluating, selecting and developing implementation plans for their school district's phonics program. Other teachers were unaware of the terms of the grant agreement. Accordingly, many teachers were surprised and chagrined at being observed while still in the learning stages of teaching phonics. Most teachers did not understand why they were being observed for forty-five minutes while phonics instructional sessions lasted only twenty to thirty minutes. The fact that observations served to document the degree to which phonics was integrated into reading and writing throughout the curriculum was not clear to observed teachers; many thought that they were expected to teach intensive phonics for the entire observation. Teachers consistently mentioned frustration with having to learn a great deal of information in a short period of time. Many wished that they had had some time to prepare over the summer, before the current school year began.

Enthusiasm for phonics instruction was highest in both students and teachers in classrooms where phonics instruction was consistent and regular. Both students and teachers appeared more motivated in classrooms where phonics was consciously integrated with literature, with music, with art. High levels of motivation were engendered in students when teachers invented phonics games and challenges and approached phonics instruction in a spirit of playfulness. Similarly, comfort levels rose in classrooms where teachers knew enough about students to adjust phonics instruction to individual needs and abilities. Motivation and involvement were high in classrooms where students contributed actively to language experience stories displayed on easel-mounted chart paper. Active involvement in such tasks as marking analyzed words with phonic symbols or generating words illustrating phonic principles seemed to stimulate student interest. Finally, teachers were successful in generating enthusiasm when students were recognized for their accomplishments in transferring phonics to their own journal-writing or other personal reading and writing.

Recommendations

The Phonics Demonstration Project has experienced a significant degree of success in its initial year implementation. As a direct result of the project, more students are learning to use phonics as a tool for reading and writing, and teachers are noticing the difference. While some adjustments to present programs may be needed to "fine tune" program delivery, much of what is

already being done is worth continuing. The following recommendations are therefore proposed.

Continue support for present programs. Preliminary results strongly indicate that PDP programs are developing student knowledge of phonics principles. Teachers and administrators in PDP participant schools overwhelmingly support continuation of the program. Most feel that it would take at least two school years to internalize the organizational structure of district-selected phonics programs, and that the benefit to their students would be even greater after the second year of implementation. It is vital that districts receive the funding necessary to provide all participant teachers with materials basic to the district-selected phonics program, if they are to do an effective job of delivering phonics instruction.

Emphasize instruction and support at grades K through 2, with continued training for teachers of older special needs students. Phonics is basically a beginning reading strategy. It is a means to an end. Intensive phonics instruction becomes less vital as students become proficient readers. If students have built a strong foundation in phonics in grades K and 1, teachers may gradually reduce the amount of intensive phonics instruction in grades 2 and 3, as their students learn to access additional reading strategies. When intensive phonics instruction persists into third grade, especially when students are urged to apply phonic analysis to words they can already read, it may become counterproductive, slowing students down and interfering with comprehension.

Although phonics may be taught less directly by the third grade, it is important that all participant teachers receive training in phonics so that they can build upon the phonics knowledge background that their students have developed in earlier grades. Students and teachers need to utilize a common vocabulary of phonics terms and word attack procedures when discussing when, where, and how to use phonic strategies.

For special needs students (ESL, LEP, LD, DH, Title I), systematic phonics instruction is often needed at the third grade level and beyond. Teachers who work with these students need the active support of the PDP. Such support is especially vital for teachers of "inclusion" classes, where special needs students are mainstreamed into the regular classroom. In some cases, it may be necessary to provide teachers of older primary-grade students with phonics instructional materials designed for younger students, based on their special needs differing students' ability levels.

Augment teacher support in the areas of integration and transfer across the curriculum. Transfer and application should be an integral part of the program, from the beginning. It is acknowledged, however, that teachers need time to digest phonic knowledge before application and transfer become second nature. During the first year of the program, teachers are still grappling with phonic knowledge. First year inservice should focus on knowledge development (phonics terms, rules, exceptions, procedures for word analysis). For first year

participants, inservice training needs to be offered prior to program implementation.

The focus for continued inservice should increasingly emphasize integration of phonics with quality literature and content area reading and writing. No reading program can be successful just because students know how to use phonics. Students must learn to love reading and must seek information and pleasure in reading *independently*. Phonics can help build the self-confidence that is necessary for independence in reading, but it cannot build a love of reading. Such a lifelong predilection is built over time with exposure to enjoyable and personally meaningful literature. Teachers need to learn creative ways to integrate phonics with informational and aesthetic reading and writing throughout the curriculum. The aim is to build independent readers and writers who use phonics as a tool for effective interaction through the medium of print.

Continue longitudinal data collection on ten sample schools. By focusing on the ten selected schools, observations, interviews, and self-reports can be evaluated for change over time. Levels of teacher satisfaction can be assessed in a more realistic framework than that provided within the initial stages of program implementation. Change is always hard, but in time, what may have seemed difficult or overwhelming frequently becomes understandable and routine. Once teachers have internalized the structure of their district-selected phonics program, they may become more adept at integration and transfer of

phonics throughout the curriculum. Only a longitudinal study can provide such data.

Provide more access to inservice and on-site support. Access to help with questions about phonics knowledge and procedures can serve to reduce teacher frustration who are still learning the structure and organization of their district's selected phonics program. Funds are needed to provide "release time" to on-site teacher trainers so that their expertise can be put to work in providing demonstration lessons or assistance in program implementation. In-service funds can also be utilized to provide time for peer collaboration in program delivery and problem-solving. Teachers who are new to the program need more planning time up front and more time to observe in classrooms where phonics implementation is successful. Providing teachers with time to learn from their peers requires less funding than that needed for paid consultant visits; professional program assistance can be thus supplemented for very little additional cost.

Include participant teachers in the decision-making process. When teachers have a voice in the selection and evaluation of a phonics program, sense of "ownership" is engendered. Without a sense of involvement at this level, a lack of commitment may follow. Participants also need to be apprised of the terms of the grant agreement, including information about their roles in program implementation, assessment, and data collection. After two years using the district-selected phonics program, teachers are in perhaps the best

position to evaluate the effectiveness of the program. As part of the continuing evaluative process, teachers should communicate their needs and any perceived program deficiencies to the phonics program representative. If, after two years, the district-selected phonics program fails to address specified needs and deficiencies, teacher participants should have input into selection of a more effective phonics program.

Conduct further testing to assess student mastery of phonics principles and their application. Evaluation of phonics mastery needs to be tested separately from reading comprehension, since other factors can influence reading comprehension. When interpreting test results, it is important to remember that phonics is a means to an end, and not an end in itself. If students are reading fluently and comprehending well, they do not need additional phonics instruction in reading, regardless of how they do on a phonics test. Some measure of application of phonics to spelling and writing also needs to be assessed, as a means of testing integration and transfer. Finally, as students mature as readers, phonics usage needs to be assessed in the context of other cueing systems.

Will students effectively combine phonics with other cueing systems to improve reading fluency and comprehension? Assessing strategic use of reading cueing systems is most effectively measured through a Reading Miscue Inventory (RMI). An RMI could be administered by on-site reading specialists to selected students at various time intervals. Results could indicate the degree to

which students used appropriate phonic cues as part of an overall reading strategy. It is important to keep in mind that the ultimate goal is not to produce children who are good at *phonics*, but to produce children who are good *readers*.

Extension of the Evaluation and Additional Data Analysis

Student Performance/Achievement Measures

The evaluation conducted during Spring 1997 focused on the extent to which teachers were conducting phonics instruction as intended. No measures of student performance were collected. Because school districts are required to administer Competency-Based Education (CBE) tests and to keep records of the percentages of students passing these tests, it would be possible to obtain some gross measures of student performance.

The data required are the percentages of students passing the CBE tests within each grade level and school building. The data would be collected only in the schools of the PDPs. The comparison is to be made with the 1996 CBE tests data, again obtained in the same schools within grade level and building.

In order to make the comparison, it is necessary for individual schools to have used the same tests and the same passing criterion across the two years, the school years ending June 1996 and June 1997. It is not necessary that the same tests be used across schools because the measure to be analyzed is percentage passing, not mean scores on the tests. If a school has changed the criterion for passing but used the same tests, the data will be useful if we can obtain the distributions of scores for the two years. If a school has switched tests, a comparison would be tenuous and unjustified.

Because some data do not become available until later in the summer, probably the end of August, the analysis would not be completed until Fall, 1997,

most likely around the end of October. Deadlines for the submission of data must be met or the data will not be included in the analysis. For the evaluation conducted Spring 1997, some schools did not have self-report data because they were delinquent in completing the forms. The directions were to have those forms completed during March and early April. Some schools did not submit forms until mid-May, by which time the analyses were being done.

Additional Data Analyses

The use of the self-report form for the Spring 1997 evaluation involved two infractions from the intended use. As mentioned above, some project schools submitted completed forms too late to be included in the analysis. Secondly, the intention was to have one form completed at each project, rather than have each of the 490 plus participating teachers complete a form. The adjustment was to select randomly one first-grade teacher's form from those projects that had submitted forms. As a result of the two infractions, the data from numerous forms have not been included in the analysis.

The data from all the forms could be analyzed, separating the data by grade level. The analyses would be extended to include teachers in grades K, 2, and 3. Essentially, with the exception of several missing teachers, this would be an analysis of a population, the population of all teachers participating in the PDPs. The total number of completed forms is around 440. The self-report forms provide a description of the nature of phonics instruction as perceived by the teachers at this point in time when the data were collected.

Plan for Continued Evaluation of Phonics Instruction

The evaluation of phonics instruction introduces methodological problems for which solutions are difficult. Reading performance is affected by a host of factors, many of which are not within the control of teachers. Therefore, it is difficult to partition effects to specific causes. Phonics instruction tends to be most highly concentrated in first grade, early in the learning-to-read experience. As students become more proficient in reading, they use a greater variety of strategies to understand the content being read. Phonics as a strategy may decrease in importance as students advance through the elementary grades and the effect of early phonics instruction may lessen with the passing of time.

A second family of problems in phonics instruction evaluation is associated with the fact that the evaluation must be a field study; a study conducted in the schools as they go through their day-to-day operation. Inherently, field studies tend to have reduced control, compared, for example, to a laboratory experiment. Field studies vary in their amount of control but the issue when conducting field studies is one of maintaining at least adequate control so that the results can be interpreted with confidence.

Because of the data collection in the schools, field studies typically rely on teachers or administrators for at least part of the data collection. Problems often associated with such data collection are: 1) lack of consistency in following directions, 2) attrition across time of student data, 3) difficulty in adhering to deadlines, and 4) missing or unusable data. There is a general reluctance on the

part of teachers and administrators to participate in evaluation studies that they perceive may reflect their performance. Even with the modest evaluation conducted during Spring 1997, which did not involve student performance data, there were problems with data collection in the schools.

Nevertheless, field studies are, at times, the only approach to conducting evaluation and they can yield credible data. Such studies require time and effort and preliminary arrangements to enhance the cooperation in the field.

Suggested Measures

The most important type of measures for an evaluation of phonics instruction is student performance. Reading performance is the most obvious measure but because reading is such an essential skill overall, other academic measures also apply. A secondary type of measure is one which assesses the extent to which phonics instruction is being implemented in the classrooms. Of course, it is necessary to have consistent measures across the participating schools.

Teachers, schools and school districts engage in a variety of procedures for evaluating instruction, many of which are not comparable, especially the measures involved. So, to obtain consistent measures it likely will be necessary to use relatively gross measures of student performance. The consistent measures across the schools of Ohio are performance on the proficiency tests, which begin at fourth grade. Prior to fourth grade, schools are required to use CBE tests within grades. Those used may vary across districts but the common

measure is the percentage of students passing the CBE tests. These data need to be available by school and grade (K-3) so that comparisons can be made between schools participating in the PDP and other schools. Also, if performance in the PDP schools is to be compared with performance prior to participation in the project, it is necessary that the CBE tests and the passing criterion be consistent across the years. In fact, if there is a lack of consistency across schools in the CBE tests and the criteria used for passing, comparison with percentages passing in other schools may not be valid. Percentages of students passing the CBE reading test, and any percentages passing the CBE tests in any other academic areas, would be the measures of interest.

At the close of fourth grade performances on the proficiency tests (reading and others) would be the common measures. Both percentage of students passing and actual scores would be required by school. The actual scores are necessary because the criterion for passing has been changing across years. The passing score has increased so it will be important to have the means and standard deviations of the actual scores.

The self-report questionnaire used in the Spring 1997 evaluation, or some reduced form of it, can serve as the measure for phonics instruction implementation. The results from the Spring 1997 evaluation should indicate which items are most useful. The questionnaire is somewhat long and it may be desirable to eliminate some items, and the items will be subject to revision.

Evaluation Design

The evaluation design is a longitudinal design implemented over approximately four years, 1997 - 2001. Those students who were first graders during 1996-97 will complete fourth grade in Spring, 2000. Their fourth-grade proficiency test data will be available later in the year 2000, and the evaluation should reserve six months to one year for data analysis and report preparation after the completion of data collection. This means that the evaluation would be completed sometime during the first six months of 2001.

Data collection would take place near the close of the school year in each year, beginning Spring, 1998. CBE test data (percentages of students passing by grade) for Spring 1997 could be used as a sort of "baseline" data if such data are available. Generally, the data collection schedule would involve:

- Spring 1998: K-2, CBE tests percent passing, Self-report.

- Spring 1999: K-3, CBE tests percent passing, Self-report.

- Spring 2000: K-3, CBE tests percent passing, Self-report.

- Grade 4, proficiency tests - percent passing each area and actual scores, Self-report.

The cohort of primary interest would be the second-graders of 1997-98. However, as students enter and proceed through the PDP, their CBE test data could be collected and used for comparison across the years.

The self-report data would consist of two groups. The one group would be data on a random sample¹ of the first-grade teachers in the PDP. This group should remain relatively stable across the years and its members are the first grade teachers who provided self-report data for the Spring 1997 evaluation. The other group providing self-report data would be the teachers of the students who were first graders, 1996-97. Again, samples could be selected but each year there would be a different population from which the samples are selected. Essentially, the teachers of these students would provide self-report data about the extent of phonics instruction when the students are second, third, and fourth graders.

Several potential comparisons involving student performance data could be developed:

1. With each project school compare the percent passing the CBE tests with the percentage that passed the year prior to the school entering the project. This comparison requires that the CBE tests and the criterion for passing remain the same across the years.
2. Within each project school check the pattern of passing the CBE tests as the first graders, 1996-97, progress through grades 2-4.

¹ The entire first-grade teacher population could be used but this will increase substantially the quantity of data. If a random sample is used one teacher could be selected from each participating school.

3. Within the district, to the extent such data are available, compare the passing performance of the students in the one or more project schools with that of students in a comparable school that is not implementing distinct phonics instruction. This comparison would be made for each grade.
4. Performances on the fourth-grade proficiency tests will be determined by school. The performances of students in the project schools can be compared to: 1) statewide results, 2) results of comparable schools in the district, and 3) results of a matched sample of schools statewide, but schools not implementing distinct programs of phonics instruction.

The data for the comparisons within project schools should be available and it is important that in these schools, the CBE tests and the criterion for passing remain consistent across the years. Any comparisons with schools outside the PDP may encounter difficulties and it will be necessary to obtain assurances that data will be available and collected in a credible and consistent manner.

The self-report data from the first-grade teachers (the first group mentioned earlier), will provide a "profile" of the stability of phonics instruction among the first-grade teachers of the PDP. First grade is the point at which phonics instruction is most intense. These self-report data will indicate whether continued participation in the PDP affects the implementation of phonics instruction.

Finally, the self-report data from the teachers across grades will provide a profile of phonics instruction as grade level increases. Because students engage a greater variety of decoding strategies as they proceed through the grades, it can be hypothesized that phonics instruction per se is diminished. However, the earlier phonics instruction may have a long-range effect both on student performance and on how third- and fourth-grade teachers conduct instruction.

In summary, conducting a credible evaluation will require an extensive, longitudinal study. Because of necessity, the evaluation will be a field study and this condition introduces potential problems with the data collection. The study will require extensive cooperation of the PDP schools, and other schools if such comparisons are made. The ODE will be the source for proficiency test results; however, schools will be required to generate the school level results. An evaluation as proposed will require considerable planning and financial resources.

Appendix

Table 1. Phonics Demonstration Project Participant School Districts

Figure 1. Phonics Demonstration Project: Observation Report

Figure 2. Phonics Demonstration Project: Self-Report

Figure 3. Phonics Demonstration Project: Interview Report

Figure 4. Letter to Districts Participating in the Observation

Table 1. Phonics Demonstration Project Participant School Districts

School District	Phonics Program	Observed
Arcadia Local Schools	Char-L Phonics	
Athens City Schools	Logical Phonics	x
Bellefontaine City Schools	Workshop Way	x
Cincinnati Public Schools	Modern Curriculum Press	x
Cleveland Public Schools	Ready Reader Logical Phonics	
Edon Northwest Local Schools	Logical Phonics	
Elgin Local Schools	Modern Curriculum Press	x
Fort Recovery Local Schools	Plaid Phonics Char-L Phonics	x
Hamilton City Schools	Logical Phonics	x
Jackson City Schools	Logical Phonics	
Mad River Green Local Schools	Logical Phonics	x
Madison Local Schools	Logical Phonics	
Marlington Local Schools	Logical Phonics	
North Central Local Schools	Logical Phonics	
St. Henry Local Schools	Modern Curriculum Press	x
St. Mary's Local Schools	Plaid Phonics Char-L Phonics	x
Tecumseh Local Schools	Logical Phonics	x
Valley Local Schools	Logical Phonics	
Warren City Schools	Fun With Phonics	
Wellston City Schools	Logical Phonics	x
West Branch Local Schools	Char-L Phonics	

Figure 1. Phonics Demonstration Project: Observation Report

School:	
Teacher name:	
Grade level/s of observed classroom:	
# Students in observed classroom:	
Curriculum materials used to teach phonics:	
Date/Times of review:	
Reviewer:	
Systematic	
1. I observed phoneme instruction in the following areas:	
2. <input type="checkbox"/> initial consonant	1. <input type="checkbox"/> r-controlled vowels
<input type="checkbox"/> medial consonants	<input type="checkbox"/> 2-letter consonant blends
<input type="checkbox"/> final consonant	<input type="checkbox"/> 3-letter consonant blends
<input type="checkbox"/> short vowels	<input type="checkbox"/> diphthongs
<input type="checkbox"/> long vowels	<input type="checkbox"/> digraphs
3. I observed phonics instruction in the following word families:	
4. Phonics instruction was _____ minutes in length.	
5. I observed the following content areas integrated with phonics? (Check those that apply)	
<input type="checkbox"/> science	
<input type="checkbox"/> social studies	
<input type="checkbox"/> math	
<input type="checkbox"/> music	
<input type="checkbox"/> art	
<input type="checkbox"/> spelling	
<input type="checkbox"/> reading	
<input type="checkbox"/> other _____	
6. Describe activities observed in which phonics was integrated with content areas.	
7. The phonics lesson had the following focus:	
8. How would you characterize this teacher's effectiveness in motivating students to use phonics? Please comment:	
<input type="checkbox"/> Very effective	
<input type="checkbox"/> Moderately effective	
<input type="checkbox"/> Minimally effective	
<input type="checkbox"/> Not effective	
9. Which of the four phonics systems was in use during the observation?	
<input type="checkbox"/> Linguistic	
<input type="checkbox"/> Integrated	
<input type="checkbox"/> Bottom Up	
<input type="checkbox"/> Top Down	

Figure 1. Phonics Demonstration Project: Observation Report (continued)

Auditory/Verbal/Visual	
10. When presented with a letter or letter-combination, I observed students <i>vocally producing</i> the corresponding sounds for	
<input type="checkbox"/> initial consonant	<input type="checkbox"/> r-controlled vowels
<input type="checkbox"/> medial consonants	<input type="checkbox"/> 2-letter consonant blends
<input type="checkbox"/> final consonant	<input type="checkbox"/> 3-letter consonant blends
<input type="checkbox"/> short vowels	<input type="checkbox"/> diphthongs
<input type="checkbox"/> long vowels	<input type="checkbox"/> digraphs
11. I observed students spelling the following phonemes correctly	
<input type="checkbox"/> initial consonant	<input type="checkbox"/> r-controlled vowels
<input type="checkbox"/> medial consonants	<input type="checkbox"/> 2-letter consonant blends
<input type="checkbox"/> final consonant	<input type="checkbox"/> 3-letter consonant blends
<input type="checkbox"/> short vowels	<input type="checkbox"/> diphthongs
<input type="checkbox"/> long vowels	<input type="checkbox"/> digraphs
Intense/Succinct	
12. How would you characterize students' familiarity with phonics instructional procedures?	
<input type="checkbox"/> Very familiar	
<input type="checkbox"/> Somewhat familiar	
<input type="checkbox"/> Slightly familiar	
<input type="checkbox"/> Not familiar	
13. When encountering an unknown word, I observed students using the following the cueing systems.	
First: _____	
Second: _____	
Third: _____	
Select entries from the list: graphophonic, configuration, semantic, syntactic, context, experiential background	
14. In which content areas did I observe students independently using phonics?	
<input type="checkbox"/> science	
<input type="checkbox"/> social studies	
<input type="checkbox"/> math	
<input type="checkbox"/> music	
<input type="checkbox"/> art	
<input type="checkbox"/> spelling	
<input type="checkbox"/> reading	
<input type="checkbox"/> other _____	
Strategic	
15. Which of the following behaviors did you observe being encouraged? Check all that apply:	
<input type="checkbox"/> Routinely use phonics when encountering unknown words.	
<input type="checkbox"/> Initiate multiple reading strategies.	
<input type="checkbox"/> Initiate phonics study skills outside the classroom.	
<input type="checkbox"/> Memorize phonics rules and examples.	
<input type="checkbox"/> Decide when, where, and how to apply phonics strategies.	
<input type="checkbox"/> Repeat given examples and generate new examples	
<input type="checkbox"/> Integrate useful phonics elements when identifying and analyzing unknown vocabulary.	

Figure 2. Phonics Demonstration Project: Self-Report

School:	
Teacher name:	
Teacher's years of experience teaching phonics:	
Teacher's education in phonics instruction: (Check all that apply.)	
<input type="checkbox"/> undergraduate course/s <input type="checkbox"/> graduate course/s <input type="checkbox"/> inservice training <input type="checkbox"/> teacher's manual for current program <input type="checkbox"/> other: (explain)	
Teacher's educational level:	
Grade level/s in classroom:	
#Students in classroom:	
Name of phonics program:	
Systematic	
1. Number phonemes that have been taught so far this year, indicating the order in which these have been covered. [0=not taught; 1=taught first; 2=taught second...]	
<input type="checkbox"/> initial consonant <input type="checkbox"/> medial consonants <input type="checkbox"/> final consonant <input type="checkbox"/> short vowels <input type="checkbox"/> long vowels	<input type="checkbox"/> r-controlled vowels <input type="checkbox"/> 2-letter consonant blends <input type="checkbox"/> 3-letter consonant blends <input type="checkbox"/> diphthongs <input type="checkbox"/> digraphs
2. What word families, if any, have been taught this year?	
3. How often do you provide phonics instruction to each class?	
4. What is the length of a typical phonics instruction session?	
5. What other content areas are integrated with phonics?	3. (Check those that apply)
<input type="checkbox"/> science <input type="checkbox"/> social studies <input type="checkbox"/> math <input type="checkbox"/> music	<input type="checkbox"/> art <input type="checkbox"/> spelling <input type="checkbox"/> reading <input type="checkbox"/> other _____
6. Describe an activity integrating phonics for each of the above checked areas:	
7. Has basic program been followed in sequence?	
<input type="checkbox"/> yes <input type="checkbox"/> no (If <u>no</u> is checked, please explain.)	
8. How satisfied are you with the effectiveness of this phonics program?	
<input type="checkbox"/> Very satisfied <input type="checkbox"/> Moderately satisfied	<input type="checkbox"/> Less than satisfied <input type="checkbox"/> Not satisfied (If <u>not satisfied</u> is checked, please comment.)
9. Which of the following phrases best describes the phonics program you are following this year?	
<input type="checkbox"/> Linguistic <input type="checkbox"/> Integrated	<input type="checkbox"/> Bottom Up <input type="checkbox"/> Top Down)

Figure 2. Phonics Demonstration Project: Self-Report (continued)

Auditory/Verbal/Visual	
10. When presented with a letter or letter-combination, what percentage of your students can <i>vocally produce</i> the corresponding sounds? Please estimate.	
<input type="checkbox"/> % initial consonant	<input type="checkbox"/> % r-controlled vowels
<input type="checkbox"/> % medial consonants	<input type="checkbox"/> % 2-letter consonant blends
<input type="checkbox"/> % final consonant	<input type="checkbox"/> % 3-letter consonant blends
<input type="checkbox"/> % short vowels	<input type="checkbox"/> % diphthongs
<input type="checkbox"/> % long vowels	<input type="checkbox"/> % digraphs
11. When students hear or think of a sound, what percentage of your students can <i>spell</i> the sound correctly? Please estimate.	
<input type="checkbox"/> % initial consonant	<input type="checkbox"/> % r-controlled vowels
<input type="checkbox"/> % medial consonants	<input type="checkbox"/> % 2-letter consonant blends
<input type="checkbox"/> % final consonant	<input type="checkbox"/> % 3-letter consonant blends
<input type="checkbox"/> % short vowels	<input type="checkbox"/> % diphthongs
<input type="checkbox"/> % long vowels	<input type="checkbox"/> % digraphs
Intense/Succinct	
12. How much phonics instruction have your students had, prior to your class?	
<input type="checkbox"/> 1 year	<input type="checkbox"/> 3 years
<input type="checkbox"/> 2 years	<input type="checkbox"/> unsure
13. When encountering an unknown word, my students are most likely to use cueing systems in the following order:	
First: _____	
Second: _____	
Third: _____	
Select entries from the list: graphophonic, configuration, semantic, syntactic, context, experiential background	
14. In which content areas do you observe students independently using phonics?	
<input type="checkbox"/> science	
<input type="checkbox"/> social studies	
<input type="checkbox"/> math	
<input type="checkbox"/> music	
<input type="checkbox"/> art	
<input type="checkbox"/> spelling	
<input type="checkbox"/> reading	<input type="checkbox"/> other _____
Strategic	
15. Which of the following behaviors do I encourage in my students?	
Check all that apply:	
<input type="checkbox"/> Routinely use phonics when encountering unknown words.	
<input type="checkbox"/> Initiate multiple reading strategies.	
<input type="checkbox"/> Initiate phonics study skills outside the classroom.	
<input type="checkbox"/> Memorize phonics rules and examples.	
<input type="checkbox"/> Decide when, where, and how to apply phonics strategies.	
<input type="checkbox"/> Repeat given examples and generate new examples	
<input type="checkbox"/> Integrate useful phonics elements when identifying and analyzing unknown vocabulary.	

Figure 3. Phonics Demonstration Project: Interview Report

School:										
Teacher name:										
Date/Times of review:										
Reviewer:										
1. Describe your experience in teaching phonics.										
2. Describe your education in phonics instruction.										
Systematic										
3. Which area of phonics is most difficult to teach? <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; padding: 2px;"><input type="checkbox"/> initial consonant</td> <td style="width: 50%; padding: 2px;"><input type="checkbox"/> r-controlled vowels</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/> medial consonants</td> <td style="padding: 2px;"><input type="checkbox"/> 2-letter consonant blends</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/> final consonant</td> <td style="padding: 2px;"><input type="checkbox"/> 3-letter consonant blends</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/> short vowels</td> <td style="padding: 2px;"><input type="checkbox"/> diphthongs</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/> long vowels</td> <td style="padding: 2px;"><input type="checkbox"/> digraphs</td> </tr> </table>	<input type="checkbox"/> initial consonant	<input type="checkbox"/> r-controlled vowels	<input type="checkbox"/> medial consonants	<input type="checkbox"/> 2-letter consonant blends	<input type="checkbox"/> final consonant	<input type="checkbox"/> 3-letter consonant blends	<input type="checkbox"/> short vowels	<input type="checkbox"/> diphthongs	<input type="checkbox"/> long vowels	<input type="checkbox"/> digraphs
<input type="checkbox"/> initial consonant	<input type="checkbox"/> r-controlled vowels									
<input type="checkbox"/> medial consonants	<input type="checkbox"/> 2-letter consonant blends									
<input type="checkbox"/> final consonant	<input type="checkbox"/> 3-letter consonant blends									
<input type="checkbox"/> short vowels	<input type="checkbox"/> diphthongs									
<input type="checkbox"/> long vowels	<input type="checkbox"/> digraphs									
4. Describe a typical phonics instruction session.										
5. Describe how you integrate phonics with content areas, if applicable.(Check those that apply) <table style="width: 100%; border: none;"> <tr><td style="padding: 2px;"><input type="checkbox"/> science</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> social studies</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> math</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> music</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> art</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> spelling</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> reading</td></tr> <tr><td style="padding: 2px;"><input type="checkbox"/> other _____</td></tr> </table>	<input type="checkbox"/> science	<input type="checkbox"/> social studies	<input type="checkbox"/> math	<input type="checkbox"/> music	<input type="checkbox"/> art	<input type="checkbox"/> spelling	<input type="checkbox"/> reading	<input type="checkbox"/> other _____		
<input type="checkbox"/> science										
<input type="checkbox"/> social studies										
<input type="checkbox"/> math										
<input type="checkbox"/> music										
<input type="checkbox"/> art										
<input type="checkbox"/> spelling										
<input type="checkbox"/> reading										
<input type="checkbox"/> other _____										
6. What difficulties, if any, have you encountered in using this phonics program?										
Auditory/Verbal/Visual-- Intense/Succinct										
7. Which cueing systems are your best readers most likely to use? First: _____ Second: _____ Third: _____ Select entries from the list: graphophonic, configuration, semantic, syntactic, context, experiential background										
Strategic										
8. How useful do you feel this phonics system is, in helping students to become good readers?										
9. Other relevant comments:										

Figure 4. Letter to Districts Participating in the Observation

Please address correspondence to the checked address below:

Wright State University
 Attn: Dr. M. R. Gifford
 374 Millett Hall
 Dayton, OH 45435-0001

Wright State University, Lake Campus
 Attn: Dr. J. A. Cochran
 7600 State Rte. 703
 241 Dwyer Hall
 Celina, OH 45822

«School»

«Street»

«CityState»

Dear «Contact»:

Thank you for your participation in the Ohio Department of Education Phonics Demonstration Project. A reviewer will be observing at your school during the weeks of March 6 - April 4, 1997. On the date of observation, one classroom in each grade (K-3) will be observed for 45 minutes, followed by a 15 minute interview with the teacher. Please circle three possible observation dates from the checked list below and complete the proposed time schedule for observations and interviews.

- March 6, 7, 13, 14, 20, 21, 27, 28, April 3, 4
- March 5, 7, 12, 14, 19, 21, 26, 28 April 4

Teacher	Observation Time	Interview Time
Grade 1		
Grade 2		
Grade 3		
Grade K		

Kindly return this letter, including the following items to the above checked address, as soon as possible:

- a copy of your Phonics Demonstration Project Contract
- K-3 teacher and student phonics instructional materials

Upon receipt of the above items, you will be contacted to finalize observation dates and times. Thank you for your prompt response.

Yours truly,

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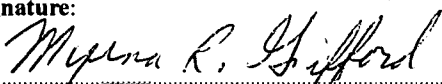
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Signature: 	Printed Name/Position/Title: Myrna Ross Gifford, Ph. D., Wright State University, College of Education and Human Services, Department of Teacher Education	
Organization/Address: Wright State University, CEHS 374 Millett Hall 3640 Col. Glenn Hwy. Dayton, OH 45435-0001	Telephone: (937) 775-3266 (Wright State Univ.) (937) 426-3305 (Home)	Fax: (937) 775-3301 or (937) 775-4855
	E-mail Address: mgifford@discover.wright.edu	Date: 8/18/98

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