

DOCUMENT RESUME

ED 471 627

CS 511 563

AUTHOR Gifford, Myrna R.; Cochran, Judith A.; Graham, Glenn; Hudson, Lynne; Wiersma, William

TITLE Ohio's Phonics Demonstration Project: A Longitudinal Study. Reading Instruction in Ohio's Phonics Demonstration Project Classrooms and Teacher Preparation Programs.

INSTITUTION Ohio State Dept. of Education, Columbus. Div. of Teacher, Education, Certification, and Professional Development.

PUB DATE 2001-11-00

NOTE 187p.

PUB TYPE Reports - Research (143)

EDRS PRICE EDRS Price MF01/PC08 Plus Postage.

DESCRIPTORS Case Studies; *Demonstration Programs; Educational Practices; Longitudinal Studies; *Phonics; Primary Education; Program Effectiveness; Public Schools; Qualitative Research; Reading Instruction; *Reading Programs; *State Programs; Statistical Analysis; *Teacher Education

IDENTIFIERS *Ohio

ABSTRACT

During the 2000-2001 school year, an 18-month evaluation of Ohio's Phonics Demonstration Program (PDP) was conducted by the same evaluation team that had conducted a similar evaluation in 1997. In addition to evaluating phonics instruction in PDP schools, the evaluation also addressed the preparation of teachers for reading/phonics instruction in Ohio's colleges and universities. The evaluation included quantitative and qualitative data, and the dual foci were on programs and practices in teacher education, and public school programs and practices concerning effective reading/phonics instruction. The Reading Teacher Preparation Inventory (RTPI) was used to assess the degree to which teacher education programs prepare their students to teach reading effectively. The public school programs were addressed through case studies of 12 PDP schools, 6 from each of the cohorts funded in 1997 and 1999. Observation of reading instruction, grades K-2, was conducted in all 12 schools, and student achievement results were collected through 6 different instruments/interviews. In general, information about teacher preparation revealed a wide variation in program effectiveness. Also, data showed that phonics instruction plays a significant role in enhancing reading instruction in the PDP schools. It is generally accepted that phonics is a necessary but not sufficient part of an effective reading and language arts program. It was found that those students who have been in the PDP program the longest had the highest gains in reading proficiency test pass rates. Eighteen appendixes include items such as: Reading Teacher Preparation Inventory; Telephone Interview Script for FY1997 Case Study Schools; Reading Teacher Inventory; Teacher, Principal, and Literacy Coordinator Interview Scripts; Student Interview Questions; and Classroom Environment Checklist for All Schools in the Study. (Contains 55 tables, 7 figures, and 66 references.) (NKA)

OHIO'S PHONICS DEMONSTRATION PROJECT: A LONGITUDINAL STUDY

Reading Instruction in Ohio's Phonics Demonstration Project Classrooms and Teacher Preparation Programs

November, 2001

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

M. R. Gifford

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Dr. Myrna R. Gifford, Principal Investigator, Wright State University

Dr. Judith A. Cochran, University of Missouri, St. Louis

Dr. Glenn Graham, Wright State University

Dr. Lynne Hudson, University of Toledo

Dr. William Wiersma, University of Toledo

Table of Contents

EXECUTIVE SUMMARY	8
1997 EVALUATION OF THE PHONICS DEMONSTRATION PROJECT	11
2001 EVALUATION OF THE PHONICS DEMONSTRATION PROJECT	13
Sources for Teacher Preparation and Public School Data	14
Benefits of the Study	14
METHOD	15
Part I: Focus on Teacher Education.....	16
Selecting Participants	16
Identifying Standards for Effective Reading and Phonics Instruction	16
Developing Instruments.....	16
Reading Teacher Assessment Database (RTAD).....	16
The Reading Teacher Preparation Inventory (RTPI)	17
RTPI Tests	18
Collecting Institutional Data.....	18
Institutional Self-Reporting	18
Administering Teacher Candidate Tests	19
Examining Institutional Report Cards	19
Assessing Reading Teacher Preparation Programs	19
Part II: Focus on Public School Practices.....	20
Selecting Participants	20
Establishing Criteria for Identifying Effective Schools	20
Establishing Indicators of Student Achievement in Reading and Language Arts.....	21
Developing Instruments.....	21
Reading Teacher Inventory (RTI)	21
Classroom Environment Checklist.....	21
Teacher and Principal Interview Scripts.....	22
Collecting Public School Data.....	23
Classroom Observation	23
Teacher- and Principal-Completed Checklist.....	23
Teacher and Principal Interviews	23
Student Interviews	24
Student Test Scores	24
RESULTS	25
Part I: Focus on Teacher Education.....	25
RTPI Rubric Scores.....	25
Old Programs Vs. New Programs	25
Highest Scoring New Programs	31
RTPI Test Scores.....	37
Item Analysis for RTPI Tests	39
Higher Education Report Cards.....	42
Part 2: Focus on Public School Practices	45
Demographic and Contextual Factors	45
Pass Rates on 4 th Grade Reading Proficiency Tests	50
Performance on 4 th Grade Reading Proficiency Subtests.....	52
Student Interview Questions and Codified Responses	55

RTI Rubric Scores	59
RTI Total Scores.....	60
RTI Competency Scores.....	61
Comparing RTPI and RTI Competencies.....	67
Classroom Environment Priorities	70
PDP School Snapshots	72
School A Snapshot	72
School C Snapshot.....	76
School D Snapshot	80
School F Snapshot.....	84
School G Snapshot	88
School H Snapshot	92
School I Snapshot.....	95
School J Snapshot.....	99
School K Snapshot	103
School L Snapshot.....	107
School M Snapshot.....	111
School N Snapshot	115
Effective Schools and The Characteristics That Distinguish Them	118
Snapshot of a Successful School	125
CONCLUSIONS AND RECOMMENDATIONS	127
Research Question #1:.....	128
Identifying Standards of Effective Reading Instruction for Diverse Learners ¹	128
Assessing the Preparation of Reading Teachers for Diverse Learners.....	128
Recommendations in Preparing Effective Teachers of Reading	130
Research Question #2:.....	131
Identifying Standards Of Effective Phonics Instruction.....	131
Assessing the Preparation of Teachers in Delivering Phonics Instruction.....	131
Recommendations in Preparing Effective Teachers of Phonics.....	132
Research Question #3:.....	132
Identifying Schools with Effective Reading Instruction for Diverse Learners	132
Identifying General Reading Practices in Effective Schools	133
Recommendations in Building Effective Reading Programs for Diverse Learners	134
Research Question #4:.....	135
Identifying Phonics Practices in Effective Schools.....	135
Recommendations in Building Effective Phonics Programs for Diverse Learners	137
Research Question #5:.....	137
Examining Relationships Between Phonics Instruction and Reading/Language Arts Achievement..	137
Recommendations Regarding the Place of Phonics in Reading and Language Arts Programs	138
References	139
Appendix A--Letters to Institutions Requesting Materials	142
Appendix B--Participating and Non-Participating Institutions	145
Appendix C--Reading Teacher Preparation Inventory (RTPI)	146
Appendix D--Letter to Institutions Requesting Administration of RTPI Tests	156
Appendix E--Directions for Administering RTPI Tests.....	158
Appendix F--PDP Case Study Schools: Demographic Matching	162
Appendix G--Telephone Interview Script for FY1997 Case Study Schools	163

Appendix H--Letters to Case Study Contacts	164
Appendix I--Instructions to PDP Schools for Recording Student Achievement Data.....	167
Appendix J--Reading Teacher Inventory (RTI)	170
Appendix K--Classroom Environment Checklist.....	178
Appendix L—Teacher, Principal, and Literacy Coordinator Interview Scripts.....	179
Appendix M--Student Interview Questions.....	181
Appendix N--Parent Permission Letter for Student Interviews	182
Appendix O--Classroom Environment Checklist for All Schools in the Study	183
Appendix P--FY97 Cohort Classroom Environment Elements	184
Appendix Q--FY99 Cohort Classroom Environment Elements.....	185
Appendix R-- Distribution of Elements Reported as Present or Strength in High-achieving PDP Schools	186

List of Tables

Table 1. RTPI Total Scores for Individual Teacher Education Institutions	26
Table 2: Mean/SD for RTPI Competencies and Total Strand Scores for All Institutions	29
Table 3. Required Hours In Reading/Language Arts Instruction in Old and New Programs	30
Table 4. RTPI Competency Scores for Highest Scoring New Programs by Institution.....	32
Table 5. Pareto* Distribution of RTPI Competency Means in Highest Scoring New Programs.....	36
Table 6. Overall Frequencies, Means, and Standard Deviations for RTPI Subtests	38
Table 7. Frequencies and Means for RTPI Subtests by University and Program	38
Table 8a. Pareto Distribution of Correct Answers in RTPI General Reading Test Categories.....	40
Table 8b. Pareto Distribution of Correct Answers in RTPI Phonics Test Categories.....	40
Table 9a. Percentage of Correct Answers in RTPI General Reading Test Categories by Institution	41
Table 9b. Percentage of Correct Answers in RTPI Phonics Test Categories by Institution	41
Table 10. Student Teaching Hours and Student Teacher/Faculty Supervisor Ratio by Institutions	43
Table 11. Number of Full-Time and Part-time Faculty Supervising Student Teachers by Institution.....	44
Table 12. School Demographics and 4th Grade Reading Proficiency Pass Rates--FY97 Cohort	46
Table 13. School Demographics and 4th Grade Reading Proficiency Pass Rates--FY99 Cohort	48
Table 14. Mean Pass Rates for 4 th Grade Reading Proficiency by Cohort.....	50
Table 15. Pareto Distribution of Mean Pass Rates for 4 th Grade Reading Proficiency by School.....	51

Table 16. Pareto Distribution of 4 th Grade Reading Proficiency Pass Rate Gains by School.....	51
Table 17. FY2000 4 th Grade Reading Proficiency Pass Rates--Stable Sample Vs. School and Cohort ...	52
Table 18a. Year 2000 Fourth Grade Reading Proficiency Subtests for FY97 Schools ¹	53
Table 18b. Year 2000 Fourth Grade Reading Proficiency Subtests for FY99 Schools*	54
Table 19. T-Tests for FY2000 4th Grade Proficiency Subtests-FY97 Vs. FY99 Cohorts.....	54
Table 20. Student Interview Questions and Codified Responses.....	56
Table 21. Means and Standard Deviations for RTI Rubric Total Scores by Cohort, School and Grade ..	60
Table 22. Means and Standard Deviation for RTI Competency Scores Over Cohorts and All Schools.....	62
Table 23a. Pareto Distribution of Competency Means for FY97 Cohort Schools.....	66
Table 23b. Pareto Distribution of Competency Means for FY99 Cohort Schools.....	66
Table 24. Point Spread Between FY97 Cohort and FY99 Cohort on RTI Competencies	67
Table 25a. RTI Competency Score Means and Standard Deviation for FY97 Cohort Schools	68
Table 25b. RTI Competency Score Means and Standard Deviation for FY99 Cohort Schools	69
Table 26. Frequencies for Classroom Environment Checklist Elements by Cohort.....	71
Table 27a. RTI Competency Scores for School A	74
Table 27b. Competency Means Pareto Distribution for School A.....	74
Table 28. Classroom Environment Checklist: Observed and Reported Frequencies for School A.....	75
Table 29a. RTI Competency Scores for School C	78
Table 29b. Competency Means Pareto Distribution for School C	78
Table 30. Classroom Environment Checklist: Observed and Reported Frequencies for School C	79
Table 31a. RTI Competency Scores for School D	82
Table 31b. Competency Means Pareto Distribution for School D.....	82
Table 32. Classroom Environment Checklist: Observed and Reported Frequencies for School D	83
Table 33a. RTI Competency Scores for School F	86

Table 33b. Competency Means Pareto Distribution for School F.....	86
Table 34. Classroom Environment Checklist: Observed and Reported Frequencies for School F.....	87
Table 35a. RTI Competency Scores for School G	90
Table 35b. Competency Means Pareto Distribution for School G	90
Table 36. Classroom Environment Checklist: Observed and Reported Frequencies for School G	91
Table 37a. RTI Competency Scores for School H	93
Table 37b. Competency Means Pareto Distribution for School H.....	93
Table 38. Classroom Environment Checklist: Observed and Reported Frequencies for School H.....	94
Table 39a. RTI Competency Scores for School I.....	97
Table 39b. Competency Means Pareto Distribution for School I	97
Table 40. Classroom Environment Checklist: Observed and Reported Frequencies for School I.....	98
Table 41a. RTI Competency Scores for School J.....	101
Table 41b. Competency Means Pareto Distribution for School J	101
Table 42. Classroom Environment Checklist: Observed and Reported Frequencies for School J	102
Table 43a. RTI Competency Scores for School K	105
Table 43b. Competency Means Pareto Distribution for School K.....	105
Table 44. Classroom Environment Checklist: Observed and Reported Frequencies for School K.....	106
Table 45a. RTI Competency Scores for School L.....	109
Table 45b. Competency Means Pareto Distribution for School L	109
Table 46. Classroom Environment Checklist: Observed and Reported Frequencies for School L	110
Table 47a. RTI Competency Scores for School M.....	113
Table 47b. Competency Means Pareto Distribution for School M	113
Table 48. Classroom Environment Checklist: Observed and Reported Frequencies for School M	114
Table 49a. RTI Competency Scores for School N	116

Table 49b. Competency Means Pareto Distribution for School N.....	116
Table 50. Classroom Environment Checklist: Observed and Reported Frequencies for School N.....	117
Table 51. 4 th Grade Reading Proficiency Criteria for High-achieving PDP Schools.....	120
Table 52. Demographics in High-achieving PDP Schools.....	120
Table 53. Reading and Phonics Practices in High-achieving PDP Schools.....	121
Table 54. Mean RTI Competency Scores for High-achieving PDP Schools.....	122
Table 55. Pareto Distribution of Classroom Strengths Reported by High-achieving PDP Schools	124

List of Figures

Figure 1. RTPI Total Scores--Old Programs Vs. New Programs.....	27
Figure 2. RTPI Competency Scores: All Institutions' Highest Scoring Licensure Programs	34
Figure 3. RTI Total Score Distribution by School and Grade.....	61
Figure 5. 4 th Grade Reading Proficiency 1997-2001 Mean Pass Rate for All Schools.....	118
Figure 6. 4 th Grade Proficiency Spring, 2001 Pass Rates for All Schools	119
Figure 7. 4 th Grade Reading Proficiency Pass Rate Change 1997-2001 for All Schools.....	119

EXECUTIVE SUMMARY

OHIO'S PHONICS DEMONSTRATION PROJECT: A LONGITUDINAL STUDY

Reading Instruction in Ohio's Phonics Demonstration Project Classrooms and Teacher Preparation Programs

Beginning in 1996, the Ohio Department of Education (ODE) in conjunction with the state legislature funded a series of Phonics Demonstration Project (PDP) grants to public school districts in an attempt to improve the quality of reading instruction. In 1997, an evaluation was conducted of selected schools participating in the PDP grants. This formative evaluation focused on the implementation of phonics instruction in the selected schools.

During 2000-2001, an 18-month evaluation of the PDP program was conducted by the same evaluation team that conducted the 1997 evaluation. In addition to the evaluation of the phonics instruction in PDP schools, the evaluation also addressed the preparation of teachers for reading/phonics instruction, this preparation as conducted in the departments, schools, and colleges of education in Ohio's colleges and universities. The evaluation was comprehensive and involved the collection of a variety of data, both quantitative and qualitative. The evaluation had dual foci (1) programs and practices in teacher education, and (2) public school programs and practices concerning effective reading/phonics instruction.

To address the teacher education focus, three sources of information were used, as provided by colleges and universities. These sources were:

1. institutional self reporting of teacher education program components, activities and requirements;
2. tests administered to teacher education candidates, and
3. Institutional Reports on the Quality of Teacher Education (Higher Ed Report Cards)

The Reading Teacher Preparation Inventory (RTPI) was used to assess the degree to which teacher education programs prepare their students to teach reading effectively. It is a comprehensive inventory addressing 19 competencies in three strands: a general reading strand, a phonics strand, and an academic/experiential strand. The RTPI General Reading and Phonics tests were administered to students in four colleges and universities who had completed their preparation for reading instruction.

The public school programs were addressed through case studies of twelve PDP schools, six from each of the cohorts funded in FY97 and FY99. These were case study schools. The six FY97 schools had also participated in the 1997 evaluation.

Observation of reading instruction, grades K-2, was conducted in all twelve schools, and student achievement results were collected. Data were collected through the following instruments/interviews:

1. Reading Teacher Inventory (RTI), an instrument that assesses the degree to which classroom teachers demonstrate proficiency in reading instruction
2. Classroom Environment Checklist
3. teacher interviews
4. principal interviews
5. student interviews
6. 4th grade Ohio Reading Proficiency Tests

An evaluation of this magnitude generated a host of results, both general and specific. In summarizing results and conclusions, the five evaluation questions as identified by the Ohio Legislature and the ODE are described below:

1. Do Ohio colleges of education prepare primary and elementary school teachers to teach reading effectively for children with different learning styles and different early childhood experiences?

After repeated requests, information was received from 30 of 48 Ohio colleges and universities that prepare K-8 teachers, and this information showed a wide variation in the preparation of reading teachers. It was concluded that the effectiveness of preparation for teaching reading varies substantially both within and among institutions. For example, within a single institution, one licensure area (e.g., early childhood) may be exemplary while another licensure area (e.g., middle childhood) may be less than adequate. In several of Ohio's institutions, preparation to teach reading ranges from minimally adequate to grossly inadequate. However, for all institutions in the study, preparation for the teaching of reading has substantially improved in the new licensure programs when compared with the old certification programs.

2. In preparing teachers to teach reading, do Ohio colleges of education include how to teach phonics effectively?

Again, based on the 30 responding institutions, the information was highly varied. New licensure programs clearly address phonics more effectively than did certification programs. However, it should be noted that even in licensure programs, it is the rare institution that requires a field experience in its phonics course. Without such field experience, teacher candidates miss out on opportunities to apply what they have learned about phonics to real-world reading instruction. The RTPI Phonics Test results showed higher performance from students in licensure programs than in certification programs. However, mean numbers of correct answers were only 69% for licensure candidates and 55% for certification candidates. Although the sample of RTPI test takers was relatively small, these tests results, when coupled with the materials submitted for review, suggest that phonics instruction in many teacher education programs is still inadequate.

3. What reading instruction practices are used by schools that are effective in teaching children with a variety of learning styles and early childhood experiences?

Numerous instructional practices for reading instruction were found in the PDP case study schools. These included scheduling reading and language arts in large time blocks of at least 120 minutes, formal and informal assessment, reading aloud to students daily and involving parents in developing within the child, a positive attitude toward reading. The PDP schools are implementing many of these instructional practices in fostering a positive learning climate.

4. What part does phonics play in teaching children to read in schools that are effective in teaching reading to children with a variety of learning styles?

Phonics instruction plays a significant role in enhancing reading instruction in the PDP schools. Teachers in these schools, primarily through the PDP grants and related professional development, have become increasingly skilled in the application of effective practices in the teaching of phonics. This improvement is most clearly evidenced in the FY97 schools. A marked shift was observed between 1997 and 2000 from teaching phonics skills in isolation to integrating phonics instruction across the curriculum.

5. What is the impact of intensive systematic phonics instruction on student achievement in reading and language arts?

There are many factors which impact student achievement and some of these are not under the control of the school. It is generally accepted that phonics is a necessary but not sufficient part of an effective reading and language arts program. In general, it was found that those students who have been in the PDP program the longest had the highest gains in reading proficiency test pass rates.

The evaluation report contains many specific results and numerous recommendations for enhancing reading instruction. In general, the recommendations focus on improving teacher education programs relative to preparing reading teachers and developing improved monitoring of such programs. Professional development of teachers, especially in phonics instruction and its relationship to current research-based literacy initiatives, should be maintained and extended if possible. Continued support for phonics instruction is recommended in order to improve reading instruction and the reading performance of students.

OHIO'S PHONICS DEMONSTRATION PROJECT: A LONGITUDINAL STUDY

Reading Instruction In Ohio's Phonics Demonstration Project Classrooms and Teacher Preparation Programs

National concern over poor reading and writing skills has prompted a host of initiatives that attempt to improve the quality of literacy education in our schools. One such initiative is Ohio's Phonics Demonstration Project (PDP). In 1996 the Ohio Department of Education in conjunction with the state legislature established a series of short-term grants to public school districts that wished to improve the quality of reading instruction. These grants provided funding to districts whose kindergarten through third grade teachers agreed to provide students with systematic, intensive instruction in phonics as a means to improving reading. Included in the grant were funds for materials, teacher training, and on-site mentoring. School districts receiving the PDP grants were allowed discretion in selecting a phonics program that addressed the needs of their students and the educational philosophy of their teachers. A cohort of 21 Ohio school districts received grants in Fiscal Year 1997.

1997 EVALUATION OF THE PHONICS DEMONSTRATION PROJECT

In 1997, an evaluation team, composed of faculty from the University of Toledo and Wright State University, was convened and conducted an initial year evaluation addressing the following four research questions:

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

The PDP Evaluation Team gathered data for the formative evaluation through direct classroom observation in ten demographically diverse school districts that had received PDP grants. For each targeted school district, PDP evaluators observed 45 minutes of instruction in phonics and reading in one kindergarten, first, second, and third grade classroom. Observation data were supplemented with teacher self-reports and teacher interviews. The full report for the 1997 Phonics Demonstration Project Evaluation is available through ERIC Document Clearinghouse (Gifford, M., Cochran, J., Graham, G., & Wiersma, W., 1997).

Findings from a sample of ten schools in the FY97 Cohort 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 encouraged and supported the integration of phonics with other reading and writing strategies were most successful in promoting reading proficiency and independence.

Levels of in-service support differed among phonics programs and school districts; it was concluded that additional support was needed for new entrants to the program. It was further concluded that more support was 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 supported 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 were submitted to the state legislature and the Ohio Department of Education:

- 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 in-service 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 Phonics Demonstration Project Evaluation Report (1997) suggested extension of the evaluation and data collection process to include the following:

- 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 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.

In the initial year report, it was concluded that a credible evaluation of the role of phonics instruction in building student literacy would require considerable planning and resources. Such a study, however, could help educators to more closely ascertain the necessary mix of ingredients for developing literacy independence and growth vital to success in school.

2001 EVALUATION OF THE PHONICS DEMONSTRATION PROJECT

In Fiscal Year 1999 and Fiscal Year 2000, two additional cohort groups of Ohio school districts received Phonics Demonstration Grant funding. The 29 Ohio school districts in the FY1999 and FY2000 cohorts represented a range of demographic school populations-- urban to rural, low to high socio-economic status (SES), and low to high percentages of African American and other minority students. In Spring, 2000, the Phonics Demonstration Project Evaluation Team was reconvened to conduct further research on the issue of improving the quality of literacy instruction in Ohio's public schools. The Ohio Legislature and the Ohio Department of Education (ODE) directed that the PDP Evaluation Team address the following five questions:

1. Do Ohio colleges of education prepare primary and elementary school teachers to teach reading effectively for children with different learning styles and different early childhood experiences?
2. In preparing teachers to teach reading, do Ohio colleges of education include how to teach phonics effectively?
3. What reading instruction practices are used by schools that are effective in teaching children with a variety of learning styles and early childhood experiences?
4. What part does phonics play in teaching children to read in schools that are effective in teaching reading to children with a variety of learning styles?
5. What is the impact of intensive systematic phonics instruction on student achievement in reading and language arts?

The scope of the PDP's summative evaluation is considerably wider than the scope of the 1997 formative evaluation. In the formative evaluation, the focus was primarily on public elementary schools and delivery of phonics instruction. In the summative evaluation, the focus is broadened to include teacher preparation programs as well as public elementary schools and general reading as well as phonics instruction. Additionally, since the formative evaluation was instituted at the end of the PDP's initial year, longitudinal data on program effectiveness and student achievement were not yet available. The summative evaluation has the advantage of a longitudinal study in order to determine the effects of certain teaching practices on student achievement.

The dual focus of the 2000-2001 PDP Evaluation suggested a 2-part design: Part I would target programs and practices in teacher education and would be used to address Questions 1 and 2 regarding how well Ohio's teacher education institutions are preparing teacher candidates to teach reading and phonics. Part II would target public school programs and practices and would be used to address Questions 3, 4, and 5 regarding the identification of effective practices in reading and phonics instruction in the public schools. Upon obtaining the data, congruencies between effective public school reading programs and effective reading teacher preparation programs might be established. On the basis of this information, the study was designed to yield recommendations to teacher education institutions for improving the quality of reading teacher preparation and recommendations to school districts for improving the quality of reading instruction.

To address Question 1 (Do Ohio colleges of education prepare primary and elementary school teachers to teach reading effectively for children with different learning styles and different early childhood experiences?), PDP evaluators needed to a) identify standards of effective reading instruction for children with different learning styles and different early childhood experiences and b) assess the degree to which Ohio's teacher preparation programs prepared primary and elementary teacher candidates to deliver effective reading instruction. Standards for effective reading instruction were identified prior to collection of data from

institutions. The data from the teacher education institutions were used to assess their reading teacher preparation programs.

To address Question 2, (In preparing teachers to teach reading, do Ohio colleges of education include how to teach phonics effectively?), PDP evaluators needed to a) identify standards of effective phonics instruction and b) assess the degree to which Ohio's teacher preparation programs prepared teacher candidates to deliver effective phonics instruction. Standards of effective phonics instruction were identified prior to collection of institutional data. Teacher preparation programs were assessed for adequate preparation in the teaching of phonics based on the data submitted by the institutions.

To address Question 3 (What reading instruction practices are used by schools that are effective in teaching children with a variety of learning styles and early childhood experiences?), PDP evaluators needed to a) establish criteria that identified schools as effective in delivering reading instruction to students with different learning styles and early childhood experiences, and b) identify general reading practices common to effective schools. Criteria for identifying effective schools were established prior to collection of public school data. General reading practices common to effective schools were identified from the collected data.

To address Question 4 (What part does phonics play in teaching children to read in schools that are effective in teaching reading to children with a variety of learning styles?), PDP evaluators identified phonics practices common to effective schools. Criteria for identifying effective schools were the same as those established in Question 3. Phonics practices common to effective schools were identified after collection of public school data.

To address Question 5 (What is the impact of intensive systematic phonics instruction on student achievement in reading and language arts?), PDP Evaluators a) identified indicators of student achievement, and b) examined the relationship between student achievement and exposure to systematic, direct phonics instruction. Indicators of student achievement were identified prior to collection of public school data. Relationships between student achievement and phonics instruction were examined.

Sources for Teacher Preparation and Public School Data

It was determined that teacher preparation data in reading would be drawn from three sources: a) institutional self-reporting, b) tests administered to teacher candidates, and c) published institutional "report cards." Data on effective public school practices were drawn from four sources: a) classroom observation, b) teacher and principal interviews, c) teacher- and principal-completed checklists, and d) student interviews. Schools were given the option of including the literacy coordinator in the interview and checklist completion process. Data on student achievement were drawn from Ohio's reading proficiency tests.

Benefits of the Study

Identifying research-based exemplary practices in teacher education institutions and public school reading programs, and ascertaining the degree to which these standards are met highlighted specific areas of strength and weakness in current programs. Based on these findings, recommendations were made for strengthening the preparation of reading teachers so that they might effectively reach students with different learning styles and various early childhood experiences. Similarly, recommendations for strengthening public school reading programs were anticipated as a natural outgrowth of this study.

A major purpose of the PDP Evaluation was determining the place of phonics in effective reading instruction. If analyses indicate strong relationships between practices in the teaching of phonics and overall growth in student achievement, then public knowledge of these practices

could inform teaching and improve the quality of reading instruction. The inclusion of informal measures of achievement should add significantly to the body of knowledge on student reading improvement. Such inclusion provides a counterbalance to a possible over-reliance on formal assessment as a measure of student achievement. It may be that exemplary practices in the teaching of reading have benefits that are not observable through formalized measures but which are apparent through informal measures. Such benefits as student motivation to read and write, fascination with books and learning, and developing a positive self-concept may have more lasting benefits on life-long achievement than do high performances on standardized tests.

METHOD

Although this evaluation focused on only five questions as directed by the ODE, the questions were extremely broad and in-depth, so that obtaining adequate and valid answers required a complex and extensive evaluation. Numerous approaches to data collection were used, generating both qualitative and quantitative data. Teaching reading, and specifically incorporating phonics into reading instruction, is an intricate process, one that cannot be assessed adequately by paper and pencil tests. Instruments are readily available for observing teaching in general, but for the purposes of this evaluation, it was necessary to develop an observation inventory in order to assess phonics instruction in the PDP schools. To obtain a broader picture of phonics instruction over time and grades taught, interviews were conducted with the educators in the PDP schools, as well as with selected students.

The scope of this evaluation included both the preparation of reading/phonics teachers and the implementation of reading/phonics instruction in PDP schools. In order to have consistent and valid measures for teacher preparation, it was necessary to develop assessment instruments by which information such as course syllabi could be assessed. Rubrics were developed to evaluate both teacher education programs and teaching practices. Tests were developed to assess reading and phonics knowledge of teacher candidates, based on the premise that such knowledge is a necessary but not sufficient prerequisite for becoming an effective reading teacher. A sample of teacher education students was tested on knowledge of reading and phonics instruction.

In the final analysis, all instruction in elementary schools is directed to desired outcomes, one of which is student achievement, in this case student performance on reading examinations. This evaluation addressed student achievement in reading for the PDP schools. As students advance through the elementary grades, they become less dependent on phonics for identifying words because they have developed other strategies. Yet student reading performance by fourth grade (at which time there is a common proficiency test) undoubtedly is impacted by instruction in the earlier grades, including phonics instruction. Therefore, the evaluation included scores on Ohio's 4th Grade Proficiency Test and reading instruction practices from earlier grades for students in the PDP schools.

With all of the measurement conducted for this evaluation--observation, interviewing, reviewing materials and testing--the results are intended to generate a complete "picture" from preparation for reading instruction (teacher education component) through the actual phonics instruction in schools funded through the PDP program. With any extensive evaluation, there is the issue of how to organize the results. For this evaluation a logical division was two major parts, one the teacher education component and the other the public school part as represented by the selected PDP schools.

Part I: Focus on Teacher Education

Selecting Participants

Fifty Ohio institutions have accredited teacher education programs. Forty-eight of these are accredited for elementary, early childhood, or middle childhood education. All of these institutions were solicited for inclusion in the study. Evaluators communicated with representatives from each institution's department/college of education requesting documentation of K-8 teacher education programs and college coursework. (See Appendix A.) Since this evaluation was conducted during the transition between certification programs that had been in place for several years and new licensure programs, documentation about both programs was requested.

Thirty institutions responded by submission of materials (see Appendix B) to be evaluated through a research-based rubric. (See Appendix C.) Initially, it was intended to administer the general reading and phonics tests in six of the Ohio teacher education institutions that provided program documentation. These six institutions were selected to represent the broad diversity in institutional types: public and private, small and large student populations, residential and commuter student populations, rural and urban settings, religious and secular orientations. Evaluators communicated with representatives from each of the six selected institutions requesting participation in administering general reading and phonics tests to teacher candidates who had completed the reading/language arts requirements for certification (old program) or licensure (new program). (See Appendix D and Appendix E.) Four of the six institutions were able to accommodate this request.

Identifying Standards for Effective Reading and Phonics Instruction

A thorough examination of the literature was conducted to determine a set of understandings and practices common to effective reading teachers. The literature was also examined to determine the place of phonics in effective reading programs. These findings became the basis for all of the instruments developed for the study. In addition to recognizing the characteristics of effective reading teachers, the literature was examined for studies indicating the means through which teacher candidates were prepared to become effective teachers of reading and phonics. The literature review focused on research conducted by professional organizations in reading and early childhood, government, institutional, and independent longitudinal studies, and standards developed by accreditation agencies.

Developing Instruments

The instruments developed were those for observation, interviews, assessment of teacher education programs, and testing knowledge of instruction in phonics and general reading. There were no instruments developed for testing student performance (proficiency) in reading. Copies of all data collection instruments, except secure tests, are located in the appendices.

Reading Teacher Assessment Database (RTAD)

The Reading Teacher Assessment Database (RTAD) was constructed to facilitate data entry and analysis. The RTAD contains two subordinate databases united under one master database. One of the subordinate databases houses data from teacher education institutions. The other subordinate database houses data from public schools. Because RTAD is a relational database, it can support queries designed to investigate relationships between and within the

subordinate databases. For example, if institutional data revealed a strong emphasis on certain instructional practices, public school data could be examined for evidence of those same instructional practices in effective schools.

The RTAD is also a replicable database. This means that each PDP evaluator may enter data separately in his/her own database replica. Each of these replicas may then be merged with the master database which houses data input by all evaluators. The RTAD has the additional capability of partial replication. Partial replicas can be used to allow each evaluator access to his/her own sphere of data, without access to data entered by other evaluators. In this way, partial replicas prevent evaluators from inadvertently changing or being influenced by the data entered by others.

When all the data were entered into the RTAD, public school data were examined for possible links between student achievement and classroom instruction in reading and phonics. Institutional data were reviewed to determine if practices identified with effective schools are being taught, mastered, and applied in field placements by teacher candidates.

The Reading Teacher Preparation Inventory (RTPI)

The RTPI (See Appendix C) was developed in order to document the effectiveness of teacher education programs in preparing teachers of reading to deliver effective reading and phonics instruction (Questions 1 and 2). Items on the RTPI are aligned with research-supported principles for the effective teaching of reading, including those supported by the International Reading Association (IRA, 1998a, 1998b, 1999, 2000a, 2000b, 2000c) the National Association for the Education of Young Children (NAEYC, 1994, 1996, 2000), the National Reading Panel (2000), the Educational Testing Service Praxis II Series (ETS, 2000a, 2000b, 2000c, 2000d, 2000e, 2000f), the Center for the Improvement of Early Reading Achievement (CIERA, 1998), and widely-used pedagogical literature. The RTPI can be used most effectively when applied to teacher education programs in Elementary Education, Early Childhood Education, and Middle Childhood Education. The RTPI includes a rubric and a set of tests that focus on three major strands of teacher preparation: general reading instruction, phonics instruction, and academic/experiential background.

Emphasis on Application. The RTPI rubric generates scores which reflect depth of knowledge in teaching reading required in teacher education programs for early childhood education and middle grades education. Depth of knowledge is classified with reference to Bloom's (1956) taxonomy of cognition, from the simplest levels--knowledge and comprehension--to the most complex levels--application, analysis, synthesis and evaluation. Each element on the rubric is scored from 0 (zero) to 3. A score of 0 is assigned if the element is not specified in any of the institution's submitted materials. A score of 1, indicating knowledge level, is assigned if an element is covered through lecture, assigned reading, and/or discussion. A score of 2, indicating comprehension, is assigned if an element is assessed through tests or assignments. A score of 3, indicating application through evaluation levels, is assigned if students are required to apply, analyze, and evaluate the element through interactions with school children. A requirement to design a lesson and teach it to college classmates would receive a score of 2. However, a requirement to design a lesson, present it to school children, and reflect on the effectiveness of the lesson would receive a score of 3.

Emphasis on Pedagogy and Field Experience. Depth of preparation for teaching reading is additionally indexed by the number of instructional hours required for education students in reading/language arts pedagogy and field experience. The United States Department of Education Title II Higher Education Act (National Center for Education Statistics, 2000) and the National Council for the Accreditation of Teacher Education (2000) emphasize the importance of

documenting extensive, quality field experiences and evaluating teacher candidates' ability to apply teaching concepts in the classroom. Evaluation of teacher candidates' performance in the classroom aligns with Ohio's new licensure standards (Ohio Revised Code, 1996) which require that first year teachers be evaluated and observed in the classroom as a prerequisite to obtaining a teaching license. Based on the premise that performance in the classroom is a much clearer indicator of teaching expertise than are test scores or written assignments, institutional programs scoring near 3 on the RTPI competencies can be considered superior while programs scoring near 1 can be considered inadequate.

RTPI Tests

The evaluation plan called for institutional self-report data to be supplemented by test scores of teacher candidates. Praxis II scores were considered but rejected when a content analysis of the tests addressing reading and language arts instruction revealed that phonics was not adequately addressed. For this reason, the RTPI General Reading and Phonics Tests were developed and administered to teacher candidates who had completed the reading language arts block in four participating institutions. The RTPI General Reading Test assesses knowledge about the reading process, literacy development, developmentally appropriate texts and methods, authentic reading/writing experiences, diagnosis and remediation of reading difficulties, cueing strategies, reading for different purposes, assessment, communicating with parents and support personnel, and understanding and applying research. These categories are aligned with the ten competencies on the General Reading Strand of the RTPI rubric (GRS1 - GRS10). The RTPI Phonics Test assesses knowledge about phonemic/phonological awareness, phonics rules, spelling patterns, structural analysis, and syllabication. Items on the RTPI phonics test cover information within the five competencies on the Phonics Strand of the RTPI rubric (PS1- PS5). Items on the tests also reflect the content of widely used textbooks on reading and phonics pedagogy.

Institutions had the option of receiving their RTPI test results, including the categories of teacher candidate strength and weakness. RTPI assessment information could be used to inform future teacher education instruction. Anonymity for all participant institutions and students was guaranteed. Four forms of each RTPI test were developed for security purposes. The forms differed only in the order in which questions were presented. Reliabilities of the RTPI tests were estimated with the Cronbach Alpha coefficient, an estimate of internal consistency reliability.

Collecting Institutional Data

Institutional Self-Reporting

To obtain institutional self-report data, the 50 Ohio Colleges and Universities with teacher preparation programs were contacted by the PDP Evaluation Team. Institutions were requested to supply the evaluators with old (certification) and new (licensure) program descriptions, a rationale for the changes made in their program requirements, rationale for the change in program requirements, course syllabi, and ancillary materials such as course packs and supplemental readings for all courses in reading and language arts, including clinical and field experiences. Several institutions were contacted for missing or unclear data, especially with regard to clinical and field experiences. In most cases, this additional material was submitted.

Thirty of the forty-eight Ohio institutions with early childhood and middle childhood licensure programs submitted the requested materials. Eighteen of Ohio's teacher education

institutions did not submit the requested materials.

Administering Teacher Candidate Tests

The RTPI General Reading and Phonics tests were administered to teacher education students in four institutions during April-June, 2001. Although six institutions were contacted, only four of these institutions were willing or able to participate in administering the RTPI tests. Students tested had completed the reading and language arts sequence of the program. Included were both juniors and seniors in colleges of education. Some had completed the "Old" (certification) program and others the "New" (licensure) program. The old program was for K-8 licensure while the new program was for Early Childhood, Middle Grades, and Intervention Specialist Licensure. The four participant institutions varied in size, location, and type, but did not represent the full range of institutional types in Ohio's teacher education programs. Testing took place in three state-supported universities and one private university. Directions for administering the RTPI tests were sent to participants in March and April, 2001. (See Appendix E). The test was administered under controlled conditions by faculty in the respective universities. After tests had been administered, institutions were directed to return both test booklets and answer sheets for processing. Test results were processed at Wright State University. Copies of test results were forwarded to institutions that requested them.

Examining Institutional Report Cards

The third source of institutional data was obtained through examination of each institution's Institutional Report of the Quality of Teacher Preparation: Title II, Higher Education Act (Ohio Department of Education, 2000, 2001). This Higher Education Report Card (HERC) is a Title II-based assessment of teacher education programs published by each institution as a report on the Internet and forwarded to the state and federal departments of education. Institutions offering teacher education were required to make available to the public detailed information about teacher education programs including teacher candidate performance on Praxis II exams and the administration and supervision of teacher candidates' student teaching experiences. Information about Praxis II assessments detailing how each institution's graduates performed during their first year in the classroom will also be included in HERCs. PDP evaluators used the Institutional Report Card data to fill in data gaps relating to field experiences, supervision of field experiences, and supervisor-to-student teacher ratio.

Assessing Reading Teacher Preparation Programs

Each of three PDP evaluators reviewed materials from one third of the institutions in the study. Materials submitted by institutions included some or all of the following: program descriptions, program modification summaries, course descriptions, course proposals, course syllabi, and supplemental materials (e.g., course packets, sample assignments, readings). During the months of December, 2000 through July, 2001, the total of thirty institutional packets were processed and entered into the database. Scoring for each element on the RTPI rubric was documented by noting the location of supporting evidence in the institutional packets.

During the data collection period, teacher education programs in Ohio were undergoing a transition from certification programs to licensure programs, as mandated by the Ohio Department of Education. Differences in course requirements for certification (Old Program) and licensure (New Program) required that each of these programs be evaluated separately on the RTPI. Some teacher candidates taking the RTPI tests were enrolled in certification programs while others were enrolled in licensure programs.

Part II: Focus on Public School Practices

Selecting Participants

PDP evaluators determined that a case study approach would provide the most effective way to gather data on FY1997 and FY99 Cohort schools. This approach was selected because it would provide evaluators with an in-depth snapshot of teaching practices through direct observation of kindergarten, first, and second grade classrooms, supplemented by teacher, student, and principal interviews. Qualitative details relating to such factors as classroom environment, teacher/student relationships, and student motivation could then potentially be integrated with more quantitative measures focusing on teacher knowledge and instructional practices.

Twelve elementary schools were selected for case study, six from the FY97 Cohort and six from the FY99 Cohort. Given the time and resources of this study, a representative sample of schools from each cohort was selected for data collection, rather than attempting to collect data from all PDP schools. The two PDP evaluators who had previously observed classrooms and conducted interviews for the 1997 evaluation were each assigned six of the twelve case study schools. One of the case study schools was observed by both evaluators to establish inter-rater reliability.

Case study schools were selected to represent an array of diverse academic, demographic, and geographic school populations. (See Appendix F.) Telephone interviews were conducted with FY1997 school contact persons in June, 2000 to determine eligibility for inclusion in the study (Appendix G). Six schools selected from the FY97 Cohort represented a spectrum of academic achievement, SES levels, percentage of minority students, school size, and urban/suburban/rural settings. Fourth Grade Proficiency Test pass rates for the past three years were chosen to represent academic achievement. The percentage of students receiving free/reduced lunches was chosen to represent SES levels. Only those FY1997 schools that had continued to provide regular phonics instruction were considered for inclusion in the case study group. Next, six schools were selected for case study from the FY99 Cohort. Schools were selected to match, as closely as possible, the academic, demographic, and geographic characteristics of the six case study schools from the FY97 Cohort.

Establishing Criteria for Identifying Effective Schools

It was decided that effectiveness in delivering reading instruction to different types of learners could be gauged in part by measures of student achievement, specifically with regard to reading scores on Ohio's Fourth Grade Proficiency Tests. Since all Ohio school districts are required to administer these tests, scores on these tests provided a consistent measure of student achievement across PDP cohort groups. It was intended that off-year proficiency test scores would be used to supplement proficiency test data in determining program effectiveness and student achievement. However, since off-year proficiency tests are optional and may be replaced by district-designed or other achievement tests, these data were not available for all PDP cohort schools. Evaluators obtained Spring, 2000 Fourth Grade Proficiency Test data and Off-Year Proficiency Test data (where available) for 25 randomly-selected students per grade in grades 1-4 for each of the twelve case study schools. It was stipulated that selected students must have been enrolled in the school for their entire school experience up to the Spring 2000 testing, with the exception of school districts having separate kindergarten school facilities. Although data from the Grade 1-3 Proficiency Tests were collected, scores were not reported uniformly by all schools in the study. In consideration of the reporting inconsistencies and the fact that many schools in the study used alternate forms of off-year assessments, it was decided to remove these

data from consideration in the analysis of student achievement in PDP schools. Fourth grade proficiency test results for schools receiving PDP grants in FY1997 were compared with test results for schools receiving PDP grants in FY 1999 and test results statewide.

In addition to Fourth Grade and Off-Year Proficiency scores, it was decided that direct classroom observation and interviews with principals, teachers, and students should be used to determine school effectiveness, supplementing quantitative test data with qualitative data on a) teacher perception of student improvement and the degree to which improvement could be attributed to the reading and/or phonics program, b) student attitudes toward reading, and c) students' perceptions of themselves as successful readers. A letter outlining what would be required of schools participating in the study was sent to principals and contact persons in both cohort groups. This letter included instructions for recording student achievement data. (See Appendix H and Appendix I.)

Establishing Indicators of Student Achievement in Reading and Language Arts

It was decided that fourth grade proficiency test scores and pass rates would serve as indicators of student achievement, in addition to serving as indicators of effective schools. Similarly, qualitative data regarding teacher, principal, and student perception of progress in reading were considered as supplementary to formal measures of achievement. Teachers and principals in each case study school were questioned as to the means of assessing and documenting student progress in reading, phonics, and language arts with respect to both formal and informal measures. Evaluators sought to discern perceptions of progress and achievements from the perspectives of students, teachers, principals and literacy coordinators. In observed classrooms, it was sometimes possible for evaluators to assess student facility in reading and language arts and to gather direct evidence regarding whether students were using phonics in reading and writing. When such evidence was available, it also was considered as an indicator of student achievement.

Developing Instruments

Reading Teacher Inventory (RTI)

To assist evaluators in isolating practices common to highly effective schools, the Reading Teacher Inventory (RTI) was developed as the classroom teacher counterpart to the Reading Teacher Preparation Inventory (RTPI). The RTI (See Appendix J) differs from the RTPI in that it was designed to reflect actual teaching practice, rather than preparation for teaching. However, both instruments are grounded in the same research-based principles for effective reading instruction. Whereas the RTPI rubric identifies increasing depth levels of teacher candidate knowledge, the RTI rubric identifies the degree to which classroom teachers demonstrate proficiency in reading instruction that meets the needs of every student. In addition, the RTI assesses teachers' ability to improve their own reading instruction through collegiality and professional development.

Classroom Environment Checklist

A checklist of literacy-supportive classroom attributes was designed to identify environmental features during classroom observations (See Appendix K). Based on extensive research in the field of reading instruction, the Classroom Environment Checklist was completed by evaluators, classroom teachers, school principals, and, in some cases, literacy coordinators. Teachers were asked to note the five checklist attributes that they considered to be major

strengths in their classrooms. Principals and literacy coordinators were asked to note the five checklist attributes that they considered to be common to most primary-grade classrooms in the school. Teachers did not view or complete classroom environment checklists until after the observation and interview processes were finished in order to avoid influencing the reading instruction or interview responses through teacher familiarity with checklist items.

In scoring the RTI, evaluators documented the data source for scoring each competency on the rubric. RTI scores supported by multiple data sources would indicate greater validity than scores supported by a single source. For example, an RTI competency score documented through observation, teacher-completed checklist, and teacher interview, assuming consistent measurement, would have greater face validity than an RTI competency score documented only through the teacher-completed checklist. Teachers did not view or complete classroom environment checklists until after the observation and interview processes were finished in order to avoid influencing the reading instruction or interview responses through teacher familiarity with checklist items.

Teacher and Principal Interview Scripts

Teacher and principal interviews (see Appendix L) were included in the study to supplement and clarify information gathered through classroom observation. It was deemed necessary to supplement observational data because an observation of one hour can not paint a full picture of all the significant factors in the teaching of reading. A series of 13 to 14 questions was developed to target research-supported attributes of the classroom and school environment that affect reading and language arts programs. Teacher and principal interview questions are nearly identical. However, the teacher interview aims at eliciting information about the classroom environment, while the principal interview aims at eliciting information about the school environment. The principal interview script was followed for interviews with literacy coordinators or other literacy support personnel, if a school elected to schedule such interviews.

Student Interview Script

Student interviews were included in the study to provide a glimpse of reading programs from the student perspective (See Appendix M). Nine interview questions were developed to target student attitude about reading, perception of self as reader, favorite books and stories, source of books in the home, reading outside of school, how teachers helped children learn to read, and what children did when encountering unknown words. Parent permission forms were developed to request student participation in the interview process. (See Appendix N). The parent permission forms also included a line for the student signature, indicating his/her willingness to participate in the interview process.

A focus group of first and second grade children from non-PDP schools was selected to test the appropriateness and usability of student interview questions. One female and one male strong reader and one female and one male weak reader (as identified by their teachers) from each of grades 1 and 2 were selected for both focus group interviews and case study interviews. Students interviewed in case study schools were not necessarily members of observed classrooms.

An introductory letter to the focus group school principal was composed, explaining the interview process and setting the conditions for selecting interviewees. This letter provided assurances of anonymity for the school, teachers, and interviewees. Student interview questions were included to familiarize the principal with the nature of the information sought. Parents were guaranteed the anonymity for interviewees and information gained through interviews.

Collecting Public School Data

In February, 2001 two PDP evaluators completed day-long site visits at each of the twelve PDP schools selected for case study. During the site visits, evaluators collected data through direct classroom observations and interviews with teachers, school principals, selected students, and, in some cases, literacy coordinators.

Classroom Observation

PDP evaluators spent one hour observing phonics and general reading instruction in each of three classrooms in the case study schools: one kindergarten, one first grade, and one second grade. Teachers were asked to conduct their reading, phonics, and/or language arts instruction just as they normally would. The PDP evaluator recorded all classroom activity during the hour of observation, completing the Classroom Environment Checklist by noting the presence or absence of each item on the list. Evaluators also recorded supporting data for each item on the Classroom Environment Checklist. For example, if the presence of a classroom library was checked, evaluators might note its accessibility to students, the approximate number and type of books, and/or the way in which books were displayed. When assigning scores to RTI rubric competencies, evaluators documented the reasons for assigning each score and noted the data source as classroom observation.

Teacher- and Principal-Completed Checklist

Teachers in observed classrooms were given the Classroom Environment Checklist to complete only after the classroom observation and interview had taken place. Thirty-five observed teachers in kindergarten, first, and second grades completed these checklists, prioritizing the five attributes on the checklist that they considered to be their greatest strengths. (Thirty-five classrooms were observed because one school did not have a kindergarten classroom.) Eight of the twelve principals in observed schools completed the Classroom Environment Checklist, prioritizing the five attributes seen most often in classrooms at their schools. (See Appendices O, P, and Q.)

Teacher and Principal Interviews

Teacher interview questions were sent to case study schools in advance of scheduled site visits to familiarize interviewees with the questions, to allow interviewees some time to formulate answers, and to reduce the amount of time needed to conduct interviews. In many cases, interviews were taped by audiocassette in order to conserve time and facilitate interaction between interviewee and interviewer. Teachers and principals were informed that interviews would be taped only for the accurate recording of information and that tapes would not be used for any other purpose. Permission to tape was obtained from all participants before commencing to record the interviews.

For each of the observed classrooms, evaluators collected data on the reading program being used, the type of reading and language arts instruction, the way reading was assessed, and attributes of the classroom environment. These data were recorded for later processing and entry into the RTI rubric as evidence for each competency. Through the interviews, evaluators documented perceptions of the reading program, professional development opportunities in reading and phonics, personal attitudes about reading and writing, communication between teachers, parents, and literacy support personnel, and institution of school-wide literacy programs such as tutoring, after-school programs, and special incentives.

For each of the observed classrooms in case study schools, evaluators also collected data on the phonics program being used, the time spent on phonics instruction, the way phonics was taught and assessed, and the place of phonics in the general reading/language arts curriculum. In addition, evaluators collected information about how reading and phonics assessment information is used. Evaluators documented teacher, principal, literacy coordinator, and student perceptions of the phonics program and its effect on reading. For FY97 Cohort case study schools, data were collected on whether schools were still using the same phonics program and how phonics instruction had changed since receiving the initial PDP grant.

Student Interviews

In late January, a non-PDP focus school was selected for focus group interviews. The introductory letter and parent permission forms were sent to the school principal. Focus group interviews were conducted when all permission forms had been returned to the school principal. These forms were collected by the evaluator before interviews were conducted. As a result of focus group responses the seven interview questions were supplemented with additional questions to clarify or elicit a more detailed response.

Case study schools were contacted by email and fax to request student interviewee participation. Permission forms were distributed to case study schools in advance of scheduled site visits. During the February, 2001 site visits, signed permission forms were collected and student interviews were conducted. Individual interviews took between seven and ten minutes. Answers to interview questions were codified to encompass the most common responses to facilitate data processing.

Student Test Scores

Fourth grade Ohio Reading Proficiency Test scores for Spring, 2000 were collected from all case study schools, either during site visits or subsequent to those visits. Test results were collected between January, 2001 and May, 2001. Off-year proficiency test scores were collected from eight of the twelve case study schools. The remaining schools used other forms of assessments prior to fourth grade. Due to the variety of off-year assessments, only fourth grade proficiency scores were analyzed.

RESULTS

Part I: Focus on Teacher Education

Data collected for this evaluation included both qualitative and quantitative measures. Correspondingly, numerous and varied analyses were conducted. To the extent possible, there was a desire to generate quantitative data, in part because such data lend themselves to what are considered more objective analyses. From a measurement perspective, the importance lies in the meaning ascribed to the data. In the analyses, precautions were identified to avoid assigning to the data meaning that did not exist.

Assessment of Ohio's teacher education programs in reading and phonics instruction was based on data obtained through the RTPI rubric, the RTPI tests, and the Title II Institutional Report Cards. Means and standard deviations were computed as descriptive statistics for the scores of the RTPI rubric and the RTPI tests. For the RTPI competency scores on the rubric, these may be considered "rough" measures of central tendency and dispersion, rough in the sense that the measurement did not attain an interval scale.

All of the scores lend themselves to being grouped into categories, some on multiple variables. For example, RTPI rubric scores can be classified by institution, by old vs. new program, and by certification and licensure areas (e.g., K-8 Certification, Early Childhood Licensure, Middle Childhood Licensure). RTPI test scores can be classified by institution and old vs. new program. One-way analyses of variance (ANOVA) were computed using these categories as independent variables. ANOVA is an inferential statistics analysis, which applies to random samples, comparing variance within groups to variance between groups. This evaluation did not have random samples, and ANOVAs were computed only for the purposes of checking the relative sizes of variance. ANOVA also provides the positioning of group means. When only two groups were involved, a t-test was computed.

RTPI Rubric Scores

Each of the reading teacher competencies of the RTPI is scored 0 to 3. The score for an individual competency is on an ordinal scale (i.e., a score of 1 shows greater coverage than a score of zero, etc.). However, it is not argued that an equal unit exists between each level of the 0 to 3 scale. The 19 competency scores of the RTPI comprise three strands with 10, 5, and 4 competencies respectively for general reading, phonics, and academic/experiential preparation. A total score can be generated for each of the strands, as well as an overall total score. These scores likely are between ordinal and interval scale measurement. The scores of all competencies were weighted equally, since at this point there is no rationale for differential weighting. The analyses for the RTPI Rubric scores were as follows:

1. RTPI Total Scores were computed, including means and standard deviations, across all institutions providing data.
2. For each individual competency and for each of the three strands, a distribution of scores, including the mean and standard deviation, was computed across all institutions providing data.

Old Programs Vs. New Programs

At the time of data collection (March, 2001), many institutions had still not developed all their new program syllabi and supplementary course materials. The incompleteness of syllabi and course materials in new programs resulted in lower RTPI Total Scores and lower individual competency scores for some institutions' new programs. However, despite this problem, clear trends between old and new programs are apparent. When comparing RTPI Total Scores and

individual competency scores, wide variation was noted, both within and across institutions as well as between old and new programs. Under the old program, institutions offered teacher certification in Elementary Education (K-8), Early Childhood (EC), Special Education (SE), and Reading Specialist. Scores on the RTPI rubric differed between certification areas within individual institutions. For example, an institution might be assigned a high score for its K-8 certification and a lower score for its SE certification. Under the new program, institutions offer licensure in Early Childhood (EC), Middle Childhood (MC), Intervention Specialist (IS), and Reading Specialist (RS). As with certification programs, scores on the RTPI rubric differ among licensure areas within individual institutions. For example, an institution might be assigned a high score in its EC licensure and a lower score for its MC licensure.

Table 1 displays the variation within and across institutions on RTPI Total Scores for the highest and lowest scoring certification (old program) and licensure (new program) areas in

Table 1. RTPI Total Scores for Individual Teacher Education Institutions

Institution	Highest Total Old Program	Highest Total New Program	Highest Total Change	Lowest Total Old Program	Lowest Total New Program	Lowest Total Change
Institution AA	28	26	-2	26	24	-2
Institution AB	36	44	8	34	43	9
Institution AD	40	50	10	30	39	9
Institution AE	29	41	12	29	38	9
Institution AF	44	35	-9	42	35	-7
Institution AG	26	39	13	24	39	15
Institution AI	33	31	-2	30	28	-2
Institution AM	28	47	19	28	41	13
Institution AP	44	45	1	44	45	1
Institution AQ	29	47	18	29	31	2
Institution AR	51	50	-1	48	50	2
Institution AS	33	32	-1	21	24	3
Institution AT	31	46	15	31	46	15
Institution AU	25	34	9	25	34	9
Institution AW	34	46	12	30	35	5
Institution AZ	28	47	19	28	35	7
Institution BB	49	48	-1	49	48	-1
Institution BC	30	28	-2	30	28	-2
Institution BD	9	27	18	8	26	18
Institution BE	39	47	8	39	43	4
Institution BH	14	22	8	14	22	8
Institution BJ	35	46	11	35	40	5
Institution BK	5	10	5	5	9	4
Institution BL	36	41	5	36	41	5
Institution BM	28	48	20	28	43	15
Institution BO	26	43	17	26	42	16
Institution BP	22	45	23	22	45	23
Institution BR	22	33	11	22	28	6
Institution BS	23	38	15	23	37	14
Institution BY	25	22	-3	25	20	-5
Mean/SD	30.07/10.35	38.60/10.12	8.53/8.47	28.70/9.98	35.30/9.56	6.60/7.26

1. Highest Total Score was computed for each institution by summing the highest scores for all the competencies in any certification or licensure program.
2. Lowest Total Score was computed for each institution by summing the lowest scores for all the competencies in any certification or licensure program.
3. If there is no difference between Highest Total Score and Lowest Total Score, this indicates a consistency across certification or licensure programs. If there is a difference between Highest Total Score and Lowest Total Score, this indicates an inconsistency across certification or licensure programs.
4. Maximum total score is 57.

each of the 30 teacher education institutions. The mean total score for the highest scoring old programs was 30.07 with a standard deviation of 10.35 points. The mean total score for the highest scoring new programs was 38.60 with a standard deviation of 10.12. These differences represent an average gain of 8.53 points for the highest scoring new programs. The mean total score for the lowest scoring old programs was 28.70 with a standard deviation of 9.98. The mean total score of the lowest scoring new programs was 35.30 with a standard deviation of 9.56. These differences represent an average gain of 6.60 points for the lowest scoring new programs. With a maximum total score of 57, the mean for the highest scoring old programs was 53% of the maximum, compared to 68% of the maximum for the highest scoring new programs. The total score mean for the lowest scoring old programs was 50% of the maximum, compared to 62% of the maximum for the lowest scoring new programs. A comparison of each institution's RTPI Total Scores for old and new programs is displayed in Figure 1.

Figure 1. RTPI Total Scores--Old Programs Vs. New Programs

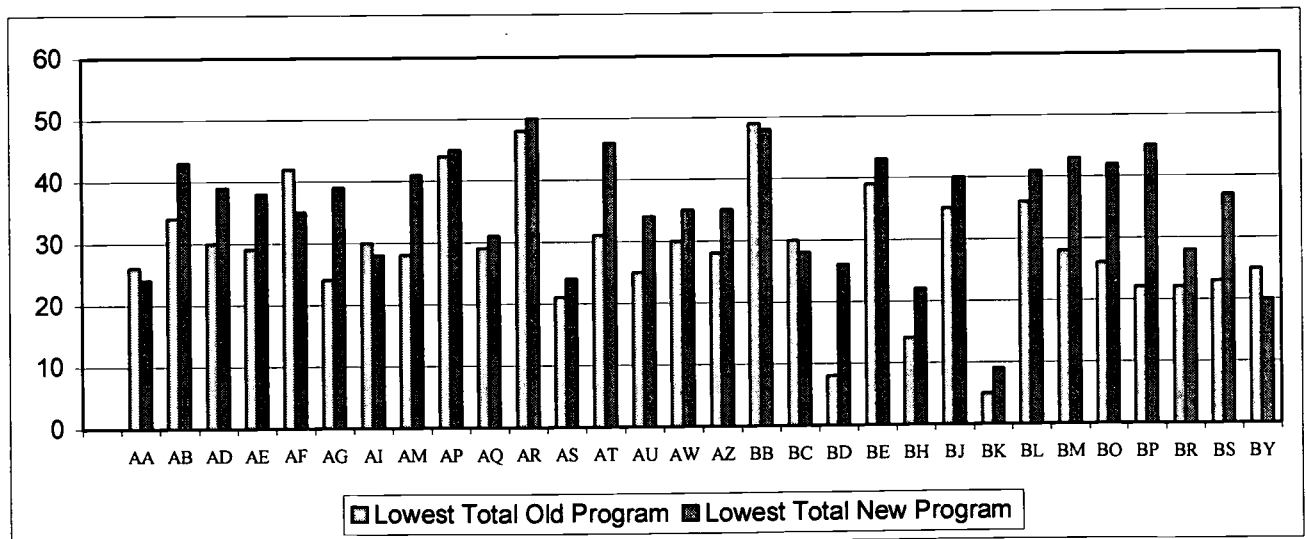
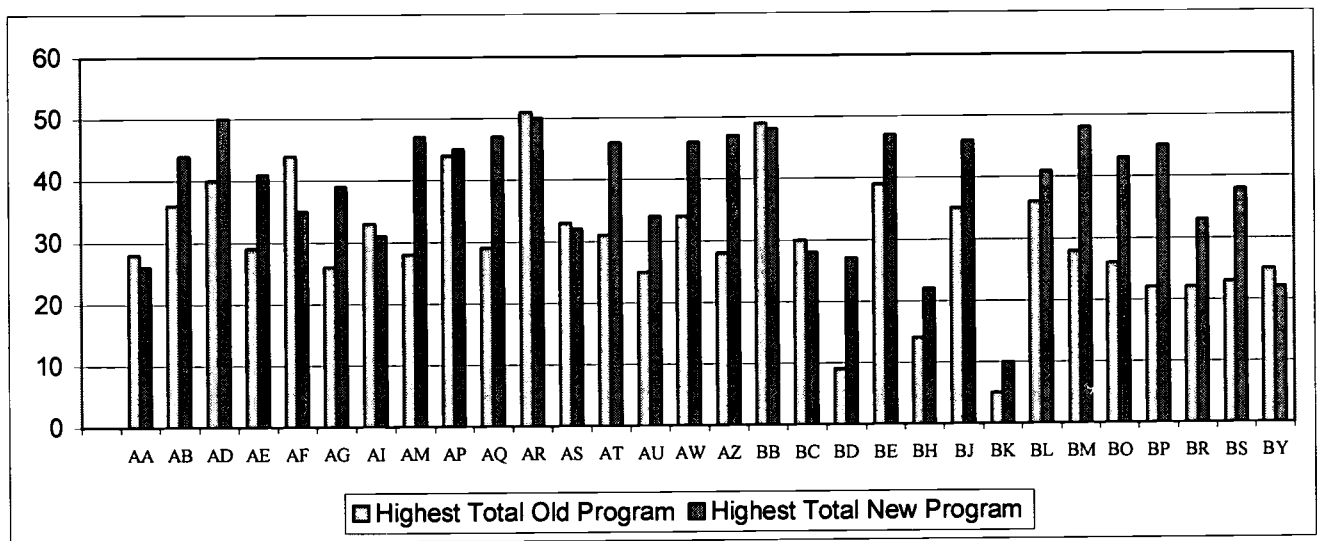


Table 2 displays the mean scores of all institutions on the individual RTPI competencies and on each of the three RTPI strands for the highest and lowest scoring old and new programs. When highest scoring certification and licensure areas are compared, the means for every competency on the RTPI rubric are higher for the new program than for the old program. Highest scoring new programs gained an average of 2.37 points in the General Reading Strand (GRS), 4.7 points in the Phonics Strand (PS), and 1.43 points in the Academic/Experiential Strand (AES). When the lowest scoring certification and licensure areas are compared, some individual competencies earned lower scores in the new program. However, even in the lowest scoring licensure areas, means for each strand still showed gains over the old certification program: 1.13 gain in GRS, 4.47 gain in PS, and .97 gain in AES. With a maximum GRS score of 30, the mean for the highest scoring old programs was 68% of the maximum, compared to 76% of the maximum for the highest scoring new programs. With a maximum PS score of 15, the mean for the highest scoring old programs was 34% of the maximum, compared to 65% of the maximum for the highest scoring new programs. With a maximum AES score of 12, the mean for the highest scoring old programs was 38% of the maximum, compared to 50% of the maximum for the highest scoring new programs.

General Reading Strand. Table 2 reveals that within the General Reading Strand, the single competency with the highest gain in new programs over old program was GRS1 Understanding of the reading process as complex, interactive and constructive. Gaining more than one third of a point in the highest scoring new programs, the balance for this competency has shifted from exposing teacher candidates to the reading process through readings, lecture, and discussion to assessing this knowledge through assignments and tests. Still, with a new program mean of 2.30, the balance has not shifted to the degree that students in most programs are required to show an understanding of the reading process in their interactions with school children. The standard deviation of .88 indicates that even within this improved competency, there is wide variation between institutions.

Phonics Strand. The strand that showed the greatest gains from old to new programs was the Phonics Strand. The establishment of the new licensure programs includes a state-mandated requirement for 50 hours of phonics instruction. Under the old certification program, phonics was not required as a separate course. Old program treatment of phonics instruction showed considerable variation in breadth and content. In some old programs, phonics was an integral part of the basic reading pedagogy course. In other old programs, only passing mention was given to phonics. New programs also show considerable variation among institutions. Syllabi and course descriptions indicate that some phonics courses may or may not include a study of linguistics, phonics rules and spelling patterns, or the place of phonics in the reading curriculum. Examination of program descriptions reveals that many university teacher education departments resent the imposition of the 50-hour phonics requirement. One university even uses as its only required phonics text, a book that is biased against teaching phonics to children (Moustafa, 1997). This textbook claims that “In spite of the findings that teaching children letter-phoneme correspondences was fraught with problems—ranging from the complexity of the task to children’s inability to distinguish phonemes the same way literate adults do—some researchers and educational leaders continue to advocate that children be taught letter-phoneme correspondences” (p. 39).

Academic/Experiential Strand. Within the Academic/Experiential Strand, the single competency with the highest gain in new programs over old programs was AES1 Courses in basic reading and language arts instruction. Again, wide variation among and within institutions is apparent in the number of required hours in reading/language arts instruction. Table 3 highlights these contrasts, in both old and new programs. The mean number of reading/language

Table 2: Mean/SD for RTPI Competencies and Total Strand Scores for All Institutions

COMPETENCY	Mean/SD ¹ Highest Scores Old Program	Mean/SD ¹ Highest Scores New Program	Change ³ in Highest Score	Mean/SD ² Lowest Scores Old Program	Mean/SD ² Lowest Scores New Program	Change ³ in Lowest Score
GRS1 Understanding of the reading process as complex, interactive and constructive	1.93/.87	2.30/.88	0.37	1.93/.87	2.17/.83	0.23
GRS2 Understanding how language and cognitive development relate to literacy	2.07/.91	2.30/.79	0.23	2.03/.89	2.13/.86	0.1
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.43/.90	2.57/.73	0.13	2.37/.89	2.37/.76	0
GRS4 Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2.13/1.07	2.47/.78	0.33	2.03/1.07	2.30/.88	0.27
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.23/1.10	2.40/.86	0.17	2.10/1.16	2.00/1.02	-0.1
GRS6 Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2.07/1.08	2.37/.89	0.3	1.97/1.07	2.37/.89	0.4
GRS7 Helping readers apply different comprehension strategies for different purposes	2.03/.89	2.27/.98	0.23	2.00/.87	2.10/.92	0.1
GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction	2.53/.73	2.60/.86	0.07	2.50/.73	2.40/.89	-0.1
GRS9 Communicating pertinent information with parents and support personnel	1.30/1.12	1.60/1.19	0.3	1.20/1.10	1.30/1.15	0.1
GRS10 Understanding and applying research on reading	1.69/1.00	1.90/.76	0.21	1.69/1.00	1.80/.85	0.11
GR STRAND	20.40/6.46	22.77/6.31	2.37	19.80/6.38	20.93/5.73	1.13
PS1 Knowing essential phonics rules, spelling patterns, and concepts	1.37/1.07	2.37/.76	1	1.37/1.07	2.30/.75	0.93
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	1.47/1.01	2.37/.72	0.9	1.47/1.01	2.27/.69	0.8
PS3 Understanding the scope and sequence of effective phonics instruction	0.87/.97	2.10/.88	1.23	0.87/.97	2.07/.87	1.2
PS4 Recognizing the role of metacognition in phonics instruction	0.67/.96	1.63/1.30	0.97	0.67/.96	1.53/1.22	0.87
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	0.73/.94	1.33/1.27	0.6	0.60/.89	1.27/1.20	0.67
P STRAND	5.10/3.84	9.80/4.25	4.7	4.97/3.80	9.43/4.06	4.47
AES1 Courses in basic reading/language arts instruction	1.93/.91	2.90/.31	0.97	1.53/.82	2.27/.78	0.73
AES2 Professional experiences with a wide variety of learners	0.63/.81	0.77/.90	0.13	0.47/.82	0.63/.85	0.17
AES3 Supervised practice in teaching reading/language arts	1.63/.96	1.80/1.00	0.17	1.57/.94	1.53/.97	-0.03
AES4 Supervised practice in teaching phonics	0.40/.67	0.57/.63	0.17	0.40/.67	0.50/.63	0.1
AE STRAND	4.60/2.09	6.03/1.65	1.43	3.97/1.75	4.93/1.89	0.97

1. Mean of Highest Scores is based on each institution's highest score for that competency in any certification or licensure area.
 2. Mean of Lowest Scores is based on each institution's lowest score for that competency in any certification or licensure area.
 3. If there is no difference between Mean High Score and Mean Low Score, this indicates a consistency across certification or licensure areas. If there is a difference between Mean High Scores and Mean Low Scores, this indicates an inconsistency across certification or licensure areas.
 4. Maximum score for any competency is 3. Maximum score for GR Strand is 30, for P Strand is 15, for AE Strand is 12.

Table 3. Required Hours In Reading/Language Arts Instruction in Old and New Programs

InstCode	Old Program				New Program			
	EC	K8	SE	RS	EC	MC	IS	RS
AA		255.00	120.00	45.00	165.00	45.00	45.00	210.00
AB		183.75		112.50	180.00	153.75		
AD		135.00		285.00	345.00	105.00		255.00
AE		225.00			135.00	135.00	180.00	
AF		270.00		120.00	135.00	135.00	135.00	
AG		165.00	90.00		180.00	180.00	225.00	
AI		135.00	180.00	225.00	225.00	180.00	180.00	
AM		90.00			210.00	120.00	90.00	
AP		135.00			180.00	180.00	180.00	
AQ		100.00			160.00	170.00	210.00	170.00
AR		135.00		180.00	180.00	180.00		
AS		90.00	150.00		230.00	230.00	210.00	
AT		60.00			180.00	210.00		
AU		60.00			180.00	180.00		
AW	90.00	135.00	135.00		135.00	180.00	180.00	
AZ		140.00			180.00	180.00	100.00	
BB		120.00			180.00	180.00	180.00	
BC		90.00		120.00	270.00	180.00	225.00	
BD		120.00	45.00	45.00	180.00	180.00		360.00
BE		90.00			180.00	180.00	180.00	
BH		60.00	105.00		180.00	225.00	225.00	
BJ		90.00			160.00	180.00		
BK		105.00			120.00			135.00
BL		180.00			180.00	180.00	180.00	210.00
BM		180.00			180.00	225.00	270.00	
BO		75.00			135.00	135.00	180.00	
BP		90.00			270.00	270.00	270.00	
BR		170.00			270.00	190.00		220.00
BS		375.00			135.00	195.00	135.00	270.00
BY		210.00			90.00	180.00	90.00	
Mean	90.00	142.29	117.86	141.56	184.33	174.61	175.22	228.75
StDev	n/a	70.99	43.67	84.04	52.27	41.98	58.47	68.28
Max	90.00	375.00	180.00	285.00	345.00	270.00	270.00	360.00
Min	90.00	60.00	45.00	45.00	90.00	45.00	45.00	135.00

EC=Early Childhood Certification or Licensure Program
 MC=Middle Childhood Licensure Program
 IS=Intervention Specialist Licensure Program
 K8=Kindergarten Through Grade 8 Certification Program
 SE= Special Education Certification Program
 RS=Reading Specialist Licensure Program

arts hours required under the old K-8 programs was 142.29 hours, with a standard deviation of 70.99, and a range from 60 hours to 375 hours. The reading/language arts requirement mean for the new programs is 184.33 for Early Childhood (EC), 174.61 for Middle Childhood (MC), and 175.22 for Intervention Specialist (IS). While gains in required reading/language arts hours are noticeably higher in new programs, the degree of variation among institutions remains substantial for each of the licensure (new program) areas. EC reading/language arts requirements range from 90 to 345 hours, MC and IS from 45 to 270 hours. (A score of 3 on AES1 required a minimum of 180 hours in reading/language arts instruction for teacher candidates.)

Highest Scoring New Programs

Although the highest scoring new programs at teacher education institutions earned scores of 2 or better on twelve of the nineteen competencies, performance on five other competencies was less than adequate. The complete set of each institution's RTPI competency scores for the highest scoring new programs can be found in Table 4. Figure 2 shows the distribution among institutions for each RTPI competency in the highest scoring new programs. Table 5 ranks institutions' highest new program performance on each RTPI competency, arranged from highest to lowest scores.

The highest scoring individual competency in new programs was AES1 Courses in reading and language arts, with a score of 2.9 out of a possible 3. (See Table 5.) All but three institutions scored a 3 on this competency, indicating that teacher education students are required to complete at least 180 instructional hours in reading/language arts. The lowest scoring individual competency was AES4 Supervised practice in teaching phonics with a score of .57. None of the institutions earned a score of 3 on this competency. Two institutions earned a score of 2, thirteen earned a score of 1, and fifteen received scores of zero. Very few institutions include a field experience component in their phonics course. Even among the few who do have this component, the time devoted to working with children in phonics is minimal. To earn a score of 3, institutions needed to require 90 or more hours of field experience in teaching phonics. Institutions earning a score of 2 required teacher candidates to teach phonics to children from 60-89 instructional hours. Those receiving a score of 1 required less than 60 hours teaching phonics. The reality is that, even among institutions scoring a 1, most required students to teach only one or two lessons in phonics. The teaching of phonics to children is not specified as a requirement in institutions scoring a zero on AES4.

GRS Strand. The highest scoring general reading competency for new programs was GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction, showing a mean of 2.60 and a standard deviation of .86. With the exception of GRS9 Communicating pertinent information with parents and support personnel and GRS10 Understanding and applying research on reading, most General Reading Strand scores were adequate, if not superior. Eight of the institutions scored a 3 on GRS9, indicating that teacher candidates in these programs had actual practice in communicating with parents and support personnel as part of their field experiences. Eleven institutions earned GRS9 scores of 2, indicating that communication with parents and support personnel was assessed through tests and/or assignments. Two institutions earned GRS9 scores of 1, indicating that students were not required to apply their knowledge of communication with parents or literacy support personnel. Nine institutions do not mention such communication in any course materials or program descriptions. Five institutions earned a score of 3 on GRS10, generally requiring teacher candidates to conduct literacy research with school children or requiring them to read research articles on literacy and apply the findings in their interactions with school children. Nineteen institutions earned GRS10 scores of 2, four earned GRS10 scores of 1, and two received GRS10 scores of zero. A zero was assigned to GRS10 if institutional materials did

Table 4. RTPI Competency Scores for Highest Scoring New Programs by Institution

Inst Code	GRS1	GRS2	GRS3	GRS4	GRS5	GRS6	GRS7	GRS8	GRS9	GRS10	PS1	PS2	PS3	PS4	PS5	AES1	AES2	AES3	AES4
AA	1	2	1	1	3	1	1	2	2	1	2	2	1	0	0	3	1	2	0
AB	3	3	3	2	3	3	2	2	0	2	3	3	3	3	2	3	1	1	2
AD	3	3	3	3	3	3	3	3	2	3	2	3	2	2	3	3	2	3	1
AE	2	3	3	3	3	3	3	3	2	2	2	2	2	2	0	3	0	3	0
AF	0	2	3	3	2	2	2	2	3	0	2	2	2	2	0	2	1	3	2
AG	1	2	2	2	3	2	2	3	3	2	3	2	3	2	0	3	1	2	1
AI	2	2	3	3	2	1	1	3	3	2	0	2	0	0	0	3	1	3	0
AM	3	2	3	3	3	3	3	3	1	2	3	3	3	3	2	3	0	3	1
AP	3	2	3	2	3	3	3	3	3	3	2	2	2	2	1	3	1	3	1
AQ	3	3	3	3	2	2	3	3	2	2	3	2	2	3	2	3	2	3	1
AR	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3	1	2	1
AS	2	2	3	3	2	2	2	3	0	2	2	2	2	0	0	3	0	2	0
AT	3	3	3	3	3	3	3	3	2	1	3	3	3	3	3	3	0	1	0
AU	2	3	3	3	3	3	2	3	0	2	2	2	0	0	0	3	0	2	1
AW	3	3	3	3	2	3	3	3	2	2	3	3	3	3	3	3	0	1	0
AZ	3	3	3	3	3	3	3	3	3	3	2	3	2	3	2	3	0	1	1
BB	3	3	3	3	2	3	3	3	2	2	3	3	3	3	3	3	0	2	1
BC	1	1	1	3	2	3	1	3	0	2	1	2	2	0	0	3	1	2	0
BD	3	3	2	2	1	1	1	1	1	1	2	2	1	0	1	3	1	1	0
BE	3	1	3	3	3	3	3	3	2	2	3	3	3	3	3	2	1	3	0
BH	1	1	1	1	1	1	1	3	2	1	2	1	1	0	0	3	0	2	0
BJ	3	3	3	3	3	3	3	3	3	2	3	3	3	2	2	3	0	0	1
BK	1	0	1	1	0	0	0	0	0	0	1	0	1	0	0	2	0	2	1
BL	2	3	2	2	3	3	3	3	0	2	3	3	2	1	1	3	3	1	1
BM	3	3	3	3	3	2	3	3	3	2	3	2	2	2	2	3	3	3	0
BO	3	2	3	3	1	3	3	3	2	2	3	3	3	3	3	3	0	0	0
BP	3	2	3	3	3	3	3	3	2	2	3	3	2	3	3	3	0	1	0
BR	2	2	3	2	3	2	2	2	0	3	2	2	2	0	0	3	1	1	1
BS	2	2	2	1	3	3	3	3	0	2	3	3	3	0	3	3	2	0	0
BY	2	2	2	1	1	1	0	0	0	2	2	2	2	1	0	3	0	1	0

- GRS1 Understanding of the reading process as complex, interactive and constructive
- GRS2 Understanding how language and cognitive development relate to literacy
- GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure
- GRS4 Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum
- GRS5 Recognizing and addressing the multiple causes of reading difficulties
- GRS6 Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process
- GRS7 Helping readers apply different comprehension strategies for different purposes
- GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction
- GRS9 Communicating pertinent information with parents and support personnel
- GRS10 Understanding and applying research on reading
- PS1 Knowing essential phonics rules, spelling patterns, and concepts
- PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy
- PS3 Understanding the scope and sequence of effective phonics instruction
- PS4 Recognizing the role of metacognition in phonics instruction
- PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency
- AES1 Courses in basic reading/language arts instruction
- AES2 Professional experiences with a wide variety of learners
- AES3 Supervised practice in teaching reading/language arts
- AES4 Supervised practice in teaching phonics

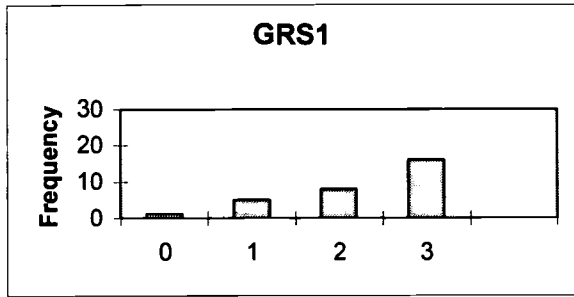
not specify a requirement that teacher candidates read about, listen to, or discuss literacy research.

Phonics Strand. The best Phonics Strand competency score in the highest scoring new programs was PS1 Knowing essential phonics rules, spelling patterns, and concepts. Despite the gains in phonics between old and new programs, however, Figure 2 and Table 5 indicate that phonics competencies PS4 and PS5 are still inadequately covered, earning mean scores of less than 2 points each, even in the highest scoring new programs. Metacognition, addressed in PS4, is important for developing readers because by becoming aware of their own thinking processes, they can consciously decide when and how to use phonics as one of an array of cueing strategies. Automaticity, addressed in PS5, is important because developing readers need to use phonics and other cueing strategies at a rapid, almost subconscious level or reading comprehension and writing fluency will suffer. Phonics is also covered unevenly across universities. Standard deviations indicate that, even for the highest scoring new programs, PS4 and PS5 varied more than one point on a 0 to 3 point scale.

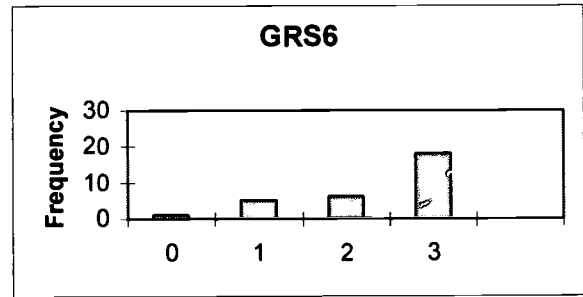
Academic/Experiential Strand. AES1 Courses in basic reading/language arts instruction received the highest scores of any competency on the RTPI. However, other competencies on the Academic/Experiential Strand were considerably weaker, particularly AES2 Professional experiences with a wide variety of learners and AES4 Supervised practice in teaching phonics. Mean scores on these competencies fell between zero and 1, even in the highest scoring new programs. An examination of institutions' submitted materials revealed that experience with a wide variety of learners was frequently touted as a goal of the teacher education program. However, there was little or no documentation of the requirement for working with diverse learners in course syllabi, course packets, or course assignments. To receive accreditation, institutions are required to provide a minimum of 300 hours of supervised student teaching in at least two different settings, with two different age groups of varying abilities (NAEYC, 1994, p. 296). This may explain why so many institutions omitted documentation regarding how they met the diversity requirement. Nonetheless, without documentation of actual practice rather than just goals, it was impossible for PDP evaluators to assign credit for such practice on the RTPI rubric.

In addition to student teaching experiences, professional organizations further recommend that future teachers engage in field experiences to learn to work effectively with children of culturally and linguistically diverse family systems (NAEYC, 1994, p. 295). In the highest scoring new programs, institutions scored a mean of .77 on AES2, indicating that the mean number of required hours for working with diverse learners was less than 200, based on institutions' submitted materials. For fourteen institutions, no requirement for working with diverse learners was indicated in submitted documentation. (See Table 4.)

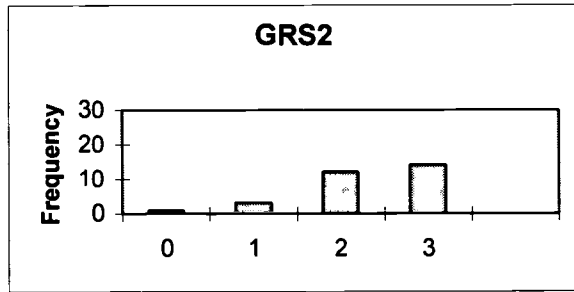
Figure 2. RTPI Competency Scores: All Institutions' Highest Scoring Licensure Programs



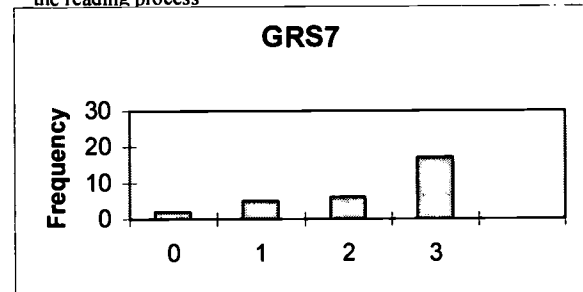
GRS1. Understanding the nature of the reading process as complex, interactive, and constructive



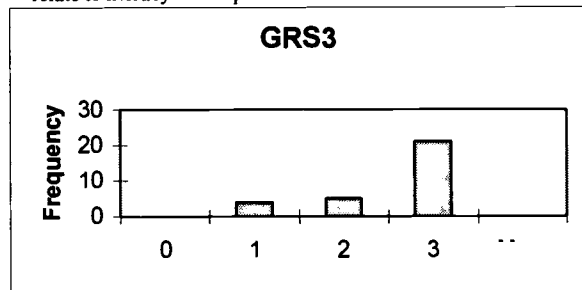
GRS6. Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process



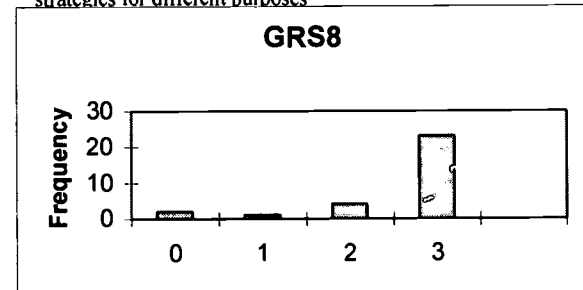
GRS2. Knowing how language development and cognition relate to literacy development



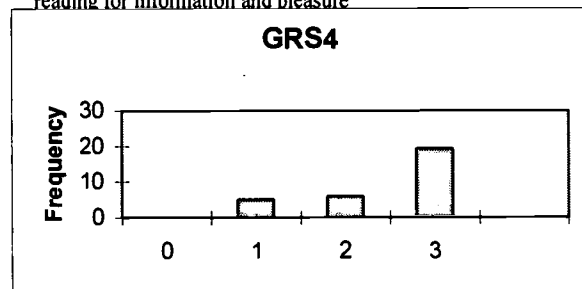
GRS7. Helping readers apply different comprehension strategies for different purposes



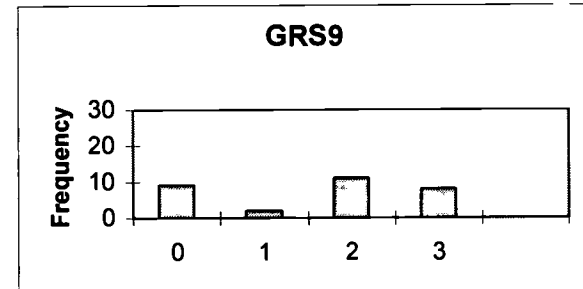
GRS3. Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure



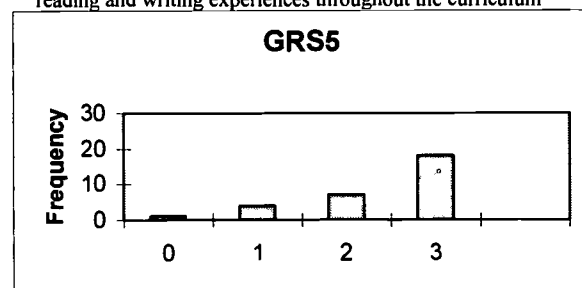
GRS8. Using multiple assessment indicators to monitor reading progress and to inform instruction



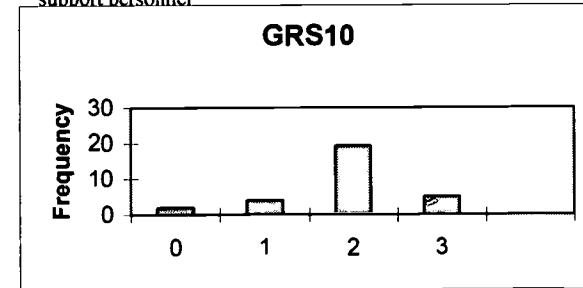
GRS4. Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum



GRS9. Communicating pertinent information with parents and support personnel

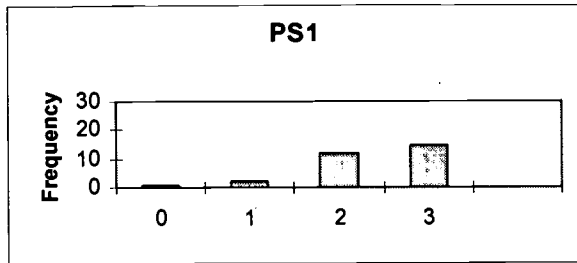


GRS5. Recognizing and addressing the multiple causes of reading difficulties

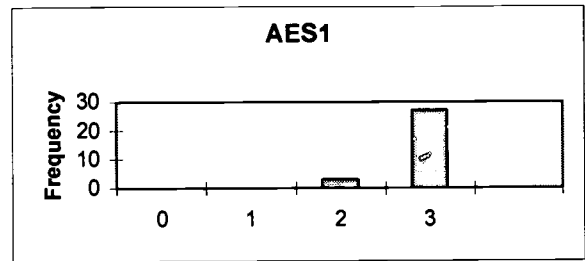


GRS10. Understanding and applying research on reading

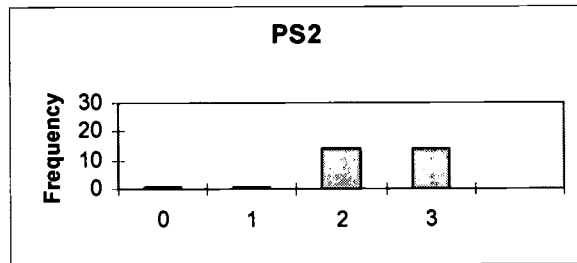
Figure 2. RTPI Competency Scores: All Institutions' Highest Scoring Licensure Programs (continued)



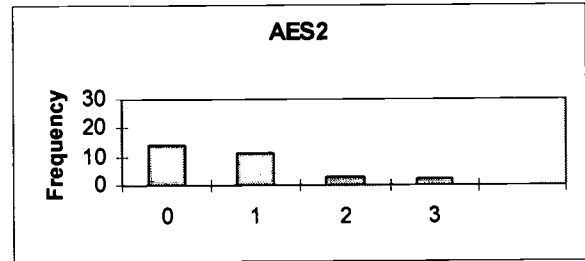
PS1. Knowing essential phonics rules, spelling patterns, and concepts



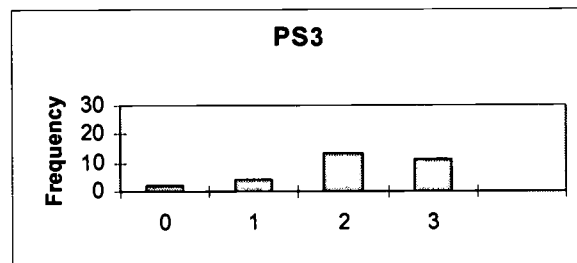
AES1. Basic reading/language arts instruction



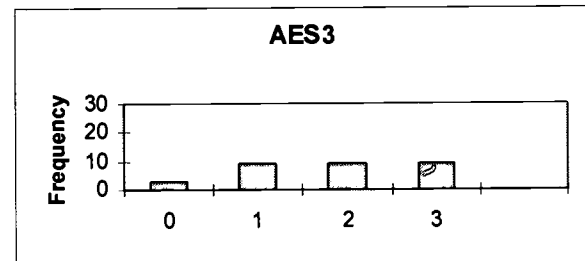
PS2. Recognizing the importance of phonemic and phonological awareness in emergent literacy



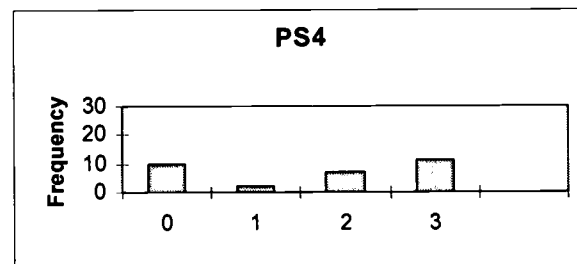
AES2. Professional experiences with a wide variety of learners



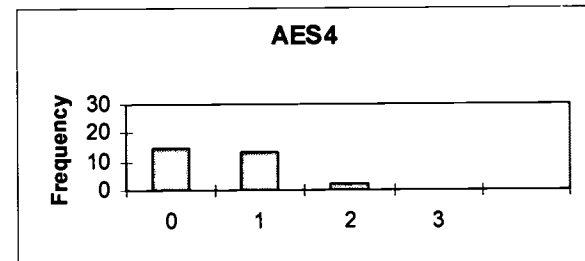
PS3. Understanding the scope and sequence of effective phonics instruction



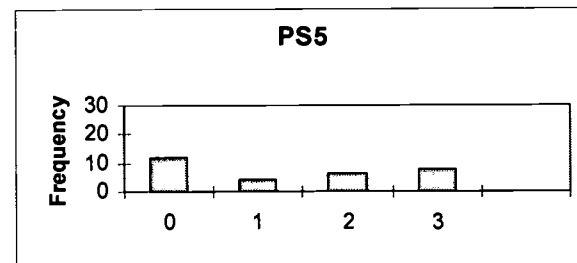
AES3. Supervised practice in teaching reading/language arts



PS4. Recognizing the role of metacognition in phonics instruction



AES4. Supervised practice in teaching phonics



PS5. Understanding the importance of phonics automaticity in reading comprehension and writing fluency

Table 5. Pareto* Distribution of RTPI Competency Means in Highest Scoring New Programs

	Competency	Mean	StDev
AES1	Courses in basic reading/language arts instruction	2.90	.31
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	2.60	.86
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.57	.73
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2.47	.78
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.40	.86
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2.37	.89
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2.37	.76
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.37	.72
GRS1	Understanding of the reading process as complex, interactive and constructive	2.30	.88
GRS2	Understanding how language and cognitive development relate to literacy	2.30	.79
GRS7	Helping readers apply different comprehension strategies for different purposes	2.27	.98
PS3	Understanding the scope and sequence of effective phonics instruction	2.10	.88
GRS10	Understanding and applying research on reading	1.90	.76
AES3	Supervised practice in teaching reading/language arts	1.80	1.00
PS4	Recognizing the role of metacognition in phonics instruction	1.63	1.30
GRS9	Communicating pertinent information with parents and support personnel	1.60	1.19
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.33	1.27
AES2	Professional experiences with a wide variety of learners	0.77	.90
AES4	Supervised practice in teaching phonics	0.57	.63

*Pareto distributions list data in descending order.

RTPI Test Scores

The RTPI tests provide two scores, one for knowledge of general reading and the other phonics. These are objective tests, which provide interval scale data. Each of the two RTPI subtests (General Reading and Phonics) contains 50 true-false items. As mentioned earlier, the traditional concepts of test reliability apply to these tests. The analyses for the RTPI Test scores were as follows:

1. For the General Reading and Phonics subtests, Cronbach Alpha reliability coefficients were computed.
2. For each of the subtest scores, the means and standard deviations across all institutions providing data were computed.
3. For each of the subtest scores ANOVAs were computed, with institution as the independent variable.
4. For each of the subtest scores, t-tests were computed for old program vs. new program over all institutions and within each institution's programs.
5. An item analysis was conducted to determine areas of strength and weakness in both general reading and phonics.

To maintain anonymity, the universities of students who took the tests will be identified simply by A, B, C, and D. A total of 209 students took the test, although the numbers varied across institutions from 14 to 92. One student did not have a General Reading Test score and four students were missing Phonics Test scores. The total number of scores for the subtests were 208 and 205 respectively.

Reliability estimates were computed for the two subtests. These were Cronbach alpha (α) coefficients, estimates of internal consistency reliability. The Cronbach α for the General Reading subtest was .66 and that for the phonics subtest, .73. These reliability estimates were considered adequate.

The descriptive statistics for all students taking the two subtests were:

	Mean	Median	Std. Dev.
General Reading	30.74	31.0	5.20
Phonics	30.24	32.0	5.8

Since the maximum score for each subtest is 50, the prospective teachers who had completed the reading preparation parts of their programs scored slightly above 60% correct on both subtests. These scores would be even lower if a correction for guessing had been applied. The standard deviations of the two subtests were similar and appear reasonable for tests of this type. That is, the subtests provided variation among scores so that those taking the test were differentiated but the scores were not excessively variable.

In analyzing the scores, one-way analyses of variance (ANOVA) were computed with university as the independent variable, and t-tests were computed for differences between means of those prepared by the old versus the new programs. ANOVA and the t-test are inferential statistical procedures typically applied when random samples are involved. These were not random samples of teacher education students, so the procedures were not applied in the classical inferential statistics context of testing null hypotheses. Rather, the procedures were computed for the purpose of comparing variances, that is, the variance between the means of the groups compared to the within group variances.

The frequencies, means, and standard deviations for the RTPI subtests are given by university in Table 6. The ANOVAs resulted in statistically significant F-ratios for the scores of both subtests. This shows that the variance among the means of the universities exceeded, actually far

exceeded, the variance of the scores within the universities.

The university means were quite variable. University B had the lowest mean on both subtests. The lowest mean of 25.93 on the Phonics subtests represents an average score of slightly more than one-half the test items correct. It should be noted that all of the students who completed the test in University B were enrolled in old programs; hence they had not taken the new phonics course. This was also the case for the 14 students tested in University C.

Table 6. Overall Frequencies, Means, and Standard Deviations for RTPI Subtests

University	General Reading			Phonics		
	N	X	S	N	\bar{X}	S
A	34	34.03	4.34	34	31.35	4.00
B	91	28.31	5.07	92	25.93	4.45
C	14	34.43	5.27	10	32.90	5.13
D	69	31.58	4.14	69	35.06	3.58

Frequencies (N), Means (X), and Standard Deviations (S)

Table 7 contains the frequencies and means on the subtests for students completing the old and new programs within universities. Only Universities A and D had tested students who had completed new programs. For all test-takers combined, students in the new programs had greater means on both subtests, for the Phonics subtest the difference was over 7 points. For both subtests the differences were statistically significant.

In the two universities that tested students completing both new and old programs, new program students had the greater means on the Phonics subtest. The means on the General Reading subtest were quite close for new and old program students with differences of only .58 and 1.21 points. The relatively low scores of students in University B, which tested only old program students, substantially reduced the means for the old programs.

Table 7. Frequencies and Means for RTPI Subtests by University and Program

University	Program	General Reading		Phonics	
		N	X	N	\bar{X}
A	Old	7	33.57	7	30.29
	New	27	34.15	27	31.63
B	Old	91	28.31	92	25.93
	New	--	--	--	--
C	Old	14	34.43	10	32.90
	New	--	--	--	--
D	Old	16	32.50	16	31.44
	New	52	31.29	53	36.15
Total	Old	128	29.79	125	27.44
	New	79	32.27	80	34.63

Item Analysis for RTPI Tests

Items are categorized on the RTPI General Reading and Phonics tests into areas linked to the RTPI competencies. Because the effective teaching of reading includes the teaching of phonics, some categories on the RTPI General Reading Test relate to phonics and some categories on the RTPI Phonics Test relate to general reading. The majority of items on each test, however, focus on either reading or phonics. The RTPI Phonics Test specifically targets mastery of the basic rules, concepts, and spelling patterns of phonics. This content knowledge is essential to the effective instruction of phonics and to the ability to diagnose and remediate word recognition problems.

Tables 8a and 8b display the mean percentage of test-takers answering questions correctly in each of the RTPI test categories. On the General Reading Test, teacher education students performed best on items dealing with the assessment of reading and writing (74% correct), and authentic reading/writing experiences (67.6% correct). The strongest areas of student performance in general reading relate to RTPI competencies GRS8--Using multiple assessment indicators to monitor reading progress and to inform instruction and GRS4--Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum. Students scored lowest on the general reading categories of developmentally appropriate texts and methods (52.2% correct) and multiple cueing strategies, with (54.2% correct). The weakest areas of student performance in general reading relate to RTPI competencies GRS3--Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure, PS3--Understanding the scope and sequence of effective phonics instruction, GRS6--Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process, and PS4--Recognizing the role of metacognition in phonics instruction.

On the Phonics test, students performed best on their knowledge of phonemic/phonological awareness in literacy development (75.2% correct) and r-controlled vowels (67.6% correct). The strongest areas of student performance in phonics relate to RTPI competencies PS2--Recognizing the importance of phonemic and phonological awareness in emergent literacy, GRS2-- Understanding how language and cognitive development relate to literacy, and that portion of PS1-- Knowing essential phonics rules, spelling patterns, and concepts dealing with r-controlled vowels (e.g., a-r, e-r, i-r, o-r). The lowest scoring phonics category was consonant blends (49.5 % correct) and vowel digraphs and diphthongs (54.2% correct). The weakest areas of student performance in phonics relate to those aspects of RTPI competency PS1 dealing with two- and three-letter consonant blends (e.g., s-w, p-l, s-q, s-p-r) and vowel digraphs and diphthongs (e.g., o-o, a-u, o-i, o-u). The fact that teacher education students performed better on some competencies than on others should not obscure the fact that their overall performance on both the general reading and phonics tests was less than stellar. The relatively poor scores on these tests indicate that, insofar as these test takers represent a microcosm of the teacher candidate population, serious knowledge gaps exist that may restrict the effective teaching of reading and phonics.

Tables 9a and 9b illustrate the variation among and within institutions administering the RTPI tests by displaying the percentage of correct answers on each test category for each of the four participating institutions. The percentage of correct responses within a given category varied among institutions nearly 30% in general reading and nearly 37% in phonics. The percentage of correct responses among categories within an institution varied nearly 43% in general reading and nearly 57% in phonics. Variations may be linked to a) variation in course content as taught by different instructors within and among institutions, b) uneven coverage of different phonics categories, or c) variation in student ability.

Table 8a. Pareto Distribution of Correct Answers in RTPI General Reading Test Categories

	Mean % Correct Answers	RTPI Competencies
Assessment	74.1	GRS8
Authentic Reading/Writing Experiences	67.6	GRS4
Reading Process	65.6	GRS1
Communicating with Parents and Support Personnel	63.0	GRS9
Reading for Different Purposes	61.5	GRS7
Diagnosis and Remediation	61.1	GRS5
Literacy Development	60.6	GRS2, PS2, PS5
Understanding and Applying Research	56.3	GRS10
Multiple Cueing Strategies	54.2	GRS6, PS4
Developmentally Appropriate Texts and Methods	52.2	GRS3, PS3

Table 8b. Pareto Distribution of Correct Answers in RTPI Phonics Test Categories

	Mean % Correct Answers	RTPI Competencies
Phonemic/Phonological Awareness	75.2	PS2, GRS2
R-Controllers	67.6	PS1
Simple Consonants	66.9	PS1
Long and Short Vowel Rules	61.5	PS1
Consonant Digraphs	58.5	PS1
Spelling Patterns	57.3	PS1
Structural Analysis/Syllabication	55.8	PS1
Vowel Digraphs and Diphthongs	54.2	PS1
Consonant Blends	49.5	PS1

- GRS1 Understanding of the reading process as complex, interactive and constructive
- GRS2 Understanding how language and cognitive development relate to literacy
- GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure
- GRS4 Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum
- GRS5 Recognizing and addressing the multiple causes of reading difficulties
- GRS6 Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process
- GRS7 Helping readers apply different comprehension strategies for different purposes
- GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction
- GRS9 Communicating pertinent information with parents and support personnel
- GRS10 Understanding and applying research on reading
- PS1 Knowing essential phonics rules, spelling patterns, and concepts
- PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy
- PS3 Understanding the scope and sequence of effective phonics instruction
- PS4 Recognizing the role of metacognition in phonics instruction
- PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency
- AES1 Courses in basic reading/language arts instruction
- AES2 Professional experiences with a wide variety of learners
- AES3 Supervised practice in teaching reading/language arts
- AES4 Supervised practice in teaching phonics

Table 9a. Percentage of Correct Answers in RTPI General Reading Test Categories by Institution

	Institution A	Institution B	Institution C	Institution D	Max	Min	Difference
Reading Process	77.93	58.97	76.20	66.52	77.93	58.97	18.96
Literacy Development	62.77	54.20	76.20	64.73	76.20	54.20	22.00
Developmentally Appropriate Texts and Methods	61.78	52.63	55.57	51.70	61.78	51.70	10.08
Authentic Reading/Writing Experiences	69.34	61.54	75.51	73.30	75.51	61.54	13.97
Diagnosis and Remediation	67.62	59.32	61.88	63.55	67.62	59.32	8.30
Multiple Cueing Strategies	56.87	59.33	49.97	46.87	59.33	46.87	12.46
Reading for Different Purposes	66.67	57.13	69.05	64.50	69.05	57.13	11.92
Assessment	83.83	63.15	92.88	79.75	92.88	63.15	29.73
Communicating with Parents and Support Personnel	82.40	60.40	71.40	55.10	82.40	55.10	27.30
Understanding and Applying Research	62.36	48.36	70.02	61.16	70.02	48.36	21.66
Mean % Correct Answers	69.16	57.50	69.87	62.72	69.87	57.50	12.37
Max	83.83	63.15	92.88	79.75			
Min	56.87	48.36	49.97	46.87			
Difference	26.96	14.79	42.91	32.88			

Table 9b. Percentage of Correct Answers in RTPI Phonics Test Categories by Institution

	Institution A	Institution B	Institution C	Institution D	Max	Min	Difference
Phonemic/Phonological Awareness	80.00	60.00	74.00	88.98	88.98	60.00	28.98
Simple Consonants	71.76	60.24	62.00	74.22	74.22	60.24	13.98
R-Controllers	68.24	51.74	66.00	88.72	88.72	51.74	36.98
Consonant Blends	52.38	37.60	46.00	64.36	64.36	37.60	26.76
Consonant Digraphs	57.04	53.04	80.00	63.50	80.00	53.04	26.96
Long and Short Vowel Rules	57.06	53.34	78.00	73.06	78.00	53.34	24.66
Vowel Digraphs and Diphthongs	55.30	50.00	62.00	58.26	62.00	50.00	12.00
Spelling Patterns	54.72	43.70	54.00	77.08	77.08	43.70	33.38
Structural analysis/Syllabication	41.18	41.30	52.00	32.46	52.00	32.46	19.54
Mean % Correct Answers	59.74	50.11	63.78	68.96	68.96	50.11	18.85
Max	80.00	60.24	80.00	88.98			
Min	41.18	37.60	46.00	32.46			
Difference	38.82	22.64	34.00	56.52			

Higher Education Report Cards

The number of student teaching hours required and the student teacher to faculty supervisor ratio in each of the 30 institutions is displayed in Table 10. Data published in HERCs reflect current (licensure) programs and do not reflect requirements under the old (certification) programs. The mean number of student teaching hours required is 365.67 hours, with a standard deviation of 59.36. Student teaching hours ranged from a low of 175 hours to a high of 595 hours. ANOVA indicated that the student teaching hours variation among institutions is greater than variation within institutions. The F ratio was significant at the .10 level of significance, but not at the .05 level. Nevertheless, such variations among and within institutions means that some students in certain licensure areas receive more time working with children than others. Similarly, graduates of some institutions will have had much more time to develop skill in working with children than graduates of other institutions, even within the same licensure areas.

To obtain a rough approximation of the proportion of student teaching hours devoted to reading/language arts instruction, primary grade teachers in the study were interviewed as to the daily amount of time allotted to such instruction. Teacher interviews indicate that roughly 120 minutes or one-third of the 6-hour school day is devoted to reading/language arts instruction. Adjusting the number of student teaching hours to reflect approximate time devoted to reading and language arts instruction, the estimated mean number of student teaching hours in reading is 121.89. The estimated minimum student teaching hours in reading is 58.33 hours and the estimated maximum is 198.33. The ability to help children become competent readers and writers is a skill developed over time, after extensive experience working with individuals and groups. The wide variation among programs and institutions in the amount of time that teacher candidates are engaged in reading and writing instruction implies that some beginning teachers will be much more prepared to become effective reading teachers than others.

Table 10 indicates that across all institutions sampled, the mean faculty supervisor to student teacher ratio is 6.31:1 with a standard deviation of 2.33. The minimum student teacher to faculty supervisor ratio is 1.30:1 and the maximum is 14:1. Obviously, a high student teacher to faculty ratio translates into less supervised time and less feedback for improving student teaching skill. Interestingly, the highest ratios were not always in the large urban institutions, nor were the lowest ratios consistently in the smaller institutions.

Additional information from the HERCs indicates that in two-thirds of the institutions, student teacher supervision is done by adjunct, rather than full-time faculty. Table 11 displays the number of full-time and part-time faculty who supervise student teaching. Included in the number of part-time faculty are those who hold full-time positions in the institution but only part-time positions in professional education. While adjunct faculty may be adequate to the task of supervising student teachers, the coordination of course content with actual practice is made more difficult if the person supervising student teachers is not the person who designs and teaches the methods courses. Since the purpose of student teaching is to provide opportunities for prospective teachers to practice the application of knowledge learned in college courses, institutions using non-teaching supervisors would need to make some effort to familiarize those supervisors with methods course content, institutional teaching philosophy, and institutional mission. Although such training and orientation for adjunct supervisors efforts may well be in effect, this could not be discerned from the materials submitted for review.

Table 10. Student Teaching Hours and Student Teacher/Faculty Supervisor Ratio by Institutions

InstCode	MinHrs StTchg	MaxHrs StTchg	AvgHrs StTchg	MinHrs TchgRdg	MaxHrs TchgRdg	AvgHrs TchgRdg	StTchr/ FacSupv Ratio
AA	360.00	360.00	360.00	120.00	120.00	120.00	7.28:1
AB	300.00	300.00	300.00	100.00	100.00	100.00	7.16:1
AD	450.00	450.00	450.00	150.00	150.00	150.00	11.00:1
AE	300.00	300.00	300.00	100.00	100.00	100.00	6.25:1
AF	450.00	450.00	450.00	150.00	150.00	150.00	6.09:1
AG	350.00	350.00	350.00	116.67	116.67	116.67	4.00:1
AI	400.00	560.00	480.00	133.33	186.67	160.00	3.50:1
AM	300.00	300.00	300.00	100.00	100.00	100.00	9.00:1
AP	300.00	450.00	375.00	100.00	150.00	125.00	4.64:1
AQ	300.00	300.00	300.00	100.00	100.00	100.00	6.00:1
AR	450.00	450.00	450.00	150.00	150.00	150.00	5.35:1
AS	400.00	400.00	400.00	133.33	133.33	133.33	4.90:1
AT	350.00	350.00	350.00	116.67	116.67	116.67	6.00:1
AU	360.00	360.00	360.00	120.00	120.00	120.00	5.1:1
AW	450.00	450.00	450.00	150.00	150.00	150.00	8.00:1
AZ	350.00	350.00	350.00	116.67	116.67	116.67	14.00:1
BB	300.00	300.00	300.00	100.00	100.00	100.00	6.00:1
BC	400.00	400.00	400.00	133.33	133.33	133.33	5.10:1
BD	450.00	450.00	450.00	150.00	150.00	150.00	6.00:1
BE	330.00	330.00	330.00	110.00	110.00	110.00	8.00:1
BH	420.00	420.00	420.00	140.00	140.00	140.00	6.00:1
BJ	330.00	330.00	330.00	110.00	110.00	110.00	5.00:1
BK	300.00	300.00	300.00	100.00	100.00	100.00	8.52:1
BL	300.00	480.00	390.00	100.00	160.00	130.00	8.00:1
BM	300.00	300.00	300.00	100.00	100.00	100.00	4.29:1
BO	175.00	595.00	385.00	58.33	198.33	128.33	5.00:1
BP	420.00	420.00	420.00	140.00	140.00	140.00	8.00:1
BR	300.00	300.00	300.00	100.00	100.00	100.00	2.91:1
BS	300.00	300.00	300.00	100.00	100.00	100.00	4.00:1
BY	320.00	320.00	320.00	106.67	106.67	106.67	4.30:1
Mean	350.50	380.83	365.67	116.83	126.94	121.89	6.31:1
St.Dev.	66.26	81.30	59.36	22.09	27.10	19.79	2.33
Min	175.00	300.00	300.00	58.33	100.00	100.00	2.91:1
Max	450.00	595.00	480.00	150.00	198.33	160.00	14.00:1

1. Data on this table were obtained through the Title II Higher Education Report Cards published by each institution.
2. Hours student teaching reading was estimated as 1/3 of total student teaching time.

Table 11. Number of Full-Time and Part-time Faculty Supervising Student Teachers by Institution

InstCode	Part-Time Faculty Supervisors	Full-Time Faculty Supervisors	Ratio* of Part-Time to Full-Time Faculty Supervisors
AP	21	1	21.0:1
BD	24	3	8.0:1
BM	71	9	7.9:1
BP	23	5	4.6:1
AW	49	21	4.1:1
BO	49	12	4.1:1
AE	98	31	3.2:1
BR	35	11	3.2:1
AR	21	7	3.0:1
BH	6	2	3.0:1
BJ	64	24	2.7:1
AF	23	13	1.8:1
BS	12	7	1.7:1
AB	8	5	1.6:1
AI	15	10	1.5:1
AZ	15	10	1.5:1
BE	24	16	1.5:1
BL	28	20	1.4:1
AQ	9	7	1.3:1
AS	42	40	1.1:1
AT	4	4	1.0:1
AU	6	6	1.0:1
AM	10	11	.9:1
BC	6	7	.9:1
BY	55	58	.9:1
AG	7	10	.7:1
BK	4	8	.5:1
BB	4	9	.4:1
AA	0	10	n/a
AD	0	6	n/a

*Ratio numbers have been rounded off to the nearest tenth.

Part 2: Focus on Public School Practices

The observations and interviews conducted in the 12 PDP schools generated a variety of qualitative data. These data essentially provide descriptive case studies of the schools as to their reading instruction and particularly the role of phonics in this instruction. There were two groups of PDP schools, those funded in 1997 and in 1999. There was variation in the phonics programs used within and across cohorts, and of course, the schools were not exactly matched on numerous variables that impact instruction and student achievement (See Appendix F).

The student achievement scores for reading and language arts provided objective data. The Fourth Grade Proficiency Test scores, (four subscales and a Total Scale Score) as required by the ODE, were consistently administered and reported across the schools. Off-year proficiency tests for grades 1-3 were not analyzed due to the inconsistency among schools in reporting test data.

Public school findings are organized into two broad categories: data across schools and cohorts and data within individual PDP schools. Data relating to groups larger than individual schools are presented through:

1. Demographic and contextual factors within each cohort
2. Cohort Pass Rates--4th Grade Reading Proficiency
3. Analysis of FY2000 4th Grade Proficiency Reading Subscores
4. Codified Student Interview Responses over all schools in the study
5. RTI Competency Scores 1) over all schools in the study 2) within each cohort
6. Classroom Environment Priorities by cohort

Information from observations and interviews for each of the twelve PDP Schools is presented in case study format through:

1. Descriptive School Snapshots
2. School RTI Competency Scores and Pareto Distributions
3. School Classroom Environment Checklists

Demographic and Contextual Factors

FY97 Cohort. Schools in the FY97 Cohort are represented by the letters A, C, D, F, K, and M. Table 12 displays many of the demographic and contextual factors for these schools. Of the six schools, the majority are located in rural or small city environments. Enrollment ranges from a low of 288 students to a high of 565 students. Most teachers are non-minority female. Three of the schools have high teacher stability while one of the schools began with a totally new staff after reorganizing ten years ago. Other schools in the FY97 Cohort have moderate staff stability. Teachers in this cohort are experienced. Most have been teaching for twelve years or more. A majority holds Master's degrees. Most students are also non-minority; minorities are predominant in only two of the six schools. A majority of students in this cohort come from families whose income levels qualify them for free/reduced lunch, although one school has less than a fifth of their student population in this category. The student turnover rate is relatively low except for School M which has turnover rate of 36%.

All six FY97 schools have continued to use the phonics program from the original grant: three are using *Logical Phonics* and three are using a variety of other phonics programs: *Phonics Week by Week*, *Four Blocks' Working With Words*, *Modern Curriculum Press Phonics*, *Char-L Phonics*, and *Workshop Way*. Three of the schools are using Harcourt Brace reading series and three are using a variety of other textbooks and literature anthologies. Teachers in most of these schools have been trained extensively in new literacy programs and practices: Four Blocks, Balanced Literacy, Reading Recovery, and Literacy Collaborative. The Four Blocks uses 120 minutes daily for reading/language arts. It utilizes four kinds of reading: shared reading, guided reading, buddy reading, and self-selected reading. Part of the Four Blocks program is a phonics segment called "Working With

Table 12. School Demographics and 4th Grade Reading Proficiency Pass Rates--FY97 Cohort

	School A	School C	School D	School F	School K	School M
School Variables						
Location	Small City	Rural	Urban	Small City	Rural	Rural
Grade Levels	K-6	1-5	K-6	K-6	K-5	K-5
Enrollment	450	408	325	530	565	288
Student Variables						
% Non-white	75	1.5	62	8	2	30
% Eligible F/R Lunch	95	43	69	65	18	66
% Annual Turnover	**	10	8	4.2	2	36
Teacher Variables						
% Female	95	97	88	83	91	95
% Non-white	15	0	17	0	0	5
Teaching Experience Mean Yrs.	**	12	14	13	14	15.4
% in building for 10/more years	45	47	0*	49	52	26
% with Master's Degree or higher	**	31	50	18	65	58
4th Grade Reading Proficiency Pass Rates						
% Passing in 1996-97	21.6	45.1	24.4	51.4	78.0	24.5
% Passing in 1997-98	18.2	54.4	40.0	27.3	74.2	23.8
% Passing in 1998-9	44.2	54.4	46.5	49.2	75.3	23.4
% Passing in 1999-00	37.0	65.8	29.4	56.3	93.0	34.2
% Passing in 2000-01	37.0	56.0	72.0	39.0	82.0	21.0
% Change 1996-97 Vs. 2000-01	71.3%	24.2%	195.1%	-24.1%	5.1%	-14.3%
FY97 Cohort Mean 4th Grade Reading Proficiency Pass Rates						
	% Passing in 1996-97	% Passing in 1997-98	% Passing in 1998-99	% Passing in 1999-00	% Passing in 2000-01	% Change 1996-97 Vs. 2000-01
	40.8	39.7	48.8	52.6	51.2	10.4

*All staff members were new following building reorganization less than 10 years ago.

** Data missing

Words.” In this segment, students use manipulative letter tiles to form words from other words and roots. Lessons in *Working With Words* are organized around word families or spelling patterns. Balanced Literacy programs include reciprocal teaching, following a model for shared reading and writing, interactive reading and writing, guided reading and writing, modeled reading and writing, and language experiences. Balanced Literacy provides opportunities to practice independent reading and writing in many genres and modes. Both Four Blocks and Balanced Literacy include components of teachers reading aloud to students. The Reading Recovery program was developed for at-risk first grade students and trains teachers to diagnose children’s reading and writing strategies through running records, observation, and diagnostic surveys. Reading Recovery teachers provide individualized one-on-one instruction for 12-20 weeks. By the end of this period, children should have developed some independent strategies for processing text and should read at or above the level of their peers, without the need for further intervention. The Literacy Collaborative is a classroom-based program aimed at increasing the literacy achievement of all students through an instructional framework and professional development. Literacy Collaborative schools must also provide Reading Recovery as a safety net. In these schools, a trained Literacy Coordinator is responsible for training and coaching teachers, in addition to working directly with students. Literacy Collaborative parents are encouraged and assisted in providing active home literacy support. Guided Reading is a strategy incorporated into many programs to provide the scaffolding needed for students to comprehend and engage with the text at increasing levels of difficulty. Students read selections for a specific purpose, making and confirming predictions as they read. Schools implementing Guided Reading may use the results of running records to guide instruction and to help students become fluent readers who can solve problems strategically in their independent silent reading. Each FY97 school has developed a way to integrate their original phonics program into the new literacy programs. Many of these new programs, like Four Blocks, include their own phonics components. Four of the six schools were rated as having a high level of innovation by their principals.

FY97 Cohort Schools supplement the 4th Grade Proficiency Test with a number of other standardized and informal measures. Three of the schools use the Iowa Test of Basic Skills. One school uses Directed Reading Assessments (DRAs) and another uses Reading Recovery’s Running Records. The DRA assessment tests students on comprehension and assigns a reading level. The Reading Recovery Running Records assess the strategies that students use to decode words such as context, syntax, phonics, sight words, and other visual cues. Both of these measures help teachers to diagnose reading problems. Two of the schools have extensive after-school and before-school tutoring programs for struggling readers. Funds for these programs come from Ohio Reads, STARS (Seniors Teaching and Reading to Students), and business partner donations. Tutors are community members, business executives, and high school students. School principals have been aggressive in securing grants and other funding to support literacy. Many schools have been awarded five or more grants from a variety of public and private sources.

In most FY97 Cohort schools, the principals are female, very articulate, and very knowledgeable about literacy. Many of the principals have taken literacy training right along with their teachers. The teachers themselves report a high degree of support for professional development and a close working relationship with the school principal and literacy coordinator. Teachers and principals report strong commitments to having extended blocks of time for reading and writing, individualized attention to students, small group instruction, and classroom libraries stocked with a variety of books accessible to children in the classrooms.

FY99 Cohort. Schools in the FY99 Cohort are represented by the letters G, H, I, J, L, and N. Table 13 displays many of the demographic and contextual factors for the FY99 Cohort schools. Of the six schools, half are located in urban environments. The others are located in suburban, rural, and small town environments. Enrollment ranges from a low of 415 students to a high of 744 students. Three of the schools have public preschools. The high elementary school enrollment and availability of public preschools is not uncommon in urban or rural environments with low SES populations.

Table 13. School Demographics and 4th Grade Reading Proficiency Pass Rates--FY99 Cohort

	School G	School H	School I	School J	School L	School N
School Variables						
Location	Rural	Urban	Urban	Suburban	Urban	Small town
Grade Levels	PreK-6	PreK-6	K-5	K-5	PreK-6	K-5
Enrollment	744	466	563	453	450	415
Student Variables						
% Non-white	1	68	55	9	62	5
% Eligible F/R Lunch	50	35	57	6	97	25
% Annual Turnover	11.7	21	7	2	40	10
Teacher Variables						
% Female	90	81	92	100	91	93
% Non-white	0	9	17	0	5	0
Teaching Experience-Mean Yrs	10.8	7.2	12	16	18.7	16
% in building for 10/more years	42	31.2	46	32	40	33
% with Master's Degree or higher	50	41	83	64	53	26
4th Grade Reading Proficiency Pass Rates						
% Passing in 1996-97	42.7	46.2	34.3	68.6	37.5	38.2
% Passing in 1997-98	31.0	35.3	37.7	69.1	28.6	50.7
% Passing in 1998-9	50.5	58.1	48.5	69.8	39.5	62.3
% Passing in 1999-00	43.3	43.5	32.3	75.0	40.0	52.0
% Passing in 2000-01	41.0	42.0	47.0	87.0	30.0	64.0
% Change 1996-97 Vs. 2000-01	-4.0%	-9.1%	37.0%	26.8%	-20.0%	67.5%
FY99 Cohort Mean 4th Grade Reading Proficiency Pass Rates						
	% Passing in 1996-97	% Passing in 1997-98	% Passing in 1998-99	% Passing in 1999-00	% Passing in 2000-01	% Change 1996-97 Vs. 2000-01
	44.6	42.1	54.8	47.7	51.8	7.2

School L in this group has the highest poverty rate in the study, with 97% of its students eligible for free/reduced lunch. The three urban schools in this group have a predominantly minority student population, while the other schools in the cohort have very few minorities. School I has 60 ESL students and 30 special education (DH) students. These students account for 90 out of the 560 students. As with the FY97 Cohort, most teachers are non-minority females. In this cohort, all three urban schools have teachers who belong to minority populations. Staff stability hovers around 30% to 40%. Teachers in FY99 schools average more than ten years of experience, with three of the six schools reporting a teaching experience average of over 16 years. This group of teachers is highly educated, with three schools reporting over 50% holding Master's degrees. School N, however, has the lowest percentage of Masters degree teachers, reporting just 26%.

Five of the six schools use different phonics programs. Two of the schools use Logical Phonics. The others use Process Phonics, Sadlier Phonics, Touch Phonics, and ELLI. School I is using the Harcourt Brace reading basal and the Four Blocks language arts program. Two of the schools use no basal at all, just an entirely literature-based program. In one of these schools, the upper grades use basals (3rd grade and higher); in the other, only literature is used for reading in all grades. Other schools use the Houghton Mifflin literature-based basal, *Open Court*, and leveled trade books for Guided Reading. Teachers in these schools have been trained in several of the new research-based literacy programs like Four Blocks and the Literacy Collaborative. The latter is an outgrowth of Reading Recovery and uses many of its techniques with students beyond the first grade. Still others are trained in using reading comprehension computer programs like *Fast Forward* and *CCC*. These programs give students immediate feedback on comprehension and are alleged to improve performance on standardized reading tests. Teachers and principal in one school received professional development in *Leadership for Literacy*, a program that boosts awareness of emergent literacy development. Teachers working with Four Blocks devote 120 minutes daily to reading/language arts instruction. Many teachers include content area reading during this time. Although phonics is included in the Four Blocks program, it is not used consistently in the content areas in the schools with the totally literature-based programs.

FY99 Cohort Schools supplement the Fourth Grade Proficiency Test with a number of other standardized and informal measures, among them the Metropolitan Achievement Test (MAT), basal tests, Iowa Test of Basic Skills, off-year proficiencies (in some schools), Target Teach, Burns and Rowe, DRAs, Informal Reading Inventories, *Brigance*, and *Running Records*. Special programs that target literacy in FY99 Cohort Schools include extended day with a focus on reading comprehension and writing. Tutoring programs include Ohio Reads Grant volunteers from businesses and churches who work with very small groups of children. Some schools use retired or currently employed teachers as after school tutors. Rolling Readers and Extended Learning Opportunity are among the after school literacy programs staffed by volunteers. Reading Excellence Act tutors are highly trained and have a degree in reading.

Four of the FY99 Cohort schools have female principals; two have male principals. Some of the principals in this group are very well acquainted with literacy theory and practice. Like FY97 principals, most are innovative and creative in obtaining grants and other funds to support literacy and learning in their schools. Only two of the six schools have daily contact with a Literacy Coordinator or other literacy support personnel. Two of the schools lack Title I reading programs (federally funded programs to assist struggling readers). Teachers in this cohort have had recent professional development workshops in literacy, but the amount of in-service training varies among schools. Only a few of the principals have taken the training with the teachers. Teachers and principals report strong commitments to reading aloud to students, extended blocks of time for reading/writing, positive classroom climate, a well-stocked classroom library, a print rich environment, and teacher circulation among students during reading and writing activities.

Pass Rates on 4th Grade Reading Proficiency Tests

There was considerable variation in 4th grade reading proficiency pass rates from year to year. However, pass rate means over the 1997-2001 period provide a picture of achievement over time. A comparison of fourth grade reading proficiency pass rates between cohorts (see Table 14) reveals that the FY97 Cohort had more substantial gains over time than did the FY99 Cohort. In school year 1996-97, the FY97 Cohort had a mean pass rate of 40.8% while the FY99 Cohort had a slightly better pass rate of 44.6%. By the school year 2000-01, the FY97 Cohort had gained 10.4 percentage points in its passing rate, compared with a 7.2 percentage point increase for the FY99 Cohort. Despite the fact that FY99 Cohort had a higher pass rate in 96-97, the FY97 cohort has narrowed the gap so that the pass rates are now essentially equal at slightly over 51%. The FY97 pass rate of 40.8% in school year 1996-97 and the FY99 pass rate of 47.7% in the school year 1999-00 reflect test scores in each cohort's initial year of PDP funding. Both cohorts have improved their reading proficiency pass rates since PDP was initiated, but the greater improvement of the FY97 Cohort may be attributable to the fact that they have been in the PDP program three years longer than the FY99 Cohort. Neither cohort achieved the state pass rate for any of these years, but both cohorts surpassed the state in percentage point gains since school year 1996-97. The FY99 Cohort mean pass rate was slightly higher than that

Table 14. Mean Pass Rates for 4th Grade Reading Proficiency by Cohort

	FY97 Cohort Mean	FY99 Cohort Mean	State Pass Rate
% Passing in 1996-97	40.8	44.6	52.0*
% Passing in 1997-98	39.7	42.1	48.0
% Passing in 1998-9	48.8	54.8	60.0
% Passing in 1999-00	52.6	47.7	58.0
% Passing in 2000-01	51.2	51.8	57.0
Mean Pass Rate 1996-97 to 2000-01	46.62	48.2	55.0
Percentage point gain FY97 vs. FY01	10.4	7.2	5.0

*State pass rates were available only in whole numbers.

of the FY97 Cohort for the 1997-2000 time span; however, the higher overall test scores may be linked to demographic factors, since the FY99 higher averaged 14.33% fewer students eligible for F/R Lunch.

Table 15 displays the mean pass rate for each school in the study from school year 1996-97 through school year 2000-01. School K had the highest mean pass rate of 80.5%, followed by School J with a mean pass rate of 73.9%. School M had the lowest mean pass rate at 25.4%. School K surpassed the state mean pass rate of 55.0% by 25.5 percentage points and School J surpassed the state mean by 18.9 percentage points. The pass rate for School C was effectively the same as the state mean. Variability in pass rates from year to year is highlighted by the fact that School J was the only one of the 12 schools whose pass rates improved each year over the period from 1997-2001. Five schools improved in three of the four testings since 1997. Three schools improved twice over the four testings, and three schools improved only once since 1997. So, the pass rates of half the schools went down as often as they went up. Similar fluctuations characterized the state pass rates. Obviously, many factors relating to students, teachers, and the tests themselves, contribute to the variability in pass rates.

Table 15. Pareto Distribution of Mean Pass Rates for 4th Grade Reading Proficiency by School

Cohort	School	Mean Pass Rate 1996-97 to 2000-01	Comparison with State Mean Pass Rate of 55.0%
FY97	K	80.5	+
FY99	J	73.9	+
FY97	C	55.1	+
FY99	N	53.4	-
FY99	H	45.0	-
FY97	F	44.6	-
FY97	D	42.5	-
FY99	G	41.7	-
FY99	I	40.0	-
FY99	L	35.1	-
FY97	A	31.6	-
FY97	M	25.4	-

While high proficiency pass rates are often associated with a more affluent and literate school community, the degree of change in school pass rates provides a yardstick for reading improvement in schools whose student demographics (i.e., urban or rural schools in low SES communities) are generally associated with lower proficiency scores. Pass rate gains on the 4th grade reading proficiency test are displayed on Table 16. The school showing the greatest gain in fourth grade reading proficiency pass rates from school year 1996-7 through school year 2000-2001 is School D, with a remarkable 195.1% improvement. Other schools with substantial gains were School A with a 71.3% gain and School N with a 67.5% gain. Three schools from the FY99 Cohort and two schools from the FY97 Cohort lost ground on their proficiency pass rates since school year 1996-1997, with the largest losses in Schools F and L.

Table 16. Pareto Distribution of 4th Grade Reading Proficiency Pass Rate Gains by School

Cohort	School	% Change FY97-FY01
FY97	D	195.1
FY97	A	71.3
FY99	N	67.5
FY99	I	37.0
FY99	J	26.8
FY97	C	24.2
FY97	K	5.1
FY99	G	-4.0
FY99	H	-9.1
FY97	M	-14.3
FY99	L	-20.0
FY97	F	-24.1

It is acknowledged that the rate of student turnover directly impacts the length of time that students are exposed to the PDP program and other literacy initiatives. The impact of stability was examined by comparing the pass rates of all fourth grade students in each school compared to a stable sample of 25 students. (See Table 17.) This sample was obtained when each of the PDP schools provided Spring, 2000 4th grade reading proficiency subtest scores for 25 students who had been in the school for their entire school experience from kindergarten on (or first grade on in the case of the school that did not have kindergarten).

While the trend for each cohort seems to indicate that student stability and pass rates are directly related, some variation exists for individual schools. Stability seems to have a greater effect

in poor urban schools than in others. Two of the three poor urban schools in this evaluation, School D and School I, showed the greatest positive effects of student stability. In School D, the pass rate for the stable sample was 50%, compared with a 4th grade rate of 29.4%. In School I, the pass rate for the stable sample was 60%, compared with a 4th grade rate of 32.3%. In the third poor urban school, School L, stability seemed to have the opposite effect, however, with a stable sample pass rate of 20%, compared to a 4th grade rate of 40.0%. This apparent anomaly may be explained by the fact that, according to the School L principal, students tend to move out of this neighborhood when their family becomes more economically secure. In this way, the school continually seems to lose its highest achieving students. While Schools D and I are also in poor areas, they are magnet schools that attract students from outside the neighborhood and tend to have very little turnover in school population. (See Tables 12 and 13.)

Table 17. FY2000 4th Grade Reading Proficiency Pass Rates--Stable Sample Vs. School and Cohort

School	Stable Student Sample	All 4 th grade Students in School
A	40%	37.0%
C	60%	65.8%
D	50%	29.4%
K	96%	93.0%
M	31%	34.2%
F	**	56.3%
FY97 Cohort Mean		55.4%
<hr/>		
G	44%	43.3%
H	44%	43.5%
I	60%	32.3%
J	80%	75.0%
L	20%	40.0%
N	**	52.0%
FY99 Cohort Mean		49.6%

**Missing data

Performance on 4th Grade Reading Proficiency Subtests

As another measure of reading achievement, PDP evaluators examined Spring, 2000 scores of 25 students from each school who had been in the same cohort school since kindergarten. Scores were recorded on the four reading proficiency subtests: 1) Fiction-Constructs Meaning (FCM), 2) Fiction-Extends Meaning (FEM), 3) Nonfiction-Constructs Meaning, and 4) Nonfiction-Extends Meaning (NEM). The FCM and NCM subtests require that students be able to accurately retell a reading selection in writing, in their own words. Students are also required to accurately summarize the main idea and important supporting details and use inference to predict outcomes or what the story conveyed. The FCM and NCM subtests also require that students use graphic aides (tables, graphs, or illustrations) to locate or interpret information. The FEM and NEM subtests require that students analyze the text by discerning main ideas and supporting ideas in nonfiction. Students are required to analyze fiction text in relation to the actions of characters, problem/solution, plot, or point of view. The FEM and NEM subtests also require the ability to analyze nonfiction through comparison and contrast, cause and effect, or fact vs. opinion. Students are additionally required to infer from the text and draw conclusions from textual clues where information is implied, but not explicitly stated. The FEM and NEM subtests also target student ability to respond to reading selections by relating the text to their own personal experiences or feelings. Finally, students are required to identify reference resources for locating specific information, select fiction or nonfiction

in response to a topic or theme, choose resources to solve a problem or make a decision. NEM is typically the subtest with the lowest performance (Axtmann, 1995).

For the fourth grade reading proficiency subtests, the following analyses were computed:

1. Descriptive statistics were computed for each school across the five scores and compared with "normative data" from the ODE. The percentage passing per school was determined.
2. T-tests were computed to compare the means of the FY97 and FY99 cohort groups.

When considering fourth grade proficiency scores, the importance of the student scores lies not so much in the actual achievement levels, although these levels are important, as in the performance within schools over time. In particular, reading and phonics practices were examined in schools with a pattern of test score improvement over time. When interpreting results, it was necessary to keep in mind that no analysis could separate the effects of reading or phonics instruction from the effects of other factors operating within the school. The analyses showed the patterns of student achievement when phonics is included with reading instruction in conjunction with the specific school context.

Tables 18a and 18b show that the student sample in both cohorts generally performed better on fiction than on nonfiction items and on items that required them to construct, rather than extend, meaning. This pattern is not surprising, since extending meaning requires higher level thinking skills and children generally have much more exposure to fiction than to nonfiction.

The FY97 cohort surpassed the FY99 cohort on all five reading scores (four subtests plus Scale Score). These differences were statistically significant ($p < .05$) for FCM, NCM, and Scale Scores and approached significance ($p < .10$) for FEM and NEM. (See Table 19.) Scale scores are determined based on the sum of the points earned on the four subtests. A scale score of 218 was the standard for proficient performance on the fourth grade reading test in Spring 2000. The mean scale score for the stable students in the FY97 cohort exceeded the standard, while the corresponding mean for the FY99 cohort fell below the standard.

Table 18a. Year 2000 Fourth Grade Reading Proficiency Subtests for FY97 Schools¹

FY97 Mean Scores by Subtest

Subtest (Max Possible)	School A	School C	School D	School F	School K	School M	FY97 Mean
Fiction Constructs Meaning (10)	9.25	9.28	9.30	**	9.92	9.06	9.36
Fiction Extends Meaning (14)	11.65	12.04	11.70	**	12.88	11.31	11.92
Nonfiction Constructs Meaning (4)	3.45	3.64	2.90	**	3.80	3.38	3.43
Nonfiction Extends Meaning (20)	14.50	14.44	14.70	**	17.92	12.38	14.79

FY97 Mean Scores as Percent of Maximum by Subtest

Subtest (Max Possible)	School A	School C	School D	School F	School K	School M	FY97 Mean
Fiction Constructs Meaning (10)	92.50	92.80	93.00	**	99.20	90.60	93.62
Fiction Extends Meaning (14)	83.21	86.00	83.57	**	92.00	80.79	85.11
Nonfiction Constructs Meaning (4)	86.25	91.00	72.50	**	95.00	84.50	85.85
Nonfiction Extends Meaning (20)	72.50	72.20	73.50	**	89.60	61.90	73.94

FY97 Sum of Mean Scores as Percent of Maximum

	School A	School C	School D	School F	School K	School M	FY97 Mean
Sum of Subtest Means	38.85	39.40	38.60	**	44.52	36.13	39.50
Percent of Maximum (48)	80.94	82.08	80.42	**	92.75	75.27	82.29

¹A random sample of 25 students from each PDP School was used in the analyses of reading proficiency subtests. These students have been attending the present school since the inception of its PDP grant program.

Table 18b. Year 2000 Fourth Grade Reading Proficiency Subtests for FY99 Schools*

FY99 Mean Scores by Subtest

Subtest (Max Possible)	School G	School H	School I	School J	School L	School N	FY99 Mean
Fiction Constructs Meaning (10)	8.68	8.43	8.96	9.60	7.90	**	8.71
Fiction Extends Meaning (14)	11.76	10.91	11.40	12.36	10.70	**	11.43
Nonfiction Constructs Meaning (4)	3.20	3.13	3.08	3.56	3.20	**	3.23
Nonfiction Extends Meaning (20)	14.48	12.65	14.04	16.28	11.20	**	13.73

FY99 Scores--Percent of Maximum by Subtest

Subtest (Max Possible)	School						FY99 Mean
	School G	School H	I	School J	School L	School N	
Fiction Constructs Meaning (10)	86.80	84.30	89.60	96.00	79.00	**	87.14
Fiction Extends Meaning (14)	84.00	77.93	81.43	88.29	76.43	**	81.62
Nonfiction Constructs Meaning (4)	80.00	78.25	77.00	89.00	80.00	**	80.85
Nonfiction Extends Meaning (20)	72.40	63.25	70.20	81.40	56.00	**	68.65

FY99 Sum of Subtest Mean Scores--Percent of Maximum

	School						FY99 Mean
	School G	School H	I	School J	School L	School N	
Sum Of Subtest Mean Scores	38.12	35.12	37.48	41.80	33.00	**	37.10
Percent Of Maximum (48)	79.42	73.17	78.08	87.08	68.75	**	77.30

** Data unavailable

Table 19. T-Tests for FY2000 4th Grade Proficiency Subtests-FY97 Vs. FY99 Cohorts

Subtest	N	\bar{X}	t	Prob.
FY97 Fiction Constructs Meaning	121	9.41	2.717	.007
FY99 Fiction Constructs Meaning	108	8.83		
FY97 Fiction Extends Meaning	121	12.02	1.822	.070
FY99 Fiction Extends Meaning	108	11.54		
FY97 Nonfiction Constructs Meaning	121	3.52	2.418	.016
FY99 Nonfiction Constructs Meaning	108	3.24		
FY97 Nonfiction Extends Meaning	121	15.04	1.750	.082
FY99 Nonfiction Extends Meaning	108	14.10		
FY97 Mean Scale Score	111	221.35	4.642	.000
FY99 Mean Scale Score	133	208.57		

Student Interview Questions and Codified Responses

Student interviews were included in the PDP evaluation for a number of reasons. First, since most of the data on student reading achievement is cognitive or psycho-motor, these interviews generated data on research-supported affective goals of literacy: student attitude about reading in general, student perception of self as a successful reader, and the development of a love of books and print. Each of these factors has a strong influence on the development of reading ability. In addition, student interviews provided information on how much reading students do outside of school, whether parents or others read to them, and whether or not books are available in the home. Students who have a negative attitude about reading or who see themselves as reading failures do not pursue reading as a personal pastime. Like any skill, progress in reading is directly related to the amount of practice. Students who read widely and frequently are the ones who improve. If students feel successful as readers, if they associate reading with pleasurable feelings, and if books are readily available to them, they have the foundations for becoming successful readers. In addition, reading to children is the single most important thing that parents can do to prepare their children for success in school. The interview process also shed light on this factor. Finally, student interviews provided PDP evaluators with a student's-eye view of the reading and phonics programs in the PDP schools, in contrast to the views of teachers and administrators. Since students are the ones most affected by the reading and phonics programs, it was deemed only fair that their views should be heard.

In each PDP school, interviews were conducted with both male and female strong and weak readers (as identified by their teachers) in grades 1 and 2. The students interviewed were not necessarily from the observed classrooms in each school. To facilitate the formation of a cohesive body of data, student interview answers were codified into categories. Student interview questions and codified answers can be found in Table 20. Most interviews lasted about 7 minutes. As students responded to the evaluator's questions, the answers were typed into the RTAD database on laptop computers. To protect student privacy and to guarantee anonymity, student interviews were not taped and any reference to identifying information was deleted from the database. Permission letters were signed by both student and parent prior to interview sessions (See Appendix N). Upon examination of student interview responses, it was found that there was little, if any, difference between the responses of boys and girls or between schools and cohorts. Accordingly, codified responses are separated for strong and weak readers in Table 20 but are not separated by gender, school, or cohort.

One of the most obvious findings in the interviews was the fact that every first and second grade student indicated that s/he liked to read. Apparently, even weak readers had not experienced a sense of failure in reading that is common in readers who are struggling. When asked what was fun about reading, most students replied with answers that reflected a sense of mastery. Responses reflecting a sense of mastery included, "It's kinda easy," "You can read your own chapter books and it's fun to do it because you can read as many chapters as you want," "When I read a book and it's challenging, I like it because it is so challenging," and "It makes you learn to read and you know big words like community and stuff like that." Weak readers most commonly answered that reading was fun because of a sense of enjoyment: "I just like to read a lot," and "It's fun to do." More strong readers than weak readers listed learning things as a reason that reading was fun.

Nearly all the interviewees easily provided the topic, title, or details about a favorite book that they liked to read, and strong readers were apt to name several. Nearly all students replied that they read outside of school, mostly at home, although many did not know where the books come from. Most listed several places as the source of books in the home, and weak readers were just as likely as strong ones to purchase books at the store. Stronger readers were more apt to list several places that they read outside of school. When asked if they get books from the library, affirmative answers outnumbered negative ones, but surprisingly there was almost no difference between strong

and weak readers on this answer. In another revealing answer, most students stated that several people read to them, most often family members like mother, father, grandmother, and siblings. Students did not name books that they liked to hear as readily as they did books that they like to read, although the majority of both student groups did provide the title or topic of a favorite.

Students overwhelmingly said that, yes, they were good readers, regardless of whether or not they had been so designated by their classroom teacher. When asked how they knew they were good readers, the most common answers were feedback from a parent or teacher and the ability to figure out unknown words. Other common answers included recognizing many words on sight and reading widely and often. It is obvious that most of these students see themselves as successful readers and feel that their reading contributes to their sense of self-worth. It is also gratifying to note that slower learners are not made to feel stupid or isolated from their peers, being just as likely to have confidence in themselves as readers as those who truly excelled. When asked what it takes to be a good reader, strong readers were more likely to name several skills, and strong readers were the only group that listed comprehension skills like the following response concerning using picture and

Table 20. Student Interview Questions and Codified Responses

Question	Answer	Strong Reader	Weak Reader	Total
1.0 Do you like to read?	yes	47	45	92
	no	0	0	0
1.1 What's fun for you about reading?	Sense of mastery	13	11	24
	Enjoyment	6	17	23
	Engagement in stories	12	6	18
	Stories and Learning	3	1	4
	Learn things	10	6	16
	Other	0	2	2
2.0 Do you have a favorite book or story that you like to read?	Don't know	3	2	5
	Yes	37	40	77
	Several	4	1	5
	No	6	4	10
2.1 What is it about?	Provided details	16	12	28
	Provided topic or title	25	29	54
	N/A	6	4	10
3.0 Do you ever read any place else besides school?	Yes	47	43	90
	No	0	2	2
3.1 Where?	Home	24	26	50
	Several places	18	12	30
	Other	5	5	10
	N/A	0	2	2
4.0 Where do you get the books you read at home?	Store	12	15	27
	School	1	2	3
	Library	4	4	8
	Several places	20	16	36
	Other	10	8	18
4.1 Do you ever get books from the library?	yes	27	25	52
	no	20	20	40

Table 20. Student Interview Questions and Coded Responses (cont'd.)

Question	Answer	Strong Reader	Weak Reader	Total
5.0 Does anyone ever read to you? Who?	Yes, several people	21	22	43
	Yes, non-family	3	3	6
	Yes, other family member	3	5	8
	Yes, mother	10	10	20
	No	10	5	15
5.1 Do you have a favorite book or story you like to hear?	Yes	24	32	56
	No	14	11	25
	Yes, several.	1	0	1
	N/A*	8	2	10
5.2 What is it about?	Provided details	3	4	7
	Provided topic or title	22	28	50
	N/A*	21	13	34
6.0 Are you a good reader?	Yes	44	37	81
	No	0	1	1
	Don't know	3	3	6
6.1 How do you know you are a good reader?	Feedback from teacher or parent	12	8	20
	Decoding skills	13	10	23
	Sense of mastery	6	4	10
	Sight word recognition	5	10	15
	Read avidly	8	10	18
	N/A	3	3	6
6.2 What do you have to do to be a good reader?	Several skills	8	2	10
	Sight word recognition	5	4	9
	Pay attention	1	4	5
	Practice	8	8	16
	Decoding skills	8	7	15
	Other	9	1	10
	Don't know	6	18	24
7.0 Is reading ever hard for you?	Yes	26	36	62
	No	21	9	30
7.1 What makes reading hard for you sometimes?	Hard words	32	39	71
	Long books	0	1	1
	Hard words and other reasons	4	0	4
	N/A	11	5	16
8.0 What does your teacher do to help you learn to read?	Several practices	4	1	5
	Provides books	1	5	6
	Word recognition strategies	24	22	46
	Listens to us read	4	6	10
	Supplies unknown words	8	5	13
	Reads to us	3	1	4
	Other	3	5	8

*N/A indicates that the question is irrelevant since Question 5.0 was answered in the negative.

Table 20. Student Interview Questions and Coded Responses (cont'd.)

9.0 When you're reading and you reach a word that you don't know, what do you do?	Skip the word and go on	5	7	12
	Ask for help	6	9	15
	Sound it out	28	23	51
	Chunking	5	4	9
	Look at the pictures	2	0	2
	Don't know	1	2	3
9.1 Is there anything else you can do if you still can't figure out the word?	Analogy to known word	1	0	1
	Sound it out	5	7	12
	Skip the word and go on	6	5	11
	Several strategies	13	5	18
	Chunking	6	2	8
	Look at the pictures	0	1	1
	Ask someone	3	7	10
	Context	1	0	1
	Substitute another word and go on	1	0	1
	Other	2	6	8
	Don't know	9	12	21

context cues: “You have to look at the pictures and look at the words. Look at the words that are around the word and it might help you figure out what the word is.” Both groups listed practice and decoding skills high on the list. Some of the most frequently cited decoding skills were “chunking” (dividing a word into smaller parts), stretching out the word by saying it very slowly, “sounding it out,” and looking for similarities to known words. These are all techniques that effective readers use to decode, and all relate to phonics concepts beyond letter/sound matching. Nearly a quarter of weak readers stated that they did not know what one needs to do to be a good reader.

More weak readers than strong readers replied that, yes, reading was sometimes hard for them, however about half of the strong readers replied that they also experienced occasional difficulty. “Hard words” was the reason given by most students, when asked what caused them reading difficulty. Only two students out of the entire group mentioned comprehension issues in answer to this question. This appears to indicate that young students of this age still conceptualize reading as mostly “figuring out words,” rather than constructing meaning from print. This perception is borne out when students replied to the question, “What does your teacher do to help you learn to read?” The vast majority of answers related to word recognition strategies, although in classroom observations, many teachers were engaged in helping children to comprehend the text through questioning, discussion, and prediction activities.

The most common first answer given when asked what students do when encountering unknown words was “sound it out.” Other less prevalent answers included skipping the word and going on, chunking, and asking for help. After students had answered this question, the scenario was posed to them, “Suppose you try that and you still can’t figure out the word. What else could you do?” Strong readers were more than twice as likely to suggest several other strategies, while weak readers appeared to be stuck for an answer. Equal numbers of strong and weak readers replied that they would ask for help or persist in “sounding it out.”

Summarizing the interview results, students in PDP schools:

- enjoy reading, have access to books at home, and see themselves as successful readers.
- read outside of school, have books in their homes, and are read to by family members
- think that reading and being a good reader is mostly about figuring out words
- believe that practice is important in becoming a good reader
- if strong in reading, know several word recognition strategies
- if weak in reading, are less likely to know what it takes to become a good reader or have alternative strategies when stuck

RTI Rubric Scores

The Reading Teacher Inventory (RTI) is similar, but not identical to, the Reading Teacher Preparation Inventory (RTPI). The RTI is designed to assess the quality of the teaching of reading whereas the RTPI assesses the quality of preparation for teaching reading. Whereas the RTPI has nineteen competencies, the RTI has only fifteen. The four extra competencies on the RTPI comprise the Academic/Experiential Strand of the rubric, targeting college coursework in reading/language arts and preservice experience working with children in reading and phonics. The ten competencies in the General Reading Strand and the five competencies in the Phonics Strand are very similar on both instruments. However, depth levels for each competency differ on the two rubrics. Whereas the RTPI depth levels correspond with increasing levels of knowledge, the majority of RTI depth levels correspond with increasing levels of individualization in the delivery of reading and phonics instruction.

Like the RTPI, each of the reading teacher competencies of the RTI is scored 0 to 3. A total score can be generated for each of the two strands, as well as an overall total score. The maximum possible score for the General Reading Strand is 30 (3 points for each of the 10 competencies). The maximum possible score for the Phonics Strand is 15 (3 points for each of the 5 competencies), and the maximum overall score is 45 (3 points for each of the 15 competencies). As with the RTPI, the scores of all competencies were weighted equally. For most of the competencies on the RTI, a score of zero was assigned if the competency was not observed in the classroom or reported through interview or teacher-completed checklist. A score of 1 was assigned if the competency was observed in large group instruction. A score of 2 was assigned if the competency was observed in large and small group instruction. A score of 3 was assigned if the competency was observed in one-on-one attention to individual student needs. Recognizing that children have diverse needs and background experiences, a score of 3 on RTI competencies indicates superior delivery of reading/language arts instruction, a score of 2 indicates acceptable delivery, and a score of 1 or less indicates inadequate quality in the delivery of reading/language arts instruction. An RTPI Total Score of 30 or higher is associated with adequate to superior instruction while a total score of less than 30 is associated with less than adequate to adequate instruction. Criteria for assigning depth levels for each competency on the RTI are specified in Appendix J. The analyses for the RTI Rubric scores were as follows:

1. RTI Total Scores were computed, including means and standard deviations, for all PDP schools, for each cohort, and for individual schools and classrooms.
2. For each individual competency and for each of the two strands, a distribution of scores, including the mean and standard deviation, was computed for all PDP schools, for each cohort, and for individual schools.

Sources for the RTI rubric included hour-long direct observation of classrooms in which reading and phonics lessons were taught, interviews of teachers, principal, and sometimes literacy coordinator, and teacher-completed Classroom Environment Checklists. When rubric scores were entered into the Reading Teacher Assessment Database (RTAD), evaluators noted the source of the

evaluation basis as well as the evidence for assigning a particular depth level score. Some items on the RTI rubric relied on interview and teacher-completed checklist data, since these competencies could not be assessed in a one-hour classroom observation. The three items that fall into this category are GRS8 (Using multiple assessment indicators to monitor reading progress and to inform instruction), GRS9 Communicating pertinent information with parents and support personnel, and PS3 Understanding the scope and sequence of effective phonics instruction.

Reliability. Inter-rater reliability for scoring the RTI was estimated by having two evaluators observe in School I and independently score the RTI rubric for classrooms in kindergarten, first, and second grade. Essentially a reliability in this situation is the extent of agreement between the two raters in independently arriving at the RTI competency scores. When classroom and school scores were compared, inter-rater competency scores were within acceptable limits for reliability. Raters scored each of the 45 competencies on a scale of zero to 3, with three being the highest rating. When ratings were compared, identical scores were labeled Agreement, scores differing by one point were labeled Near Agreement, and scores differing by more than one point were labeled Disagreement. Of the 45 competencies scored, there was Agreement on 40 items (88.89% of total), Near Agreement on 3 (6.67% of total), and Disagreement on 2 (4.44% of total). Individual classroom competency scores and total school score are listed below. Classroom and total scores were within less than 9% of each other, an extent of agreement considered satisfactory for this type of scoring. Scores are listed below.

	<u>Rater 1</u>	<u>Rater 2</u>
Kindergarten	32.00	30.00
First Grade	38.00	35.00
Second Grade	27.00	29.00
School Mean	32.33	31.33

RTI Total Scores

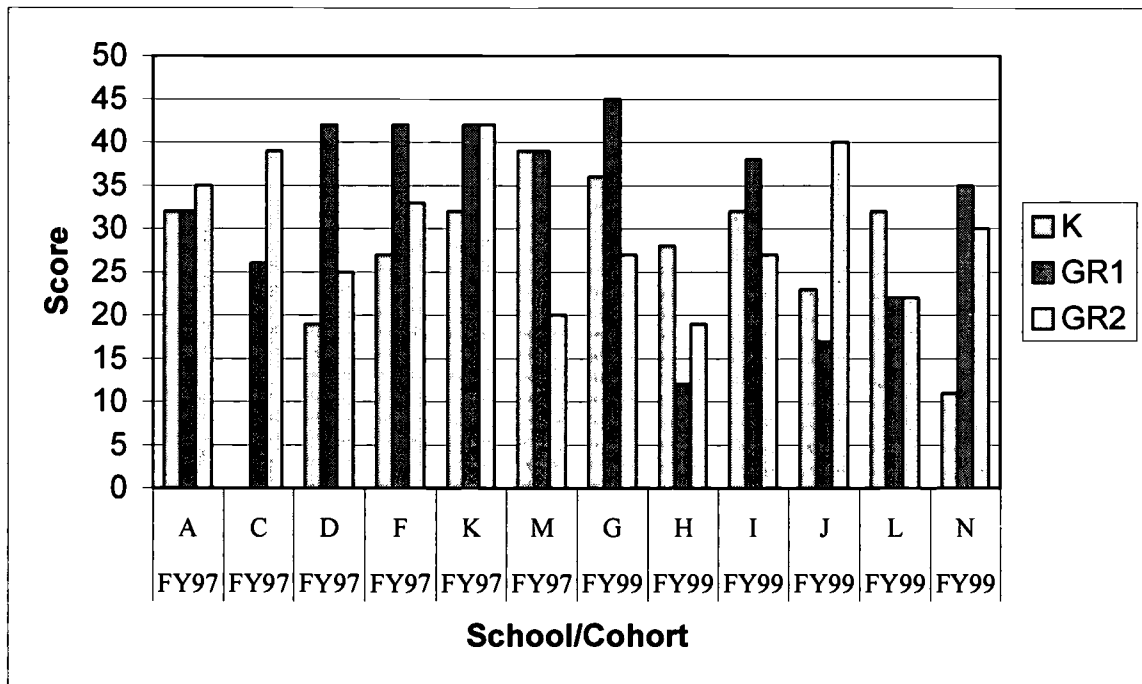
The means for RTI Total Scores were higher and less variable for the FY97 Cohort than for the FY99 Cohort. (See Table 21 and Figure 3.) The FY97 Cohort mean was 33.25 with a standard deviation of 3.22 while the FY99 Cohort mean was 27.56 with a standard deviation of 5.78. Only one school in the FY97 Cohort earned a total score of less than 30, indicating that most reading and

Table 21. Means and Standard Deviations for RTI Rubric Total Scores by Cohort, School and Grade

Cohort	School	Kind.	GR1	GR2	Mean	StDev
FY97	A	32.00	32.00	35.00	33.00	1.73
FY97	C	*	26.00	39.00	32.50	9.19
FY97	D	19.00	42.00	25.00	28.67	11.93
FY97	F	27.00	42.00	33.00	34.00	7.55
FY97	K	32.00	42.00	42.00	38.67	5.77
FY97	M	39.00	39.00	20.00	32.67	10.97
FY97 Cohort Mean					33.25	
FY97 Cohort StDev					3.22	
FY99	G	36.00	45.00	27.00	36.00	9.00
FY99	H	28.00	12.00	19.00	19.67	8.02
FY99	I	32.00	38.00	27.00	32.33	5.51
FY99	J	23.00	17.00	40.00	26.67	11.93
FY99	L	32.00	22.00	22.00	25.33	5.77
FY99	N	11.00	35.00	30.00	25.33	12.66
FY97 Cohort Mean					27.56	
FY99 Cohort StDev					5.78	

*There is no kindergarten in School C.

Figure 3. RTI Total Score Distribution by School and Grade



language arts teaching was adequate to superior. Four of the six schools in the FY99 Cohort earned scores of less than 30, indicating that most reading/language arts teaching was inadequate to adequate. The highest scoring school was School K, with a mean of 38.67 and a standard deviation of 5.77. The lowest scoring school was School H, with a mean of only 19.67 and a standard deviation of 8.02. The large numbers in standard deviations within schools indicate that in most of the observed schools, there was considerable variation in the quality of reading/language arts instruction among classrooms in the same school. The school with the most consistent total scores among classrooms was School A. Schools with the most inconsistent total scores among classrooms were Schools N, J, D, and M.

RTI Competency Scores

All Schools Competencies. Table 22 and Figure 4 display the relative strength in the RTI competencies for each cohort and for all schools combined. For the twelve PDP schools, the highest performance was on GRS8 Using multiple assessment indicators to monitor reading progress and inform instruction, with a mean score of 2.44 and a standard deviation of .54 among schools and .98 among classrooms. Schools performed most poorly on GRS10 Understanding research and advancing the field of reading, with a mean of just 1.44 and a standard deviation of .66 among schools and 1.04 among classrooms. Schools scored in the adequate to superior range on nine of the fifteen competencies and inadequate to adequate on six of the competencies. GRS4 Providing opportunities for extended authentic reading and writing experiences and GRS9 Communicating pertinent information with parents and support personnel were scored nearly as high as GRS8, indicating that many schools were superior in using assessment as instructional tools, providing reading and writing experiences that related to children’s experiences and feelings, and consulting frequently with parents and literacy support personnel. Weak scores on PS4 and PS5 indicate that

many teachers do not monitor student awareness of the literacy strategies they use, nor do they demonstrate a full understanding of the relationship between reading comprehension/writing fluency and automaticity in word recognition.

Table 22. Means and Standard Deviation for RTI Competency Scores Over Cohorts and All Schools

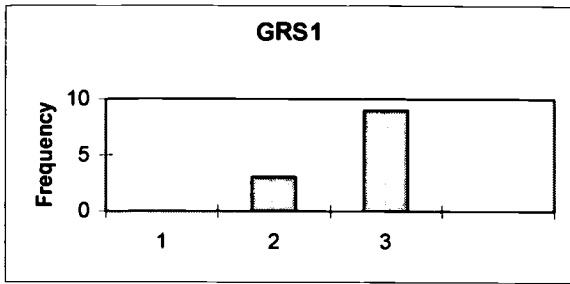
RTI Competency	FY97	FY99	All Schls ¹	StDev All Clsrms ²
GRS1 Understanding of the reading process as complex, interactive and constructive	2.47/0.87	2.06/0.87	2.26/0.52	0.89
GRS2 Understanding how language and cognitive development relate to literacy	2.14/0.73	1.67/1.08	1.90/0.63	0.95
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.53/0.80	2.00/1.03	2.26/0.52	0.95
GRS4 Providing opportunities for extended authentic reading and writing experiences	2.58/0.62	2.22/0.94	2.40/0.42	0.81
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.28/0.69	1.94/0.80	2.11/0.46	0.76
GRS6 Understanding how readers use multiple cueing strategies in reading process	1.92/0.83	1.67/0.69	1.79/0.42	0.76
GRS7 Applying different comprehension strategies for different purposes	2.03/1.12	1.67/0.97	1.85/0.59	1.04
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	2.78/0.66	2.11/1.13	2.44/0.54	0.98
GRS9 Communicating pertinent information with parents and support personnel	2.64/0.49	2.06/0.64	2.35/0.40	0.64
GRS10 Understanding research and advancing the field of reading	1.50/1.07	1.39/1.04	1.44/0.66	1.04
PS1 Knowing essential rules, patterns, and concepts of phonics	2.17/0.73	2.00/0.77	2.08/0.38	0.74
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33/0.61	1.78/0.81	2.06/0.40	0.76
PS3 Understanding the scope and sequence of effective phonics instruction	2.39/0.86	1.89/1.08	2.14/0.70	0.99
PS4 Recognizing the role of metacognition in phonics instruction	1.69/0.92	1.61/1.20	1.65/0.70	1.06
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.81/0.81	1.50/0.86	1.65/0.45	0.84
Total Score:	33.25/3.22	27.56/5.78	30.40/5.36	
% of Max	73.89%	61.23%	67.56%	

¹Standard deviations between schools reflect the variations of school means

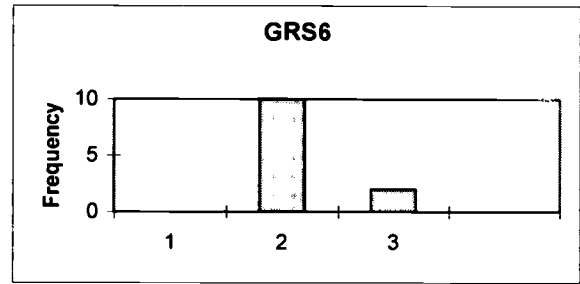
²Standart deviations among classrooms reflect the variations between all classrooms in the study, without regard to school means

BEST COPY AVAILABLE

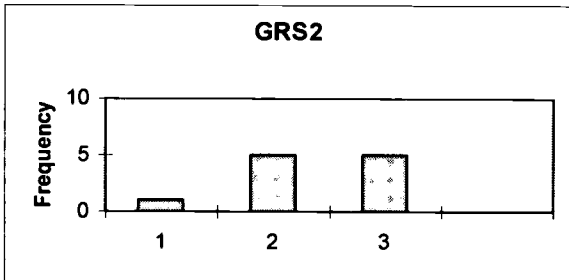
Figure 4. Distributions of RTI Competency Scores Over All Schools in the Study



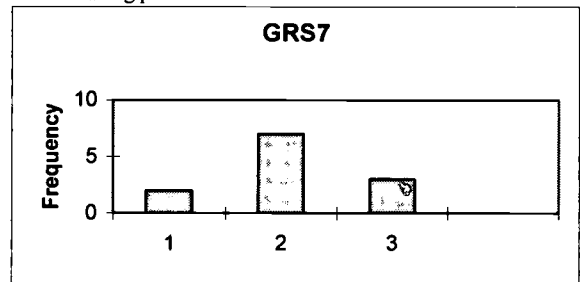
GRS1. Understanding the nature of the reading process as complex, interactive, and constructive



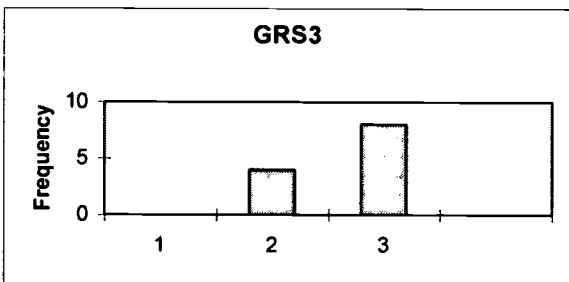
GRS6. Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process



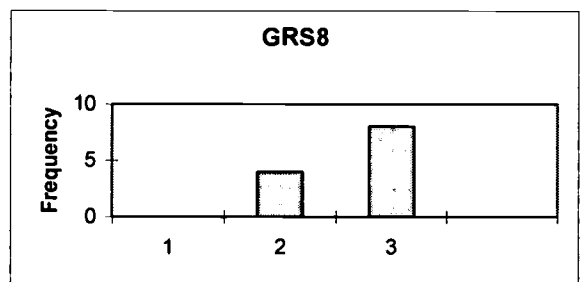
GRS2. Knowing how language development and cognition relate to literacy development



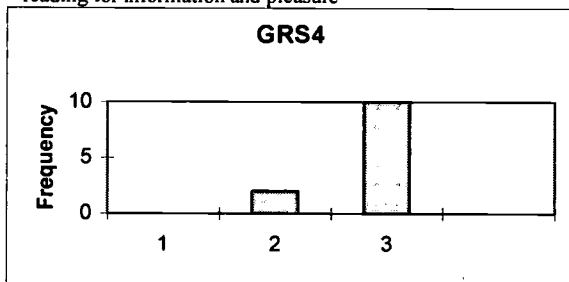
GRS7. Helping readers apply different comprehension strategies for different purposes



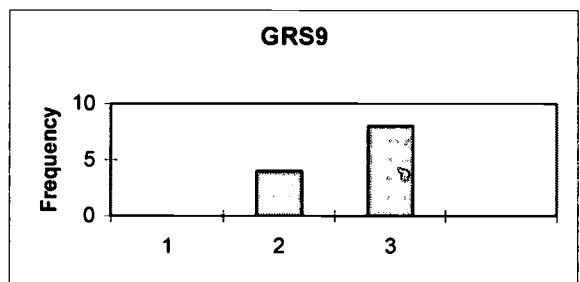
GRS3. Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure



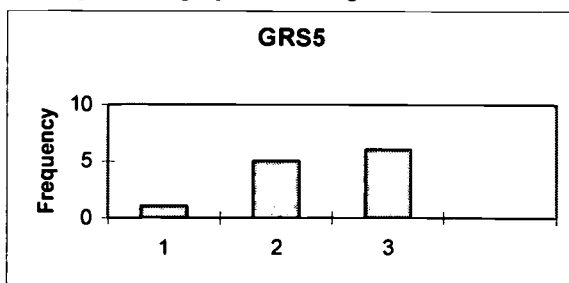
GRS8. Using multiple assessment indicators to monitor reading progress and to inform instruction



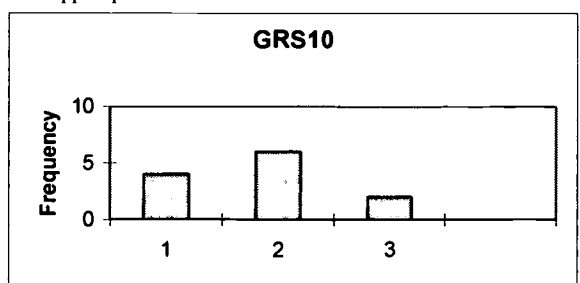
GRS4. Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum



GRS9. Communicating pertinent information with parents and support personnel

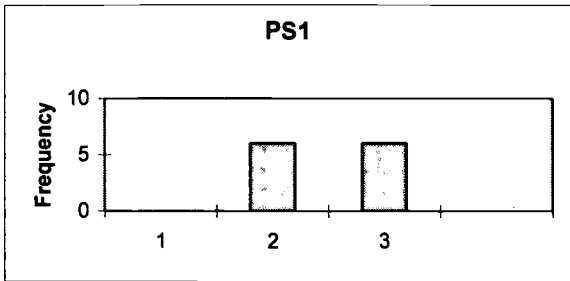


GRS5. Recognizing and addressing the multiple causes of reading difficulties

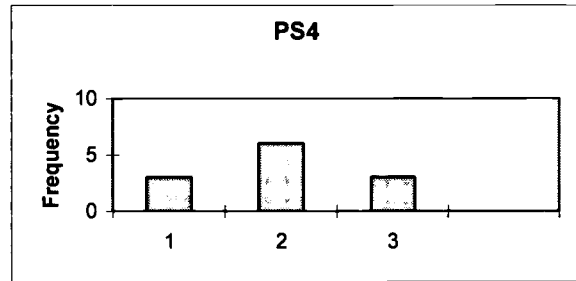


GRS10. Understanding and applying research on reading

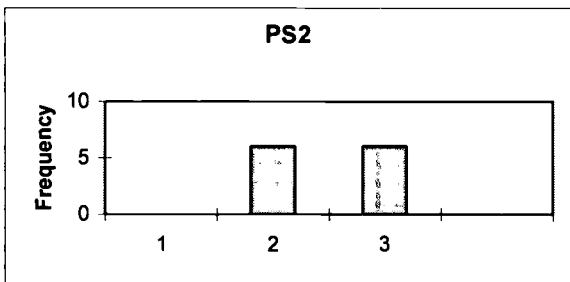
Figure 4. Distributions of RTI Competency Scores Over All Schools (continued)



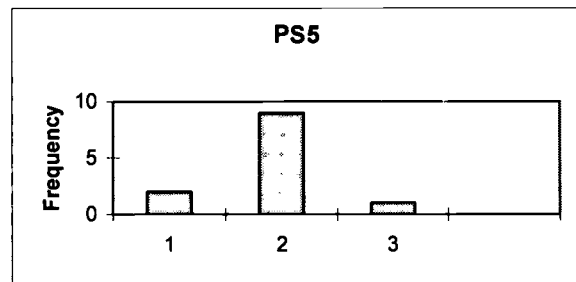
PS1. Knowing essential phonics rules, spelling patterns, and concepts



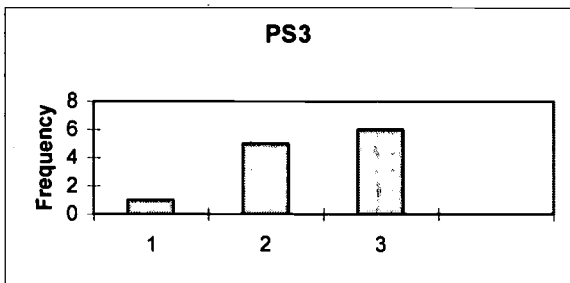
PS4. Recognizing the role of metacognition in phonics instruction



PS2. Recognizing the importance of phonemic and phonological awareness in emergent literacy



PS5. Understanding the importance of phonics automaticity in reading comprehension and writing fluency



PS3. Understanding the scope and sequence of effective phonics instruction

Cohort Group Competencies. Table 23a indicates that on the General Reading Strand of the RTI, the FY97 Cohort scored most strongly in GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction, with a mean of 2.78 and a standard deviation of .66. Other competencies in which the FY97 Cohort scored well were GRS9 Communicating pertinent information with parents and support personnel (mean 2.64/s.d. .49), GRS4 Providing opportunities for extended authentic reading and writing experiences (mean 2.58/s.d. .62), GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure (mean 2.53/s.d. .80), and GRS1 Understanding of the reading process as complex, interactive and constructive (mean 2.47/s.d. .87). In the Phonics Strand of the RTI, the FY97 cohort scored most strongly in PS3 Understanding the scope and sequence of phonics instruction (mean 2.39/s.d. .86), PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy (mean 2.33/s.d. .61), and PS1 Knowing essential rules, patterns, and concepts of phonics (mean 2.17/s.d. .73). The lowest scores for the FY97 Cohort were GRS10 Understanding research and advancing the field of reading, PS4 Recognizing the role of metacognition in phonics instruction, and PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency.

Table 23b indicates that on the RTI General Reading Strand, the FY99 Cohort had no mean scores above 2.5. This cohort scored most strongly in GRS4 Providing opportunities for extended authentic reading and writing experiences (mean 2.22/s.d. .94). Those competencies in which the FY99 Cohort earned a 2.0 or above were GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction (mean 2.11/s.d. 1.13), GRS9 Communicating pertinent information with parents and support personnel (mean 2.06/s.d. .87), GRS1 Understanding of the reading process as complex, interactive and constructive (mean 2.06/s.d. .64), GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure (mean 2.0/s.d. 1.03), and PS1 Knowing essential rules, patterns, and concepts of phonics (mean 2.0/s.d. .77).

The FY97 Cohort outperformed the FY99 Cohort on every one of the fifteen RTI competencies. (See Table 24.) Even in the FY99 Cohort's highest scoring competency, GRS4, the FY97 Cohort scored 2.58 compared to a score of 2.22 for the FY99 Cohort. The competency with the greatest spread in scores between cohorts was GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction, with a point spread of .67 between cohorts. Despite the differences in point scores, the top five competencies for both cohorts included the same items—GRS8, GRS9, GRS4, GRS3, and GRS1--although the cohorts differed in how these were ranked within the set of five. The lowest scoring competencies for both cohorts were, from lowest to highest, GRS10, PS4, PS5, GRS7, GRS6, and GRS2. In these six low-scoring competencies, cohorts again differed slightly in how they were ranked within the set, although GRS10 Understanding research and advancing the field of reading was the lowest ranking competency for both groups. Wide standard deviations confirm that there is considerable variation among schools in each cohort.

Table 23a. Pareto Distribution of Competency Means for FY97 Cohort Schools

RTI Competency	Cohort ² Mean	S.d.
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	2.78	0.66
GRS9 Communicating pertinent information with parents and support personnel	2.64	0.49
GRS4 Providing opportunities for extended authentic reading and writing experiences	2.58	0.62
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.53	0.80
GRS1 Understanding of the reading process as complex, interactive and constructive	2.47	0.87
PS3 Understanding the scope and sequence of effective phonics instruction	2.39	0.86
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33	0.61
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.28	0.69
PS1 Knowing essential rules, patterns, and concepts of phonics	2.17	0.73
GRS2 Understanding how language and cognitive development relate to literacy	2.14	0.73
GRS7 Applying different comprehension strategies for different purposes	2.03	1.12
GRS6 Understanding how readers use multiple cueing strategies in the reading process	1.92	0.83
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.81	0.81
PS4 Recognizing the role of metacognition in phonics instruction	1.69	0.92
GRS10 Understanding research and advancing the field of reading	1.50	1.07

Table 23b. Pareto Distribution of Competency Means for FY99 Cohort Schools

RTI Competency	Cohort ² Mean	S.d.
GRS4 Providing opportunities for extended authentic reading and writing experiences	2.22	0.94
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	2.11	1.13
GRS9 Communicating pertinent information with parents and support personnel	2.06	0.87
GRS1 Understanding of the reading process as complex, interactive and constructive	2.06	0.64
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.00	1.03
PS1 Knowing essential rules, patterns, and concepts of phonics	2.00	0.77
GRS5 Recognizing and addressing the multiple causes of reading difficulties	1.94	0.80
PS3 Understanding the scope and sequence of effective phonics instruction	1.89	1.08
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	1.78	0.81
GRS2 Understanding how language and cognitive development relate to literacy	1.67	1.08
GRS6 Understanding how readers use multiple cueing strategies in the reading process	1.67	0.69
GRS7 Applying different comprehension strategies for different purposes	1.67	0.97
PS4 Recognizing the role of metacognition in phonics instruction	1.61	1.20
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.50	0.86
GRS10 Understanding research and advancing the field of reading	1.39	1.04

1. Each Competency score represents the average of individual scores across the 3 grades at the specific school.
2. Cohort Mean represents the average of all the cohort's school scores for a specific competency.

Table 24. Point Spread Between FY97 Cohort and FY99 Cohort on RTI Competencies

RTI Competency	Spread FY97- FY99
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	0.67
GRS9 Communicating pertinent information with parents and support personnel	0.58
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	0.55
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	0.53
PS3 Understanding the scope and sequence of effective phonics instruction	0.50
GRS2 Understanding how language and cognitive development relate to literacy	0.47
GRS1 Understanding of the reading process as complex, interactive and constructive	0.41
GRS4 Providing opportunities for extended authentic reading and writing experiences	0.36
GRS7 Applying different comprehension strategies for different purposes	0.36
GRS5 Recognizing and addressing the multiple causes of reading difficulties	0.34
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	0.31
GRS6 Understanding how readers use multiple cueing strategies in the reading process	0.25
PS1 Knowing essential rules, patterns, and concepts of phonics	0.17
GRS10 Understanding research and advancing the field of reading	0.11
PS4 Recognizing the role of metacognition in phonics instruction	0.08

Individual School Competencies. The mean RTI competency scores for each school are listed in Tables 25a and 25b. Just as the RTI Total scores varied between classrooms within a single school, so did the individual competency scores. However, scores on the individual competencies varied less than total scores for most schools. Standard deviations were less than one point for a majority of competency scores. Competencies with the least variation were GRS9 Communicating pertinent information with parents and support personnel, with 10 of the 12 schools varying less than one point and GRS5 Recognizing and addressing the multiple causes of reading difficulties, with 9 of the 12 schools varying less than one point. Schools that scored most consistently across classrooms on the RTI competencies were School A and School K. Interestingly, School K had the highest mean 4th grade reading proficiency pass rate for 1997-2001. School A, in addition to scoring consistently in the RTI competencies, scored fourth highest in RTI Total Score and 2nd highest in 4th grade reading proficiency gains since 1997. School C and School I had very little variation in competency scores, as well. Similarly, both schools did well on RTI Total Scores and 4th grade reading proficiency gains since 1997.

Comparing RTPI and RTI Competencies

Since the rubrics used to assess reading teacher preparation and practicing teachers contained the same competencies in general reading and phonics, a comparison between the teacher candidates and teachers in PDP schools can be made. Both teacher preparation programs and practicing teachers scored well in using assessment to inform instruction (GRS8), providing extended authentic opportunities to read and write (GRS4), and understanding how language and cognitive development relate to literacy (GRS3). Both groups scored poorly in understanding and applying research (GRS10), understanding the recognizing the role of metacognition in phonics instruction (PS4) and understanding how automaticity in word recognition affects comprehension and writing fluency. Notable differences in scores were found with respect to communicating with parents and literacy support personnel (GRS9). In this area practicing teachers scored high while institutions scored low. While practicing teachers appear quite

well-versed in the basic phonics rules and concepts (PS1), RTPI tests indicate that teacher candidates have not achieved mastery in this area.

Table 25a. RTI Competency Score Means and Standard Deviation for FY97 Cohort Schools

RTI Competency	School A	School C	School D	School F	School K	School M
GRS1 Understanding of the reading process as complex, interactive and constructive	3.00/0.00	2.50/0.71	2.33/1.15	2.33/1.15	2.33/1.15	2.33/1.15
GRS2 Understanding how language and cognitive development relate to literacy	2.00/0.00	1.50/0.71	2.00/1.00	2.33/0.58	2.33/1.15	2.67/0.58
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67/0.58	2.50/0.71	2.00/1.73	2.33/0.58	3.00/0.00	2.67/0.58
GRS4 Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2.67/0.58	2.50/0.71	2.33/0.58	2.67/0.58	3.00/0.00	2.33/1.15
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.00/0.00	2.00/1.41	2.33/0.58	2.67/0.58	2.00/1.00	2.67/0.58
GRS6 Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1.33/0.58	1.50/0.71	1.67/1.15	2.00/1.00	2.67/0.58	2.33/0.58
GRS7 Helping readers apply different comprehension strategies for different purposes	2.00/1.00	2.50/0.71	1.33/1.53	1.67/1.15	3.00/0.00	1.67/1.53
GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction	3.00/0.00	3.00/0.00	2.33/1.15	3.00/0.00	3.00/0.00	2.33/1.15
GRS9 Communicating pertinent information with parents and support personnel	2.33/0.58	2.50/0.71	2.67/0.58	2.33/0.58	3.00/0.00	3.00/0.00
GRS10 Understanding and applying research on reading	2.33/1.15	2.00/1.41	0.67/0.58	1.67/1.15	1.67/1.15	0.67/0.58
PS1 Knowing essential phonics rules, spelling patterns, and concepts	2.00/0.00	2.00/0.00	1.67/1.15	2.33/0.58	2.67/0.58	2.33/1.15
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33/0.58	2.00/0.00	2.67/0.58	2.33/0.58	2.33/1.15	2.33/0.58
PS3 Understanding the scope and sequence of effective phonics instruction	2.67/0.58	3.00/0.00	1.33/1.53	2.33/0.58	3.00/0.00	2.00/0.00
PS4 Recognizing the role of metacognition in phonics instruction	1.00/1.00	1.50/0.71	1.67/1.15	2.00/0.00	2.67/0.58	1.33/1.15
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67/0.58	1.50/0.71	1.67/1.15	2.00/1.00	2.00/1.00	2.00/1.00
Total	33.00/1.73	32.50/9.19	28.67/11.9 9	34.00/7.5 5	38.67/5.77	32.67/10.9 7
% of Max	73.33%	72.22%	63.70%	75.56%	85.93%	72.59%

1. Each Competency score represents the average of individual scores across the 3 grades at the specific school.
2. Cohort Mean represents the average of all the cohort's school scores for a specific competency.
3. Maximum score for each competency is 3.

Table 25b. RTI Competency Score Means and Standard Deviation for FY99 Cohort Schools

RTI Competency	School G	School H	School I	School J	School L	School N
GRS1 Understanding of the reading process as complex, interactive and constructive	2.33/1.15	1.33/0.58	3.00/0.00	2.00/1.00	2.33/0.58	1.33/0.58
GRS2 Understanding how language and cognitive development relate to literacy	2.33/0.58	0.33/0.58	2.33/0.58	1.33/1.53	2.00/1.00	1.67/1.15
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67/0.58	2.00/1.00	2.33/1.15	1.33/1.53	2.33/0.58	1.33/1.15
GRS4 Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2.33/1.15	2.00/1.00	2.67/0.58	2.67/0.58	2.33/0.58	1.33/1.53
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.33/0.58	1.00/1.00	2.33/0.58	1.67/0.58	2.00/1.00	2.33/0.58
GRS6 Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2.00/1.00	1.33/0.58	1.33/0.58	1.67/0.58	1.67/0.58	2.00/1.00
GRS7 Helping readers apply different comprehension strategies for different purposes	2.00/1.00	2.00/1.00	2.33/1.15	1.67/1.15	1.00/0.00	1.00/1.00
GRS8 Using multiple assessment indicators to monitor reading progress and to inform instruction	3.00/0.00	1.67/1.15	2.00/1.00	1.67/1.53	2.33/1.15	2.00/1.73
GRS9 Communicating pertinent information with parents and support personnel	2.33/0.58	2.00/1.00	2.00/0.00	2.33/0.58	1.67/0.58	2.00/1.00
GRS10 Understanding and applying research on reading	2.33/1.15	0.33/0.58	1.67/0.58	1.00/0.00	1.67/1.15	1.33/1.53
PS1 Knowing essential phonics rules, spelling patterns, and concepts	2.33/0.58	1.33/0.58	2.33/0.58	2.33/1.15	1.67/0.58	2.00/1.00
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.00/1.00	1.67/1.15	2.33/0.58	1.33/0.58	1.67/1.15	1.67/0.58
PS3 Understanding the scope and sequence of effective phonics instruction	3.00/0.00	1.00/1.00	1.67/0.58	2.33/1.15	1.33/0.58	2.00/1.73
PS4 Recognizing the role of metacognition in phonics instruction	2.67/0.58	1.00/1.00	2.33/0.58	1.67/1.53	0.33/0.58	1.67/1.53
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2.33/0.58	0.67/0.58	1.67/0.58	1.67/1.53	1.00/0.00	1.67/0.58
Total	36.00/9.00	19.67/8.02	32.33/5.51	26.67/11.93	25.33/5.77	25.33/12.66
% of Max	80.00%	43.70%	71.85%	59.26%	56.30%	56.30%

1. Each Competency score represents the average of individual scores across the 3 grades at the specific school.
2. Cohort Mean represents the average of all the cohort's school scores for a specific competency.
3. Maximum score for each competency is 3.

Classroom Environment Priorities

At each site visitation, observed teachers were asked to complete a Classroom Environment Checklist (see Appendix K) composed of 36 research-identified features of literacy supportive classrooms. Checklist completers were asked to mark a plus in the first column if the element was present in their room and a zero in that column if the element was not present. In the second column of the checklist, teachers were asked to prioritize the five most important elements in their classrooms and mark these with a plus. In the last column of the checklist, teachers were asked to mark a plus by any elements that they wished to incorporate into their classrooms in the future. Principals and literacy coordinators, when available, were also asked to complete the checklist. For these administrators, however, items in the first column were to be checked if present in more than one classroom in the school. In column 2, administrators were to prioritize the five most prevalent features of their school, and in column 3, they were to list features that they would like to develop at the school in the future. In addition, a Classroom Environment Checklist was completed by the PDP evaluator for every observed classroom. (See School Snapshots for an accounting of each classroom's environmental elements, as reported and observed.)

The first column of the Checklist did not provide usable data since nearly every item was checked as present by teachers and principals. The second column, however, was very useful in clarifying the priorities of teachers and administrators. Table 26 displays a comparison of FY97 Cohort and FY99 Cohort results after summing observed teachers' and principals' top five priorities across the entire cohort. The most frequently selected item in the FY97 Cohort was extended blocks of time for reading and writing. The most frequently selected item for the FY99 Cohort was reading aloud to students. Interestingly, four of the five top five choices of each cohort were the same, although the prioritized order and number of sources reporting each element as a major strength differed between cohorts. These most popular items were extended blocks of time for reading and writing, reading aloud to students, classroom library, and positive climate.

One item selected in the top five for the FY97 Cohort is small group instruction. This item has direct bearing on how the classroom teachers fared on the RTI competencies. In times past, teachers were advised to "teach to the middle," directing the bulk of their attention to the "average" learner. Teachers who engage in this practice may be guilty of neglecting those students who are most in need and failing to challenge those who are not reaching their potential. Most of the PDP schools with poor 4th grade reading proficiency pass rates are schools with large numbers of "at-risk" students. Research indicates that such children frequently benefit from both homogeneous and heterogeneous small group instruction.

There were several items that were not selected by any teachers or principals in either cohort. These items were student choice or student interests, student self-assessment, student work displayed, and student-led activities. A common thread among these non-choices is a degree of independence, responsibility, and recognition for students. Placing these items low on the priority list would seem to indicate highly teacher-directed classrooms in which students are extrinsically, rather than intrinsically motivated. It should be remembered, however, that student autonomy and recognition is not necessarily absent from these schools and classrooms, since checklist completers were restricted to prioritizing only five items from the list of 36. Had they been given the choice of selecting ten top priorities, these student-related items might have been included.

It was noteworthy that SSR (Silent Sustained Reading) was not selected by the FY99 Cohort, yet this item was within the top eight choices of the FY97 Cohort. In addition to the importance of SSR (silent sustained reading) in providing adequate time to practice reading, it is another area in which students might be allowed to have choices and become self-motivated. Oral language activities were

also very low on the priority list. This is relevant because several of the teachers and principals stated in interviews that many students came to their school with very poor language skills. Oral language was also one of the least likely language arts to be assessed, according to teacher and principal interviews. In fact, when the question of whether and how oral language was assessed arose in the interview process, many teachers and principals appeared taken aback. It seemed that this was not an area of assessment with which they were familiar. Nevertheless, research indicates that children's development of written language ability in both reading and writing is highly correlated with their facility in oral language, especially in the early childhood years.

Table 26. Frequencies for Classroom Environment Checklist Elements by Cohort

FY97 Cohort		FY99 Cohort	
Element	Number Of Sources Reporting Element as 1 Of 5 Top Strengths	Element	Number Of Sources Reporting Element as 1 Of 5 Top Strengths
extended blocks of time for reading/writing	11	reading aloud to students	8
individualized attention to students	8	extended blocks of time for reading/writing	7
small group instruction	8	positive climate	7
classroom library	7	classroom library	5
positive climate	6	print-rich environment	5
reading aloud to students	6	teacher circulates during reading/writing	5
learning centers	4	individualized attention to students	4
SSR (Silent Sustained Reading)	4	multi-modality (visual, auditory, tactile)	4
integrating language with music/art/drama	3	neatness and organization	4
multi-modality (visual, auditory, tactile)	3	poetry or wordplay	4
neatness and organization	3	shared or choral reading	4
open-ended writing assignments	3	big books	3
shared or choral reading	3	cooperative/collaborative learning	3
technology or multi-media	3	journaling	3
big books	2	flexible scheduling	2
comfortable reading area	2	learning games	2
cooperative/collaborative learning	2	independent reading	2
flexible scheduling	2	language experience	2
language experience	2	multicultural activities	2
print-rich environment	2	open-ended writing assignments	2
recognition of achievement/progress	2	recognition of achievement/progress	2
teacher circulates during reading/writing	2	small group instruction	2
activities extended beyond the classroom	1	word walls	2
grouped desks/tables	1	grouped desks/tables	1
independent reading	1	independent research	1
journaling	1	learning centers	1
oral language activities	1	activities extended beyond the classroom	0
poetry or wordplay	1	comfortable reading area	0
word walls	1	integrating language with music/art/drama	0
learning games	0	oral language activities	0
independent research	0	SSR (silent sustained reading)	0
multicultural activities	0	student choice or student interests	0
student choice or student interests	0	student self-assessment	0
student self-assessment	0	student work displayed	0
student work displayed	0	student-led activities	0
student-led activities	0	technology or multi-media	0

PDP School Snapshots

To obtain a clearer picture of each PDP school's environment, it was important to supplement the quantifiable data of checklists, tables, and charts with descriptive data obtained through direct observation. Accordingly, case study narratives were developed to provide a snapshot of each of the twelve PDP schools.

School A Snapshot

"The primary thing is that I have people working in this school who want to be here to meet the challenge of working with urban youngsters and making a difference, even if the family support is not there. The teachers are the deciding factor for these children."

--School Principal

The small urban population of this FY97 Cohort School is heavily weighted in low-income minorities. Students come to school with weak vocabulary skills that cause major problems with reading comprehension. Teachers here expend considerable effort in trying to build the student background necessary for successful reading. This school has integrated *Logical Phonics* with the *Guided Reading* and *Balanced Literacy* that have been adopted district-wide. After-school and supplementary literacy programs have been enthusiastically supported by the school staff and by a principal who leaves no stone unturned when seeking help for her struggling readers. The tutoring program, *Grab a Book, Grab a Child*, is one of an array of novel, diverse, and well-organized interventions. The staff of this school is dedicated, experienced, and well-versed in current research-supported trends in literacy education. They have participated in extensive staff development training in *Reading Renaissance*, *Balanced Literacy*, and *Guided Reading*. Students are assessed extensively and frequently in reading and writing. Teacher-developed rubrics supplement and modify district-developed rubrics to better match the unique needs of the students. All three teachers observed at this school received the highest rating for using both formal and informal assessments to monitor reading progress and inform instruction. (See Tables 27a and 27b.)

The kindergarten, like other primary grades, has regular intensive contact with literacy support personnel such as the Title I teacher. Instead of using a pull-out model, the Title I teacher is totally responsible for 6-8 at risk children. This lowers the student/teacher ratio for both classroom teacher and Title I teacher and has helped to bring the lowest performing readers up to grade level or above. The Intervention Specialist comes into the classroom for one full day and two half days per week. The speech teacher also visits weekly and conducts Language Experience lessons. Classrooms in all grades are homogeneously grouped. The kindergarten teacher uses a multi-sensory approach, especially with students who have language deficits. She feels strongly about the value of phonemic awareness activities, using whole body kinesthetics with a manual alphabet and tactile activities like placing cereal on the shape of a letter. Because of language deficits, the teacher works on oral communication by encouraging conversational interaction and verbalization. Students are pre-tested and screened every month for letter identification and writing. These assessments are conducted using a district rubric. Kindergarten students do write in journals but often just trace their sentences. The kindergarten class uses trade books for reading and does not use a basal reader.

The first grade teacher has analyzed the phonics program, searching for phonemic awareness patterns in the basal and adapting the scope and sequence of instruction to the students' needs, rather than following the pace of the basal (Harcourt Brace) which the teacher feels is too slow. The teacher "hams things up" by dramatizing phonics rules and personifying the sounds that the children are learning to read and spell. This creative teacher has written her own "vowel stories" to help the children learn the letter/sound correspondences. The class has special parties--pepper parties, squash parties--to build experience with language and concepts. Each child has a personal word bank to help in writing and spelling without having to ask for help from the teacher. The first grade classroom uses the Harcourt Brace basal readers. The first grade teacher is also the Title I teacher. There is ongoing communication with parents through weekly correspondence and suggestions for helping children practice at home the skills that they learn in school. In her own words, this teacher proclaims, "Research says this and research says that. I do my own research in my classroom."

The second grade classroom is composed of high ability students who love to read. The teacher uses a basal and tries to have the students read each story at least four different ways--with buddies, independently, chorally, or interactively. Like the first grade teacher, this teacher also makes up her own tests, adapted to the needs of her students. Phonics, comprehension, and writing are assessed continually. Guided reading does not seem appropriate for these advanced students, according to their teacher. Phonics is consciously integrated into content areas like science. Children are supported in using phonics to figure out content-related vocabulary. Students who are below the rest of the class get lots of one-on-one personal attention.

The principal at School A is very knowledgeable about literacy and about phonics in particular, holding a degree in reading. Because the students have a high turnover rate, the principal insists that all teachers use consistent terminology for phonics concepts so that students from other schools will be integrated into the program as quickly as possible. Parents are enticed into participating in literacy evenings and conferences through creative incentives like food and prizes. Items reported most often as strengths are classroom library, extended blocks of time for reading and writing, positive climate, and small group instruction. (See Table 28.) Individualized attention to students was observed in all three classrooms. This school has had a fairly steady increase in fourth grade reading proficiency pass rates since FY1997, achieving an overall gain of over 70%. (See Table 12.)

Table 27a. RTI Competency Scores for School A

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3	3	3	3.00
GRS2	Understanding how language and cognitive development relate to literacy	2	2	2	2.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	2	3	2.67
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2	3	3	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	2	2	2.00
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	1	2	1.33
GRS7	Helping readers apply different comprehension strategies for different purposes	2	1	3	2.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	3	3	3.00
GRS9	Communicating pertinent information with parents and support personnel	2	3	2	2.33
GRS10	Understanding and applying research on reading	3	3	1	2.33
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	2	2	2.00
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2	2	3	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2	3	3	2.67
PS4	Recognizing the role of metacognition in phonics instruction	2	0	1	1.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	2	2	1.67
Classroom Total		32	32	35	33

Table 27b. Competency Means Pareto Distribution for School A

RTI Competency		Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3.00
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	3.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.67
PS3	Understanding the scope and sequence of effective phonics instruction	2.67
GRS9	Communicating pertinent information with parents and support personnel	2.33
GRS10	Understanding research and advancing the field of reading	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2.00
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.00
GRS7	Applying different comprehension strategies for different purposes	2.00
PS1	Knowing essential rules, patterns, and concepts of phonics	2.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.33
PS4	Recognizing the role of metacognition in phonics instruction	1.00

1. Mean represents the mean of the scores for each of the three grades in the school..
2. Classroom Total represents the sum of all competency scores for the specific grade.

Table 28. Classroom Environment Checklist: Observed and Reported Frequencies for School A

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	4	0	0	+	+	+	+							
big books	3	0	1	+	+		+					+		
classroom library	4	2	2	+	+	+	+		+		+	+	+	
comfortable reading area	3	0	2	+	+	+						+	+	
cooperative/collaborative learning	4	0	1	+	+	+	+	+						+
extended blocks of time for reading/writing	4	2	0	+	+	+	+	+	+		+			
flexible scheduling	3	0	0	+	+		+							
learning games	3	0	1	+	+		+							+
grouped desks/tables	3	0	2	+	+		+					+		+
independent reading	4	1	2	+	+	+	+			+		+		+
independent research	2	0	0			+	+							
individualized attention to students	4	0	3	+	+	+	+	+				+	+	+
integrating language with music/art/drama	4	0	1	+	+	+	+	+				+		
journaling	4	0	1	+	+	+	+							+
language experience	3	1	2	+	+	+				+		+		+
learning centers	3	1	1	+	+		+				+	+		
multicultural activities	4	0	1	+	+	+	+					+		
multi-modality (visual, auditory, tactile)	4	1	2	+	+	+	+		+			+		+
neatness and organization	4	1	3	+	+	+	+		+			+	+	+
open-ended writing assignments	4	1	2	+	+	+	+			+			+	+
oral language activities	4	0	0	+	+	+	+							
poetry or wordplay	4	0	2	+	+	+	+					+	+	
positive climate	4	2	3	+	+	+	+		+	+		+	+	+
print-rich environment	4	0	1	+	+	+	+							+
reading aloud to students	3	0	2	+	+	+						+	+	
recognition of achievement/progress	4	0	0	+	+	+	+	+						
shared or choral reading	4	0	1	+	+	+	+					+		
small group instruction	4	2	1	+	+	+	+			+	+		+	
SSR (silent sustained reading)	4	0	0	+	+	+	+							
student choice or student interests	3	0	2	+	+	+							+	+
student self-assessment	3	0	0	+		+	+							
student work displayed	4	0	0	+	+	+	+							
student-led activities	3	0	0	+	+	+								
teacher circulates during reading/writing	4	0	2	+	+	+	+					+		+
technology or multi-media	3	1	3	+	+		+				+	+	+	+
word walls	2	0	1	+		+								+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School C Snapshot

"We've been through a transformation because of our venture capital grant and one of our focuses was the reading. The Four Block model which we have started has been the best thing and one of its components is Working With Words. It doesn't leave out one of the ways children learn to read. This program has no gimmicks; you take the strengths from all four programs and keep them."

--School Principal

Located in a rural setting, School C houses grades one through five. Kindergarten is taught at a separate location. The school population of this FY97 school is almost exclusively non-minority with slightly less than half the students eligible for free/reduced lunch. According to a very knowledgeable school principal, the transformation from traditional reading and writing to the Four Blocks system has contributed substantially to student improvement. She feels that this program is especially strong in helping students transfer the word knowledge learned in one setting to new reading and writing tasks, stating, "Writing is reading from the inside out. If they can write the words, the word patterns, and the word families, that is the component that makes the transfer." Through taking the *Four Blocks* training herself, the principal has come to the astounding conclusion that the teachers were never really teaching comprehension but were merely testing it. Teachers are now learning to model comprehension strategies and to teach children to monitor their own comprehension as they read. In this district, students who come out of kindergarten deficient in literacy skills are "saturated early," to make up for language and experiential deficits. The principal acknowledges that this practice, although important, takes money and personnel. Reading is assessed very thoroughly in this school through informal testing in recognition of *Dolch Sight Word Tests*, comprehension skills, *Reading Recovery* levels, and *WISC* intelligence tests for the more at-risk children. *Logical Phonics*, which was adopted in 1997 as a result of the PDP grant, has been integrated into the more recently adopted *Four Block* model, particularly the *Working With Words* component of the newer program. The latter program teaches phonics based on the research-supported principle that the mind is a "pattern seeker," rather than a "rule maker." Accordingly, phonics is taught with attention to word families with similar spelling patterns.

The principal and teachers at School C plan to develop a comprehension assessment that will better inform their instruction. These teachers regularly work collaboratively on assessment instruments that are encouraged, but not required, by the district. They perform item analyses on the off-year proficiency tests and teach those comprehension skills indicated as weak. Surprisingly, the teachers found out that the practice of routinely building student background for reading comprehension tasks might have inadvertently caused students to become overly dependent upon this technique, performing poorly on tests where no such background was provided for them. Since children do not have the benefit of building background before the proficiency tests, the teachers are working on teaching children to comprehend with what they describe as a "cold turkey" approach.

The first grade teacher and many others in the school have benefited from ongoing professional development delivered in a non-traditional way: presenters come into the classroom to model how the new program can be applied in that particular setting. In addition, professional development resources are available to answer teachers' questions as they arise in developing a new literacy program like Four Blocks. The Title I teacher and the inclusion special education

teacher spend an hour to an hour and a half in this classroom daily. Some of the other teachers use the Title I teacher as a classroom aide. There is no literacy coordinator in this small community so the Title I teacher serves in that role. Title I in-services are provided for first grade parents to develop their skills in supporting reading at home. The principal always pushes reading to young children at home during these sessions. This school also has a Parent Center where parents can come with specific questions about reading problems. The Title I teacher works with the attendant at the Parent Center to provide materials that parents can use to work with their youngsters. Students in the first grade and other classrooms work with a "coaching group," a heterogeneous group of children who work together on reading and response to reading. Good readers are included in the coaching groups to provide models for poorer readers and to help avoid the stigma of being in a "low group."

The second grade teacher and other primary grade teachers use the HBJ basal series supplemented with the phonics programs, *Working With Words*, *Logical Phonics*, and *Phonics Week by Week*. All three programs are integrated into the *Four Blocks* structure for language arts. Paid high school tutors are bused over each day to work with first and second graders. This program is funded by an *America Reads* grant. The teachers decided to use high school students because with community volunteers, there was no consistency in who would be meeting with the children on a regular basis. The high school students have proven very reliable and effective. The second grade teacher agrees with her colleagues in her commitment to the *Guided Reading* approach. She attributes the big improvement she has seen in her students' reading and writing to *Four Blocks* and all the supplementary phonics instruction. Observation and interviews suggest that School C's greatest strengths are in the areas of using assessment to inform instruction and in teacher mastery of appropriate phonics scope and sequence. (See Tables 29a and 29b). Classroom environment strengths were prioritized differently by each teacher and the school principal. (See Table 30.) This school has improved their Grade 4 reading proficiency test scores by a healthy 24% since 1997. (See Table 12.)

Table 29a. RTI Competency Scores for School C

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive		2	3	2.50
GRS2	Understanding how language and cognitive development relate to literacy		1	2	1.50
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure		2	3	2.50
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum		2	3	2.50
GRS5	Recognizing and addressing the multiple causes of reading difficulties		1	3	2.00
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process		1	2	1.50
GRS7	Helping readers apply different comprehension strategies for different purposes		2	3	2.50
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction		3	3	3.00
GRS9	Communicating pertinent information with parents and support personnel		2	3	2.50
GRS10	Understanding and applying research on reading		1	3	2.00
PS1	Knowing essential phonics rules, spelling patterns, and concepts		2	2	2.00
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy		2	2	2.00
PS3	Understanding the scope and sequence of effective phonics instruction		3	3	3.00
PS4	Recognizing the role of metacognition in phonics instruction		1	2	1.50
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency		1	2	1.50
Classroom Total			26	39	32.50

Table 29b. Competency Means Pareto Distribution for School C

RTI Competency		Mean ¹
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	3.00
PS3	Understanding the scope and sequence of effective phonics instruction	3.00
GRS1	Understanding of the reading process as complex, interactive and constructive	2.50
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.50
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.50
GRS7	Applying different comprehension strategies for different purposes	2.50
GRS9	Communicating pertinent information with parents and support personnel	2.50
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.00
GRS10	Understanding research and advancing the field of reading	2.00
PS1	Knowing essential rules, patterns, and concepts of phonics	2.00
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.00
GRS2	Understanding how language and cognitive development relate to literacy	1.50
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.50
PS4	Recognizing the role of metacognition in phonics instruction	1.50
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.50

Table 30. Classroom Environment Checklist: Observed and Reported Frequencies for School C

Element	#RP	#S	#O	PRP	KRP	IRP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	0	0	+		+	+							
big books	3	0	0	+		+	+							
classroom library	3	1	1	+		+	+				+		+	
comfortable reading area	3	0	2	+		+	+						+	+
cooperative/collaborative learning	3	0	1	+		+	+						+	
extended blocks of time for reading/writing	3	1	0	+		+	+	+		+				
flexible scheduling	2	0	0	+			+							
learning games	3	0	1	+		+	+							+
grouped desks/tables	3	0	2	+		+	+						+	+
independent reading	3	0	0	+		+	+							
independent research	2	0	0	+			+							
individualized attention to students	3	1	1	+		+	+	+		+			+	
integrating language with music/art/drama	1	0	0			+								
journaling	3	0	1	+		+	+						+	
language experience	2	1	0	+		+				+				
learning centers	3	0	0	+		+	+							
multicultural activities	3	0	0	+		+	+							
multi-modality (visual, auditory, tactile)	3	1	2	+		+	+			+			+	+
neatness and organization	3	1	2	+		+	+				+		+	+
open-ended writing assignments	3	0	1	+		+	+						+	
oral language activities	3	0	2	+		+	+						+	+
poetry or wordplay	3	0	0	+		+	+							
positive climate	3	0	2	+		+	+	+					+	+
print-rich environment	3	0	2	+		+	+	+					+	+
reading aloud to students	3	1	1	+		+	+				+			+
recognition of achievement/progress	3	0	1	+		+	+						+	
shared or choral reading	3	0	0	+		+	+							
small group instruction	3	1	1	+		+	+	+			+		+	
SSR (silent sustained reading)	3	1	0	+		+	+				+			
student choice or student interests	3	0	1	+		+	+						+	
student self-assessment	0	0	0											
student work displayed	3	0	1	+		+	+							+
student-led activities	2	0	1			+	+						+	
teacher circulates during reading/writing	3	0	2	+		+	+						+	+
technology or multi-media	3	0	2	+		+	+						+	+
word walls	3	1	2	+		+	+			+			+	+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 IRP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School D Snapshot

"I think we're particularly successful in reading because ...one of the basic principles at our school is learning about teaching through coaching. Also, we stress critical thinking skills. All the classrooms have coaches so the children are continually getting the help that they need. "

--School Principal

School D is an urban school with a real success story. This FY97 Cohort school was reorganized several years ago and began with an entirely new staff and principal. Students are sent to this relatively small school because they are either at risk or have not succeeded in the traditional school environment. Nearly 70% of the student population is eligible for free/reduced lunch. Of the 325 children enrolled, nearly two-thirds are minority students who tend to remain in this school if they are lucky enough to be accepted here. Teachers in this building tend to be experienced, averaging 14 years of teaching. More than 50% of the teachers hold Master's Degrees. Teacher and principal dedication are obvious to anyone who listens to them explain their vision of creating a community of teachers and learners. The school is heavy on assessments, both formal and informal. Assessment instruments they employ routinely include *Directed Reading Assessments (DRAs)*, "one minute probes" of oral reading to evaluate fluency (first grade), running records, basal tests, proficiency-style tests, staff-developed writing rubrics, yearly pre-tests and post-tests, and a host of other instruments.

The teachers in School D are very knowledgeable about reading and phonics, using the terminology easily and conveying a true understanding of the cueing systems, levels of comprehension, the importance of fluency, and specific phonics terms and concepts. *Modern Curriculum Press Phonics* has been used in this school since the original PDP grant in FY1997. HB Signature and trade books are used for reading. This school is organized around the principle that children and teachers learn best through coaching. All of the classrooms have coaches who have advanced training and credentials in reading. The coaches team teach with the regular classroom teachers. Children are grouped in small groups so that they can get all the help they need. Teachers have all been trained in *Balanced Literacy* and are excited about the changes that this program has brought to their school. The principal has hired consultants to come in, observe the teachers in action, and help them identify and strengthen weaknesses in their reading programs. Teachers, coaches, and principal get together to scrutinize test scores and perform item analyses. Information from those meetings is used to redirect instruction and to try new ways of teaching concepts such as critical reading and thinking. Principal and teachers agree that it is the teaming that distinguishes this school and that accounts for its success with children who would probably be failing elsewhere. In this school, the principal gets right in there and teaches, along with the rest of the staff. In this way, she develops a perspective that is more like that of the teachers than that of an administrator.

Teachers in grades 1-3 are targeting expository reading because this has been identified as an area of weakness. The principal sometimes walks into a first or second grade classroom and asks children to respond critically to expository text. She asks questions like, "How are you going to use this information?" All the teachers are encouraged to use more than one style of teaching. They believe that since children do not learn in one specific way, it is their duty to find ways to reach every single child. Because of the small school size, every child is known to the school staff, generating a feeling of "family" and caring about one another. Shared reading is an important feature in kindergarten and first grade. The teachers feel that this helps the struggling

readers to participate and feel themselves a part of the reading group, as well as the discussion group. Many children come to this school with language or experiential deficits. Speaking in complete sentences is stressed from the very beginning. Oral language is assessed and targeted, in addition to reading and writing skills. Speaking portfolios are kept, right along with writing portfolios. The second grade classroom holds "seminars" for discussing books and reading selections, a practice that links oral language with written language.

Every classroom in the school sends home a daily agenda to parents. This informs the parents about what is being studied, what is expected from their child, and what parents can do to help. Thursdays are communication nights. Parents need to be especially careful to check the students' book bags on this night to learn about upcoming events and other items of future importance to students.

Beginning in the first grade, children are taught how to question each other on their reading and learning using the levels of Bloom's taxonomy. Vocabulary is improved through a "word of the day" which the older students are expected to define and explain. Kindergarten students are just expected to become familiar with the word. Most kindergarteners are reading by the time they get to first grade. In kindergarten, children create take-home books that coordinate with their in-class reading. Parents are expected to help their children read these at home. Sight words, as well as phonics, are emphasized beginning in kindergarten. As soon as the children master one sight word list, they are given a list at the next level to take home and practice with magnetic letters and other learning tools. High-achieving kindergarteners are grouped with low-performing first grade students for *Reading Recovery* style intensive coaching. After one year, these students are generally at or above grade level in reading.

In 1997, the fourth grade reading proficiency pass rate was 24.4%. In 2001, the pass rate was a very respectable 72%. School D reading proficiency pass rates have improved by a remarkable 195% from FY1997 to FY2001. (See Table 12.) The relatively weak performance of two of the three teachers observed in School D on the RTI (see Tables 31a and 31b) is surprising, given the improvement in reading proficiency pass rates. There are several possible explanations for this. First, teachers in this school are still in the early part of the learning curve since beginning to teach here when the school was reorganized four years ago. Second, this school has just begun using some of the newer literacy programs and some teachers may not have internalized the concepts, procedures, and practices of these programs. Third, despite the request that observed teachers teach reading the way they always do and not change their practices for the PDP observation, the kindergarten teacher and second grade teacher spent nearly the whole hour of observation on phonics. In teacher interviews, it was discovered that they generally spent their reading time engaged in other activities besides phonics. If School D's kindergarten and second grade teachers had been observed over time, a truer picture of their reading instruction might have been obtained and this would have been reflected in their RTI scores. The first grade teacher, who scored extremely well on the RTI (earning the maximum score on nearly all the competencies), presented a varied lesson, incorporating comprehension, literature, and writing, as well as phonics.

Teachers and principal reported the highest classroom environment strengths as extended blocks of time for reading and writing, the use of big books, and extensive classroom libraries. Other classroom environment strengths were prioritized differently by principal and teachers. (See Table 32.)

Table 31a. RTI Competency Scores for School D

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	3	3	2.33
GRS2	Understanding how language and cognitive development relate to literacy	1	3	2	2.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	0	3	3	2.00
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2	3	2	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	3	2	2.33
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	3	1	1.67
GRS7	Helping readers apply different comprehension strategies for different purposes	0	3	1	1.33
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	1	3	3	2.33
GRS9	Communicating pertinent information with parents and support personnel	3	3	2	2.67
GRS10	Understanding and applying research on reading	1	0	1	0.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	1	3	1	1.67
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	3	3	2	2.67
PS3	Understanding the scope and sequence of effective phonics instruction	1	3	0	1.33
PS4	Recognizing the role of metacognition in phonics instruction	1	3	1	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	3	1	1.67
Classroom Total		19	42	25	28.67

Table 31b. Competency Means Pareto Distribution for School D

RTI Competency	Mean ¹	
GRS9	Communicating pertinent information with parents and support personnel	2.67
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.67
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.33
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.00
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.67
PS1	Knowing essential rules, patterns, and concepts of phonics	1.67
PS4	Recognizing the role of metacognition in phonics instruction	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67
GRS7	Applying different comprehension strategies for different purposes	1.33
PS3	Understanding the scope and sequence of effective phonics instruction	1.33
GRS10	Understanding research and advancing the field of reading	0.67

Table 32. Classroom Environment Checklist: Observed and Reported Frequencies for School D

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	1	0	+	+		+				+			
big books	4	2	3	+	+	+	+		+	+		+	+	+
classroom library	4	2	3	+	+	+	+		+		+	+	+	+
comfortable reading area	3	0	2	+		+	+					+		+
cooperative/collaborative learning	4	1	2	+	+	+	+			+			+	+
extended blocks of time for reading/writing	3	3	0		+	+	+	+	+	+	+			
flexible scheduling	3	0	0		+	+	+							
learning games	3	0	1	+	+	+								+
grouped desks/tables	4	0	3	+	+	+	+					+	+	+
independent reading	4	0	0	+	+	+	+							
independent research	3	0	0	+		+	+							
individualized attention to students	4	1	2	+	+	+	+	+		+			+	+
integrating language with music/art/drama	4	1	0	+	+	+	+				+			
journaling	4	0	0	+	+	+	+							
language experience	3	0	1	+	+		+					+		
learning centers	4	0	2	+	+	+	+					+		+
multicultural activities	4	0	1	+	+	+	+					+		
multi-modality (visual, auditory, tactile)	4	0	2	+	+	+	+					+	+	
neatness and organization	4	1	3	+	+	+	+		+			+	+	+
open-ended writing assignments	3	1	1	+		+	+			+			+	
oral language activities	4	0	0	+	+	+	+							
poetry or wordplay	3	0	0	+		+	+							
positive climate	4	0	2	+	+	+	+	+					+	+
print-rich environment	4	0	3	+	+	+	+					+	+	+
reading aloud to students	4	0	0	+	+	+	+							
recognition of achievement/progress	3	1	1		+	+	+		+			+		
shared or choral reading	4	1	1	+	+	+	+				+			+
small group instruction	4	0	0	+	+	+	+	+						
SSR (silent sustained reading)	3	0	0	+		+	+							
student choice or student interests	4	0	0	+	+	+	+							
student self-assessment	4	0	1	+	+	+	+	+						+
student work displayed	4	0	2	+	+	+	+					+	+	
student-led activities	1	0	0			+								
teacher circulates during reading/writing	4	1	3	+	+	+	+		+			+	+	+
technology or multi-media	4	0	3	+	+	+	+					+	+	+
word walls	3	0	2	+	+		+					+		+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School F Snapshot

" I think just getting the kids to understand that they can do it is tough. They say, 'I don't know how.' I had a kid today that recognized words for the first time. This is a revelation for them."
--Kindergarten Teacher

Located in a small city, this FY97 Cohort School houses a student population from a mostly non-minority working class background. The 500 students who attend this school tend to remain here for the duration of their elementary school years. Classrooms are homogeneously grouped. Some classrooms are labeled as enrichment groups. Neither these groups nor the kindergarten have much contact with literacy support personnel. The hallway is lined with Martin Luther King stories written by the second graders whose teacher stood out as a strong supporter of student writing. The second grade classroom is similarly papered with student work. Letters to Dr. Seuss and spelling tests adorn the walls.

The reading program in the primary grades incorporates *Guided Reading* and *Logical Phonics* into the Harcourt Brace basal program. Some teachers put a great deal of effort into integrating word recognition and comprehension strategies while others appear to teach phonics in isolation. First and second grade teachers feel that comprehension is the hardest area of reading to teach. The kindergarten teacher feels that it is hardest to teach children the self-confidence children need to view themselves as readers and writers. The school principal is not a strong supporter of phonics for all students, in contrast to the primary grade teachers. This principal questions the utility of teaching phonics to students who are already fluent readers.

The kindergarten teacher integrates music and *Working with Words* (a Four Blocks component) into the Logical Phonics program. This teacher feels that unless the *Logical Phonics* program is supplemented with the colorful characters and manipulative activities of the newer phonics programs, it might be dull and boring for the children. The children love playing *Shamrock Shake-Up*, a phonics activity in a game show format, complete with suspense and surprise, which the teacher dramatically directs. Journal writing is common in all primary grade classrooms. The kindergarten teacher has a Whole Language orientation and likes to include Language Experience stories and literature along with the basal reader. According to the teacher, this is the first year that her kindergarten students have used phonics in their independent writing. She attributes this to the phonemic awareness activities learned in a recent workshop that she uses in trying to prepare the students for first grade.

The first grade classroom in School F is abuzz with partner activities including buddy reading and cooperative learning. The room is peppered with inviting learning aids like vocabulary rings (vocabulary cards on a big metal ring), wall cards and charts, math manipulatives, listening centers with headphones, pocket charts and big books. The environment is extremely print-rich. Visible from anywhere in the room are rules, sight words, a writing checklist, a To Do list and more. There are several learning centers and computers which are in constant use, in contrast to other classrooms where computers sit idle for most of the school day. Children respond to a literature anthology story by creating story maps and answering questions about characters. They practice their phonics rules by reciting poems and often read orally together as part of their guided reading. Students are ability-grouped for reading instruction. While one small group is at the reading table, another group grades their own dictation papers using a checklist. The teacher encourages the writers to stretch their words like bubble gum to figure out the letters to use. Students at the reading table are being assessed for reading fluency

and reading in a natural tone of voice.

The most inviting spot in the second grade classroom is a lovely two-level reading loft that would be the envy of many teachers and students. In contrast to the first grade, this classroom environment has very little print. Of the two desktop computers and one laptop computer, only one computer was in use during this classroom observation. A word wall with w-h words is used by the children as they write open-ended letters to Dr. Seuss. The class engages in dictation activities while the teacher circulates, checking on individual student mastery. *Four Blocks* and *Guided Reading* are at the core of this classroom's literacy activities. The second grade teacher thinks that the Logical Phonics program is outstanding. She teaches it every day for 30 minutes and has had wonderful feedback from parents who see their children using phonics in their independent reading and writing. In a typical reading lesson from the HB *Anthology*, the lesson begins with vocabulary and working with word meanings. The teacher then builds background, drawing on the children's experiences. The students sometimes do a picture walk to help them make predictions about the story. Often, they draw a story map with characters, setting, problem, action, solution, and conclusion. As the children write response journals to their reading, the teacher selects spelling words that coordinate with the anthology selection. Take-home books extend the reading. After reading these books, the students engage in "book talks" and re-read the take-home book with a buddy.

Teachers at this school often encounter children with language or experiential deficits that can impact their reading comprehension. To broaden their background, the children are provided with many hands-on activities, field trips, and speakers. Most parents are not involved in their children's education and do not ask for advice from teachers or principal. Based on observation and interviews, the greatest strengths were in the use of assessment, providing authentic reading and writing activities, and in recognizing multiple causes of reading difficulties. (See Tables 33a and 33b.) Classroom environment strengths were most often reported as the use of learning centers, small group instruction, and silent sustained reading. (See Table 34.) Fourth grade proficiency pass rates at this school have been extremely uneven, fluctuating from year to year. Although scores have declined 24.1% since 1997, there have been years when the pass rate has improved substantially, e.g., almost doubling between FY1998 and FY1999. (See Table 12.)

Table 33a. RTI Competency Scores for School F

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	3	3	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2	3	2	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2	3	2	2.33
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2	3	3	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	3	3	2.67
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	3	2	2.00
GRS7	Helping readers apply different comprehension strategies for different purposes	1	3	1	1.67
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	3	3	3.00
GRS9	Communicating pertinent information with parents and support personnel	2	3	2	2.33
GRS10	Understanding and applying research on reading	1	3	1	1.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	2	3	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	3	2	2	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2	3	2	2.33
PS4	Recognizing the role of metacognition in phonics instruction	2	2	2	2.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	3	2	2.00
Classroom Total		27	42	33	34.00

Table 33b. Competency Means Pareto Distribution for School F

RTI Competency		Mean ¹
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	3.00
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.67
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.33
GRS9	Communicating pertinent information with parents and support personnel	2.33
PS1	Knowing essential rules, patterns, and concepts of phonics	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2.33
GRS6	Understanding how readers use multiple cueing strategies in the reading process	2.00
PS4	Recognizing the role of metacognition in phonics instruction	2.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2.00
GRS7	Applying different comprehension strategies for different purposes	1.67
GRS10	Understanding research and advancing the field of reading	1.67

Table 34. Classroom Environment Checklist: Observed and Reported Frequencies for School F

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	0	0	+	+		+							
big books	4	0	2	+	+	+	+	+				+	+	
classroom library	4	1	3	+	+	+	+	+			+	+	+	+
comfortable reading area	2	1	3	+			+				+	+	+	+
cooperative/collaborative learning	4	0	1	+	+	+	+					+		
extended blocks of time for reading/writing	3	0	0	+	+		+	+						
flexible scheduling	3	0	0	+	+		+							
learning games	4	0	2	+	+	+	+					+		+
grouped desks/tables	3	0	3	+	+		+					+	+	+
independent reading	4	0	1	+	+	+	+					+		
independent research	0	0	0											
individualized attention to students	4	1	1	+	+	+	+		+				+	
integrating language with music/art/drama	4	1	1	+	+	+	+		+			+		
journaling	4	0	0	+	+	+	+							
language experience	4	0	1	+	+	+	+					+		
learning centers	4	2	2	+	+	+	+		+	+			+	+
multicultural activities	3	0	3	+	+		+					+	+	+
multi-modality (visual, auditory, tactile)	3	0	3	+	+		+					+	+	+
neatness and organization	4	0	2	+	+	+	+					+	+	
open-ended writing assignments	3	0	3	+	+		+					+	+	+
oral language activities	4	0	1	+	+	+	+					+		
poetry or wordplay	4	0	2	+	+	+	+					+	+	
positive climate	4	1	3	+	+	+	+	+	+			+	+	+
print-rich environment	4	1	3	+	+	+	+		+			+	+	+
reading aloud to students	4	1	1	+	+	+	+	+		+		+		
recognition of achievement/progress	4	0	0	+	+	+	+							
shared or choral reading	3	1	2	+		+	+			+		+	+	
small group instruction	4	2	2	+	+	+	+			+	+	+	+	
SSR (silent sustained reading)	4	2	0	+	+	+	+			+	+			
student choice or student interests	3	0	2	+		+	+					+	+	
student self-assessment	2	0	1	+		+							+	
student work displayed	4	0	1	+	+	+	+							+
student-led activities	1	0	0	+										
teacher circulates during reading/writing	4	0	2	+	+	+	+						+	+
technology or multi-media	2	1	3	+			+				+	+	+	+
word walls	2	0	1	+		+							+	

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School G Snapshot

"Yes, we have a lot of students who, when they start kindergarten, ...have not been read to. Their parents do not really talk with them. This is a very rural area and it has a low literacy rate among the parents."

--School Principal

School G is a very large regional rural elementary school serving a wide and remote geographical region. Most of the students in this FY99 Cohort School are non-minority and come from low to low-middle income families. Although a solid core of 40% of the teachers have remained in the building for over ten years, there is a high faculty turnover rate among the remaining faculty due to the relatively low pay scale. Teachers have been trained in the *Literacy Collaborative*, an initiative that is an outgrowth of the *Reading Recovery* program and promotes daily shared reading and shared writing. These scaffolding techniques follow a progressive model beginning with the teacher doing much of the reading and writing and ending with the children gradually taking over these tasks as they become more skilled and independent. Children are taught several strategies for decoding unfamiliar words. The principal reports that comprehension is difficult in the lower grades, alleging that the *Literacy Collaborative* does not really focus on comprehension until the third grade. All first grade teachers are required to take *Reading Recovery* Training. This training enables teachers to perform one-on-one running records of the word recognition strategies that students use. The whole school uses literature-based reading instruction. There is no basal. ELLI is used for phonics. The literacy coordinator visits each classroom once per week, except for the kindergarten which she visits monthly. She reports that not all teachers have mastered the *Literacy Collaborative* techniques, especially the task of monitoring students when several children read aloud simultaneously with varying reading rates.

The kindergarten classroom has several group-written stories on the easel. A recent composition is about George Washington, composed after listening to a book about our first president. The class reads aloud in unison a poem about Washington written on sentence strips. There are three computers in the classroom that sit idle for much of the time. Reading lessons focus on word identification. When children do pre-reading "picture walks" (previewing book content through examining the pictures), the emphasis is on predicting what words will be included in the story, rather than on what events will take place in the reading. After reading aloud together, children re-read and retell what they have read. Word walls and lists of words are posted visibly at several locations in the classroom. Packets are sent home at the beginning of the year to encourage parents to work on literacy with their children. A summer workshop is held for parents of kindergarten graduates to help them prepare for first grade. Reading instruction tends to be primarily whole group, rather than individualized.

First grade students are instructed in "what good readers do," when they come to unknown words. The teacher prompts students to use strategies like picture clues, thinking about the story, visually analyzing words, self-checking and cross-checking. These prompts are also given to parents to use when working with their children. Weekly communication with parents through phone calls and correspondence is the norm. "Make and Break" is a frequent literacy activity where children manipulate letters to form sets of rhyming words. Children are encouraged to read new words by "chunking" or dividing the word up into known chunks. The teacher reports that many of the children have poor language skills and poor book handling skills

when they enter school. Sometimes, the children's nonstandard oral grammar overrides the actual words that they are reading (e.g., substituting "goed" for "went"). The children are tested weekly on "Hearing and Recording Sounds." Every Friday is poetry day. The phonics lessons often focus on the words of a poem. Children may be asked to fill in the blanks on the poem to see how many of the chunks they represent. Phonics is integrated into all reading and writing throughout the curriculum. New phonics concepts are taught as the need arises in children's reading and writing.

The second grade also emphasizes word recognition skills. There is a phonics chart on the classroom wall with 60 sounds that are practiced daily by the children. Children engage daily in a Making Words activity where they manipulate letter tiles into patterns, adding prefixes and suffixes. Students are grouped by ability for reading instruction, using guided reading, shared oral reading, listening to reading, and interactive reading where the teacher and children take turns reading a selection. The teacher tries to get to every reading group daily. Unless the children are in a chapter book, they have a new book each day. Sometimes children write in response to their reading. The teacher writes a letter to the children every day, asking them questions about the book they read together. The children write a response and read it orally. The class honors a Student of the Week by finding about that student's likes/dislikes, family and hobbies. The students write up the special student in Writers' Workshop and put these writings into a class book.

According to the school principal, children enjoy reading and writing more since the switch from basals to literature-based instruction. Through *Ohio Reads*, *Reading Excellence Act* (REA), and *Extended Learning Opportunities* grants, volunteers are trained and provide tutoring for struggling readers. The principal wishes that the teachers had more time for training and professional development and feels that they are already "over-booked" since many of the teachers themselves do the after-school tutoring. Competency scores on the RTPI rubric varied widely between the three observed teachers. (See Tables 35a and 35b.) The first grade teacher scored a perfect 45 while the kindergarten and second grade teachers scored 36 and 27 respectively. Areas of weakness in the second grade relate to the use of multiple cueing strategies, comprehension strategies, and extended authentic reading and writing. The classroom environment strength most frequently reported in School G was providing extended blocks of time for reading and writing. (See Table 36.) The fourth grade reading proficiency pass rate for this school has fluctuated since 1997, ranging from 31% to 50.5%. (See Table 13.)

Table 35a. RTI Competency Scores for School G

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3	3	1	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2	3	2	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	3	2	2.67
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	3	1	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	3	2	2.33
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2	3	1	2.00
GRS7	Helping readers apply different comprehension strategies for different purposes	2	3	1	2.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	3	3	3.00
GRS9	Communicating pertinent information with parents and support personnel	2	3	2	2.33
GRS10	Understanding and applying research on reading	3	3	1	2.33
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	3	2	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1	3	2	2.00
PS3	Understanding the scope and sequence of effective phonics instruction	3	3	3	3.00
PS4	Recognizing the role of metacognition in phonics instruction	3	3	2	2.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2	3	2	2.33
Classroom Total		36	45	27	36.00

Table 35b. Competency Means Pareto Distribution for School G

RTI Competency		Mean ¹
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	3.00
PS3	Understanding the scope and sequence of effective phonics instruction	3.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67
PS4	Recognizing the role of metacognition in phonics instruction	2.67
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS2	Understanding research and advancing the field of reading	2.33
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.33
GRS9	Communicating pertinent information with parents and support personnel	2.33
GRS10	Understanding research and advancing the field of reading	2.33
PS1	Knowing essential rules, patterns, and concepts of phonics	2.33
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2.33
GRS6	Understanding how readers use multiple cueing strategies in the reading process	2.00
GRS7	Applying different comprehension strategies for different purposes	2.00
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.00

Table 36. Classroom Environment Checklist: Observed and Reported Frequencies for School G

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	4	0	0	+	+	+	+							
big books	4	0	2	+	+	+	+					+	+	
classroom library	3	1	3	+		+	+				+	+	+	+
comfortable reading area	3	0	3	+		+	+					+	+	+
cooperative/collaborative learning	4	0	0	+	+	+	+							
extended blocks of time for reading/writing	4	2	0	+	+	+	+	+		+	+			
flexible scheduling	3	1	0	+	+		+		+					
learning games	4	0	0	+	+	+	+							
grouped desks/tables	4	0	2	+	+	+	+						+	+
independent reading	4	1	1	+	+	+	+	+		+			+	
independent research	3	0	0	+		+	+							
individualized attention to students	4	1	2	+	+	+	+	+	+			+		+
integrating language with music/art/drama	3	0	1		+	+	+						+	
journaling	4	1	1	+	+	+	+			+			+	
language experience	4	0	1	+	+	+	+					+		
learning centers	4	1	2	+	+	+	+				+		+	+
multicultural activities	4	0	1	+	+	+	+					+		
multi-modality (visual, auditory, tactile)	4	0	2	+	+	+	+						+	+
neatness and organization	4	1	3	+	+	+	+				+	+	+	+
open-ended writing assignments	4	1	1	+	+	+	+				+			+
oral language activities	4	0	2	+	+	+	+						+	+
poetry or wordplay	4	0	2	+	+	+	+					+	+	
positive climate	4	1	3	+	+	+	+		+			+	+	+
print-rich environment	4	1	3	+	+	+	+	+	+			+	+	+
reading aloud to students	4	0	2	+	+	+	+					+	+	
recognition of achievement/progress	4	1	1	+	+	+	+		+				+	
shared or choral reading	4	0	3	+	+	+	+					+	+	+
small group instruction	4	1	1	+	+	+	+			+				+
SSR (silent sustained reading)	3	0	1	+		+	+						+	
student choice or student interests	4	0	2	+	+	+	+					+	+	
student self-assessment	2	0	0			+	+							
student work displayed	4	0	1	+	+	+	+	+				+		
student-led activities	4	0	0	+	+	+	+							
teacher circulates during reading/writing	4	0	0	+	+	+	+							
technology or multi-media	4	0	3	+	+	+	+					+	+	+
word walls	4	0	2	+	+	+	+						+	+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School H Snapshot

"In the beginning, the kindergarteners are crying, scared, falling off their chairs. They can write a few things on a line. Now they are happy. If you're going to do inclusion, Kindergarten is the best grade to start it.. Kindergarteners are not judgmental and they are very helpful to each other."

--Kindergarten Teacher.

Located next to a large urban district, this FY99 school suffers from "white flight" and all the attitudes, lack of resources, materials and skills of the urban district. It recently qualified for Title I grant money. The student body is 31% White and 65% Black. The percent of free or reduced lunch is 35%. The teachers are committed and knowledgeable but their working conditions are difficult. No businessman or woman would work in the conditions that exist for these master teachers. There was only one electric plug in each classroom, limiting the use of overhead projectors, record players, computers and video machines. Space was at a premium with multiple volunteers working with children in the halls and the library. The library, housed in a room smaller than one kindergarten classroom, was also used for another kindergarten class, the talented and gifted class, and an ESL class--all in a room smaller than the kindergarten room. The counseling office is used by the speech pathologist, who was asked to leave when the school psychologist announced she would be using the office. The school psychologist also removed the PDP observer and her companion from the same office. Space belongs to the most assertive. PDP student interviews were moved to the small book cataloging space of the library, which contained a photocopy machine, bookshelves and a filled table. Space was at a premium in this school.

This is the district's ESL school since the ESL teacher is housed in this building. The school is also designated as the district's Special Education school. The principal provides a leadership described as "invisible." "The principal is not available before school and cancels after school special education meetings with teachers." The observer was told to "reschedule your appointment with the Kindergarten teacher as she stays late but if you don't go now, you'll miss the principal who is gone after 3:15." And indeed, the principal was gone before the PDP observer could get to his office immediately after school. He did not return subsequent calls, the interview form or checklist left for him; another indication of invisible leadership in this very needy school.

Teachers use Houghton Mifflin and *Open Court* basal readers, providing ESL sections for individual needs. They also use decodable books such as *Steve's Secret*. Informal and text based tests are used for phonics and reading. The school formerly used *Logical Phonics*. "We don't have a reading program although we have state benchmarks as to where we are supposed to be, but there are no multiple copies for all teachers." Some teachers have highly prescribed reading and phonics instruction, spending 45 minutes daily on reading and whatever phonics is included in the reading series. However, since new teachers have not been trained in *Logical Phonics*, and a new grant was obtained enabling them to buy another set of books, the phonics program has been dropped. The test results from this school, then, may reflect the absence of a consistent phonics program for which all teachers have been in-serviced. In lieu of such support, teachers rely upon basal teachers' manuals for instructional support and student instruction. School H was rated from inadequate to minimally adequate on RTI competencies. (See Tables 37a and 37b.) Classroom library and positive climate were listed most often as environmental

priorities. (See Table 38.) The fourth grade reading proficiency pass rates have gone down from 46.2% in FY1997 to 42% in FY2001. (See Table 13.)

Table 37a. RTI Competency Scores for School H

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	2	1	1.33
GRS2	Understanding how language and cognitive development relate to literacy	1	0	0	0.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	1	2	2.00
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	2	1	3	2.00
GRS5	Recognizing and addressing the multiple causes of reading difficulties	0	1	2	1.00
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	1	2	1.33
GRS7	Helping readers apply different comprehension strategies for different purposes	3	1	2	2.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	1	1	1.67
GRS9	Communicating pertinent information with parents and support personnel	3	1	2	2.00
GRS10	Understanding and applying research on reading	1	0	0	0.33
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	1	1	1.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	3	1	1	1.67
PS3	Understanding the scope and sequence of effective phonics instruction	2	0	1	1.00
PS4	Recognizing the role of metacognition in phonics instruction	2	1	0	1.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	0	1	0.67
Classroom Total		28	12	19	19.67

Table 37b. Competency Means Pareto Distribution for School H

RTI Competency	Mean ¹
GRS3	2.00
GRS4	2.00
GRS7	2.00
GRS9	2.00
GRS8	1.67
PS2	1.67
GRS1	1.33
GRS6	1.33
PS1	1.33
GRS5	1.00
PS3	1.00
PS4	1.00
PS5	0.67
GRS2	0.33
GRS10	0.33

Table 38. Classroom Environment Checklist: Observed and Reported Frequencies for School H

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	2	0	0		+		+							
big books	3	0	1		+	+	+						+	
classroom library	3	2	1		+	+	+			+	+		+	
comfortable reading area	3	0	1		+	+	+						+	
cooperative/collaborative learning	2	0	0		+		+							
extended blocks of time for reading/writing	3	1	0		+	+	+						+	
flexible scheduling	3	0	0		+	+	+							
learning games	3	1	1		+	+	+		+				+	
grouped desks/tables	3	0	1		+	+	+						+	
independent reading	3	0	0		+	+	+							
independent research	1	0	0				+							
individualized attention to students	3	1	1		+	+	+		+				+	
integrating language with music/art/drama	3	0	1		+	+	+						+	
journaling	2	0	1		+	+							+	
language experience	2	0	1		+	+							+	
learning centers	1	0	1		+								+	
multicultural activities	2	1	1		+	+			+				+	
multi-modality (visual, auditory, tactile)	3	0	2		+	+	+						+	+
neatness and organization	3	0	1		+	+	+						+	
open-ended writing assignments	2	0	0		+		+							
oral language activities	3	0	2		+	+	+						+	+
poetry or wordplay	3	1	2		+	+	+			+			+	+
positive climate	3	2	2		+	+	+		+		+		+	+
print-rich environment	3	1	2		+	+	+			+			+	+
reading aloud to students	3	1	2		+	+	+		+				+	+
recognition of achievement/progress	3	0	1		+	+	+						+	
shared or choral reading	3	0	1		+	+	+						+	
small group instruction	3	0	2		+	+	+						+	+
SSR (silent sustained reading)	3	0	0		+	+	+							
student choice or student interests	2	0	1		+		+						+	
student self-assessment	1	0	0				+							
student work displayed	1	0	0				+							
student-led activities	2	0	1		+		+							+
teacher circulates during reading/writing	3	1	2		+	+	+				+		+	+
technology or multi-media	3	0	2		+	+	+						+	+
word walls	2	0	1		+	+								+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School I Snapshot

“Sometimes when there is a hard word, I sound it out...sometimes I ask my friends.”

--Second Grade Girl (weak reader), answering the interview question "How do you know you are a good reader?"

Trust, risk-taking and friendships are taught as core values in this FY99 urban school of approximately 600 students. According to the principal, proficiency scores don't tell the success stories of her students, whose discipline problems are trivial when compared to those of other urban schools in the city. Even though the pass rate on the fourth grade reading proficiency test has ranged from 32% to 47% for the past five years, children in this building speak of enjoying reading to their friends, sharing the responsibility of trying to break a word into parts and consistently loving to read. The community, too, is involved utilizing *American Reads* volunteers, a church with after school volunteers and starting an evening homework program where parents share the responsibility for bringing children with teachers who prepare lessons.

In the classrooms, the social composition is mostly African American with the balance of Indian, Vietnamese, Somalian, Afghani, and Hispanic. The ethnic distribution is 45% White 55% Black and Other with the percent of reduced and free lunch at 57%. This urban school is also a designated ESL and special education school. The school has adopted both *Process Phonics* and the *Four Blocks* reading program. The teachers are competent and creative. Their greatest wish is to have more time with the students, more in-services, and more help in class. However, limited financial resources have resulted in minimal support personnel--no counselor, no assistant principal, no proficiency test tutors, and little secretarial assistance.

For the past fourteen years, *Adventure in the Classroom* by Mary Henton has been used to strengthen learning and build a community of learners. As an alternative elementary school, this school stresses adventure-based education through multi-disciplinary units of study. It uses group problem-solving and cooperative learning. It encourages students to trust others, take risks, and accept physical, emotional and academic challenges. It is a National Project Adventure Award winner.

Phonics and reading instruction are not coordinated among teachers or grade levels. A variety of instructional materials and assessments are used, including Houghton Mifflin basals, *Systematic Sequential Phonics They Use*, *Process Phonics* and *Direct Reading Assessments (DRAs)*. The superb kindergarten teacher observed and interviewed uses phonics cards, word charts and alphabet posters. She has no reading program to give her instruction scope and sequence with the other teachers. She uses the DRA recommended level books for reading. The equally outstanding first grade teacher uses the Houghton Mifflin literature basal with phonics inserted into the *Four Blocks* program. The second grade teacher uses phonics strategies but not the content sequence of the text. She follows the *America Reads* reading sequence. Neither phonics nor reading skills are sequentially taught among the grade levels, even though *Process Phonics* is used in all grades.

The sheer volume of state and district mandated assessments makes the assessment of reading and phonics progress confusing. The principal laments that on the state level, the fourth grade proficiency is not testing the character building, enjoyment of learning and self-confidence observed in classes and heard in each student interview. In order to shore up the test scores, eight times a year—twice a quarter, *Target Teach Tests* are given by the district in reading and math.

The curriculum guides are based upon the Ohio Proficiency Test and Ohio State Competencies. Questions were made for *Target Teach* and developed into competencies which had to be mastered in an eight week period. *Target Teach* competencies were developed for third, fourth and fifth grades with the district mandated *Target Teach* Assessment test. *Target Teach* competency scores determine whether the children have mastered the quarterly objectives keyed to the proficiency test. In addition, the *Burns and Roe Informal Reading Tests* are given in second and third grade. The *Direct Reading Assessment* (DRA) is given in Kindergarten and first but not in second and third grades. In fourth grade, there is the fourth grade proficiency test. Five reading and phonics tests are administered to students in K-4 years. Data from the *Target Teach* tests for third, fourth, and fifth grades are relayed to the principal in the form of percentile mastery of objectives by class and grade. These tests are to ensure specific content has been mastered before students are tested on proficiency tests.

The content of the *Target Teach* test, however, is not the same content tested on the *Metropolitan Test*—an off year proficiency test given in second, third and fifth grades. The DRA, an elective reading test, provides some phonics and comprehension measures. The DRA identifies benchmark levels that tell what books children should use. Success in kindergarten is measured by the ability to read books at level 6-8. According to the school principal, parents have now been educated about the level books and “connect with them.” For each child in first and second grade who is participating the Phonics Demonstration Grant, there are also standardized *Metropolitan Achievement Test* Scores, Competency Based *Target Teach* Test Scores, Book placement *DRA* scores and grade level *Burns and Roe* scores. All this test administration follows state and district mandates. For the PDP grant purposes, phonics instruction is tested “tangentially” through spelling patterns in nonsense words given on the *Metropolitan Test*. In short, there are multiple reading tests and scores mandated by the state and district for all students but they do not assess the same skills with the same measures. It might be argued that the amount of time allotted to testing limits instruction and learning. However, despite the preoccupation with massive testing, Ohio proficiency reading pass rates have climbed from 34.3% in 1997 to 47.0% in 2001. A decline of over 16% in 2000 was almost entirely made up in 2001. (See Table 13.)

Teachers at School I were rated consistently superior in understanding of the reading process and also scored well in providing extended reading and writing activities. (See Tables 39a and 39b.) Classroom environment strengths were most often reported as cooperative and collaborative learning, extended blocks of time for reading and writing, individualized attention to students, and reading aloud to students. (See Table 40.)

When the PDP observers concluded their site visit at 6:30 at night, the teachers were still working in their rooms and the PTA had just closed a weekly fundraiser selling homemade food to each other. The principal had half an hour to get to another meeting that promised to run until 10 pm, the conclusion to a day that started before eight. Dedicated teachers, parents and administrators make this an outstanding school. Children love to come to this school as there are minimal discipline problems and “great stuff is going on here.”

Table 39a. RTI Competency Scores for School I

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3	3	3	3.00
GRS2	Understanding how language and cognitive development relate to literacy	2	3	2	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	3	1	2.33
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	3	2	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	3	2	2.33
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	2	1	1.33
GRS7	Helping readers apply different comprehension strategies for different purposes	1	3	3	2.33
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	2	3	1	2.00
GRS9	Communicating pertinent information with parents and support personnel	2	2	2	2.00
GRS10	Understanding and applying research on reading	2	2	1	1.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	3	2	2	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2	3	2	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2	2	1	1.67
PS4	Recognizing the role of metacognition in phonics instruction	2	3	2	2.33
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2	1	2	1.67
Classroom Total		32	38	27	32.33

Table 39b. Competency Means Pareto Distribution for School I

RTI Competency		Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3.00
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.67
GRS2	Understanding how language and cognitive development relate to literacy	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.33
GRS7	Applying different comprehension strategies for different purposes	2.33
PS1	Knowing essential rules, patterns, and concepts of phonics	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33
PS4	Recognizing the role of metacognition in phonics instruction	2.33
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	2.00
GRS9	Communicating pertinent information with parents and support personnel	2.00
GRS10	Understanding research and advancing the field of reading	1.67
PS3	Understanding the scope and sequence of effective phonics instruction	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.33

Table 40. Classroom Environment Checklist: Observed and Reported Frequencies for School I

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	0	0		+	+	+							
big books	3	0	3		+	+	+					+	+	+
classroom library	3	0	3		+	+	+					+	+	+
comfortable reading area	3	0	2		+	+	+					+		+
cooperative/collaborative learning	3	3	3		+	+	+	+	+	+	+	+	+	+
extended blocks of time for reading/writing	3	2	0		+	+	+		+	+				
flexible scheduling	3	0	0		+	+	+							
learning games	3	0	1		+	+	+					+		
grouped desks/tables	3	0	3		+	+	+					+	+	+
independent reading	3	1	0		+	+	+		+					
independent research	1	0	0			+								
individualized attention to students	3	2	0		+	+	+	+	+		+			
integrating language with music/art/drama	3	0	1		+	+	+					+		
journaling	3	0	0		+	+	+							
language experience	3	1	1		+	+	+			+				+
learning centers	2	0	3			+	+					+	+	+
multicultural activities	3	0	1		+	+	+							+
multi-modality (visual, auditory, tactile)	2	0	3		+		+					+	+	+
neatness and organization	3	0	3		+	+	+					+	+	+
open-ended writing assignments	3	1	0		+	+	+	+			+			
oral language activities	3	0	2		+	+	+					+	+	
poetry or wordplay	3	1	0		+	+	+				+			
positive climate	3	1	2		+	+	+	+		+			+	+
print-rich environment	3	1	2		+	+	+				+		+	+
reading aloud to students	3	2	2		+	+	+		+	+			+	+
recognition of achievement/progress	3	0	1		+	+	+	+						+
shared or choral reading	3	0	0		+	+	+							
small group instruction	3	0	0		+	+	+							
SSR (silent sustained reading)	3	0	0		+	+	+							
student choice or student interests	3	0	0		+	+	+							
student self-assessment	1	0	1				+						+	
student work displayed	3	0	1		+	+	+							+
student-led activities	2	0	0		+		+							
teacher circulates during reading/writing	3	0	1		+	+	+						+	
technology or multi-media	3	0	2		+	+	+						+	+
word walls	3	0	2		+	+	+						+	+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S=Gr.1 teacher reports element as 1 of 5 top strengths
 2S=Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School J Snapshot

"I think I do a fine job .The self-confidence of the children is good. Money is not the answer to solving problems."

--Kindergarten Teacher

Located near a large metropolitan city, this FY99 elementary school is comprised of predominately Caucasian students, 6% of whom are receiving free or reduced lunch. The building is well-maintained and has an impressive faculty and administrator. Literacy responsibilities were divided between two literacy coordinators. However, the principal was also committed and routinely attended in-services that addressed literacy issues. One, called *Leadership for Literacy*, helped administrators differentiate between phonics and phonemic awareness, showed them how to understand a reading record, and tested them on the characteristics of phonics programs and the preferred sequence of phonics instruction. Such administrative commitment to instructional leadership supports teacher morale and content competencies.

One of the most impressive aspects of this school was the school environment. Each observed classroom was print rich, with big books and extensive libraries. Reading aloud to students, providing poetry or wordplay, along with phonics cards added to the positive environments. In addition, there was obvious recognition of student achievement and individualized attention to students. The kindergarten teacher uses a weekly newsletter to encourage parent involvement. When student progress is limited, parents are advised to push the high frequency words but not go ahead of school instruction. Parents are asked to read to their children as much as possible, praise their children's reading efforts, and set an example by reading themselves. Home-school partnership is also supported through conferences in the fall. The second grade teacher gives parents her home telephone number and encourages them to comment on student portfolios with different color tabs. She also corresponds with parents via e-mail, which she says "is delightful because I can get to it when I want to."

Teachers use *Logical Phonics* and follow its sequence. Formal phonics is taught twice a week at the kindergarten level. Reading is literature based with computerized material that the kindergarten teacher writes on her own. First grade uses the Houghton Mifflin literature based series. A typical reading lesson begins with a review vocabulary lesson, then reading the story, then discussion, sometimes in a whole group and sometimes individually. In addition, there is the *Book-It!* , a program sponsored by Pizza Hut that provides free coupons for reading books. The second grade teacher uses a variety of instructional strategies, individual, paired, choral reading, and much repetition and integration in other subject areas. Struggling readers do things in small group and with older grades. Second graders write science and math logs so that writing and phonics have an integrated purpose. "The phonics helps them with their writing."

Classroom teachers are assisted by a professional support staff that includes an intervention specialist, *Reading Recovery* teacher, Title I teacher, and the two previously mentioned literacy coordinators. These specialists assist many teachers and do not have rooms of their own. As a result, classroom teachers must make time to talk to them either before or after school. Some teachers rely regularly on the support staff "to provide another point of view." Others have little or no contact with the specialists.

District and state assessment requirements are overwhelming this school. Throughout the year, first and second grade students are administered a minimum of three or four reading and

writing theme tests developed by Houghton Mifflin, publishers of the reading series used in the district. Each fall and spring, students in these same grades take the *Woodcock Reading Mastery/Nonsense Word Test*, which assesses vocabulary and comprehension. In the spring, these same grades take the Gates-MacGinite, even though its vocabulary and comprehension scores are not calibrated with the Woodcock reading test. Also in the spring, grade 1 is tested on the *CBE*, a district developed test in reading and writing, and grade 2 takes the *Riverside/Off-Year Proficiency Test* for writing, reading and math. By the end of the year, first graders have taken six tests of reading, none of which correlates with or even complements the others to provide an accurate picture of reading or phonics proficiency. Not surprisingly, teachers seem not to utilize the data generated from this mass of district mandated testing. When asked about how they assess reading and phonics, teachers described their own informal assessment practices, e.g., listening to children read and respond to recall questions. Only one mentioned the theme based reading tests developed by the reading series publisher.

Teachers in School J were rated highest in providing extended opportunities for authentic reading and writing. (See Tables 41a and 41b.) Classroom environment strengths were reported most often as reading aloud to students, using big books, teacher circulation during reading and writing. (See Table 42.)

Despite the time and expense associated with what appears to be an uncoordinated testing program that does not adequately inform instruction, reading achievement seems to be improving in this building. The fourth grade reading proficiency pass rate has risen steadily over the past four years to a high of 87%, with the greatest gains occurring during the past two years. (See Table 13.)

Table 41a. RTI Competency Scores for School J

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	2	3	2.00
GRS2	Understanding how language and cognitive development relate to literacy	0	1	3	1.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	0	1	3	1.33
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	2	3	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	1	2	1.67
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2	1	2	1.67
GRS7	Helping readers apply different comprehension strategies for different purposes	1	1	3	1.67
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	0	2	3	1.67
GRS9	Communicating pertinent information with parents and support personnel	2	2	3	2.33
GRS10	Understanding and applying research on reading	1	1	1	1.00
PS1	Knowing essential phonics rules, spelling patterns, and concepts	3	1	3	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1	1	2	1.33
PS3	Understanding the scope and sequence of effective phonics instruction	3	1	3	2.33
PS4	Recognizing the role of metacognition in phonics instruction	2	0	3	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2	0	3	1.67
Classroom Total		23	17	40	26.67

Table 41b. Competency Means Pareto Distribution for School J

RTI Competency		Mean ¹
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.67
GRS9	Communicating pertinent information with parents and support personnel	2.33
PS1	Knowing essential rules, patterns, and concepts of phonics	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2.33
GRS1	Understanding of the reading process as complex, interactive and constructive	2.00
GRS5	Recognizing and addressing the multiple causes of reading difficulties	1.67
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.67
GRS7	Applying different comprehension strategies for different purposes	1.67
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	1.67
PS4	Recognizing the role of metacognition in phonics instruction	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67
GRS2	Understanding how language and cognitive development relate to literacy	1.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	1.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1.33
GRS10	Understanding research and advancing the field of reading	1.00

Table 42. Classroom Environment Checklist: Observed and Reported Frequencies for School J

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	0	0		+	+	+							
big books	3	2	3		+	+	+		+	+		+	+	+
classroom library	3	0	3		+	+	+					+	+	+
comfortable reading area	3	0	2		+	+	+					+		+
cooperative/collaborative learning	3	0	1		+	+	+					+		
extended blocks of time for reading/writing	3	1	0		+	+	+				+			
flexible scheduling	3	0	0		+	+	+							
learning games	3	0	2		+	+	+						+	+
grouped desks/tables	2	0	2		+		+					+		+
independent reading	3	0	1		+	+	+							+
independent research	1	1	0				+				+			
individualized attention to students	3	0	1		+	+	+							+
integrating language with music/art/drama	3	0	0		+	+	+							
journaling	3	1	0		+	+	+		+					
language experience	3	0	0		+	+	+							
learning centers	3	0	1		+	+	+							+
multicultural activities	3	0	0		+	+	+							
multi-modality (visual, auditory, tactile)	3	0	3		+	+	+					+	+	+
neatness and organization	3	1	3		+	+	+			+		+	+	+
open-ended writing assignments	3	0	0		+	+	+							
oral language activities	3	0	2		+	+	+					+	+	
poetry or wordplay	3	0	0		+	+	+							
positive climate	3	1	3		+	+	+				+	+	+	+
print-rich environment	3	1	1		+	+	+				+			+
reading aloud to students	3	3	1		+	+	+		+	+	+		+	
recognition of achievement/progress	3	1	2		+	+	+			+		+		+
shared or choral reading	3	1	1		+	+	+		+			+		
small group instruction	3	0	1		+	+	+							+
SSR (silent sustained reading)	3	0	1		+	+	+							+
student choice or student interests	3	0	0		+	+	+							
student self-assessment	3	0	1		+	+	+							+
student work displayed	3	0	2		+	+	+						+	+
student-led activities	2	0	0		+	+								
teacher circulates during reading/writing	3	2	1		+	+	+		+	+				+
technology or multi-media	3	0	3		+	+	+					+	+	+
word walls	1	0	0				+							

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School K Snapshot

“My greatest need is finding time to do quality planning.”

--School Principal

Five years ago, this FY97 elementary school had kindergarten taught in one old building, blocks from grades one and two. The steps of both buildings were hazardous and classroom walls were thick with re-paintings of institutional green. The school had and continues to have a student population that is 98% Caucasian, with 18% of students eligible for free or reduced lunch. Today, the school is housed in a facility built as a replica of downtown with the same brick streets as hallways and clouds painted on the ceilings. This rural community clearly supports its children. The school, which cost \$14.7 million (state share \$11.6 million), houses approximately 1,000 students K-8. There are approximately 380 computers, 54 laptops with wireless connections, 52 classrooms, 14 restrooms, an "auditeria" that seats 500, a gym that seats 500, a carpeted conference room, well equipped exercise areas, and individual offices for support personnel. This is a building that a CEO would willingly occupy. The teachers don't have any requests as "anything we need, we ask for and get."

The principal is a beloved, respected community leader who has won multiple awards for her knowledge of curriculum, administration and research. Her main concern with previous phonics instruction has been the lack of transfer from phonics to reading produced using *Char-L Phonics*. Written by Charlotte F. Lockhart, the series is an intensive phonics program, not a reading program. It is a supplement to be used before the basal readers are made available. There are no workbooks, pictures, no flashcards or ditto sheets and no pages to color or papers to grade. It builds a foundation of skills around the mastery of 42 sounds of the alphabet, 5 phonetic skills and a 2-step decoding process that enables the students to decode and pronounce multi-syllable words. The researcher observed consistent implementation of the program in the 1997 observation. The principal was also confident that the teachers followed the program in a thorough and systematic manner. Yet, according to the principal, "Twenty percent of the students were still reading at frustration level."

The teachers subsequently added Guided Reading and a differentiated curriculum to better meet all student needs. They felt an anthology was not a good basis for reading instruction as it needed to have more phonics and writing instruction. They now use Houghton Mifflin basal reading series, theme based literature and *Reading Recovery*. Writing rubrics were developed for every grade to add to the informal and off year proficiency assessments. A computerized remedial reading program was purchased for students with learning problems. This pilot program, modified daily after each child gets on-line, is managed from California. In addition, the literacy support person meets daily for half an hour with each of the teachers to aid with planning and instruction. Trade books are used in reading instruction, integrating *Four Blocks'* reading and writing activities and Word Walls. *Guided Reading* was added to *Char-L Phonics*. Reading and phonics are assessed by checklists, anecdotal records, informal tests and the Ohio proficiency test.

In kindergarten, the teacher was observed reading, "How to Lose A Friend." Following a discussion about how one could lose a friend (spit on him, put a frog on her head, stay in the bathroom too long), the children did a page in a language experience book, demonstrating an extension of the reading into the children's lives. Daily 30-minute reading instruction is varied in format at the teacher's discretion. Most lessons follow *Four Blocks* structure with phonics

instruction from the Cunningham text *Systematic, Sequential Phonics They Use*. Further goals include working on instruction and assessment of oral language. Although most of the children in this school come from large, intact families, their oral language skills need development.

Based on observation and interviews, School K received the highest ratings in six categories of the RTI: evaluation and selection of developmentally appropriate texts and methods, extended reading and writing opportunities, teaching different comprehension strategies for different purposes, using assessment to inform instruction, communicating with parents and literacy support personnel, and understanding the scope and sequence of phonics instruction. (See Tables 43a and 43b.) Classroom environment strengths were most often reported as reading aloud to students, extended blocks of time for reading and writing, individualized attention to students, and positive climate. (See Table 44.)

Multiple in-services have been provided for the teachers in *Reading Recovery*, *Summer Institute for Reading Improvement*, *Fall Institute for Reading Improvement*, workshops on Word Walls and *Four Blocks*. The benefit of the in-services, according to the principal, was not only the content but the shared processing of teaching ideas that occurred as teachers traveled together to the trainings often located at great distances from this rural school. Ohio proficiency test scores climbed from 78% in 1997 to 93% in 2000, dipping to 82% in 2001. (See Table 12.)

Table 43a. RTI Competency Scores for School K

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	3	3	2.33
GRS2	Understanding how language and cognitive development relate to literacy	1	3	3	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	3	3	3.00
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	3	3	3.00
GRS5	Recognizing and addressing the multiple causes of reading difficulties	1	3	2	2.00
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2	3	3	2.67
GRS7	Helping readers apply different comprehension strategies for different purposes	3	3	3	3.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	3	3	3.00
GRS9	Communicating pertinent information with parents and support personnel	3	3	3	3.00
GRS10	Understanding and applying research on reading	1	1	3	1.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	3	3	2.67
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1	3	3	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	3	3	3	3.00
PS4	Recognizing the role of metacognition in phonics instruction	2	3	3	2.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	3	2	1	2.00
Classroom Total		32	42	42	38.67

Table 43b. Competency Means Pareto Distribution for School K

RTI Competency		Mean ¹
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3.00
GRS4	Providing opportunities for extended authentic reading and writing experiences	3.00
GRS7	Applying different comprehension strategies for different purposes	3.00
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	3.00
GRS9	Communicating pertinent information with parents and support personnel	3.00
PS3	Understanding the scope and sequence of effective phonics instruction	3.00
GRS6	Understanding how readers use multiple cueing strategies in the reading process	2.67
PS1	Knowing essential rules, patterns, and concepts of phonics	2.67
PS4	Recognizing the role of metacognition in phonics instruction	2.67
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2.00
GRS10	Understanding research and advancing the field of reading	1.67

Table 44. Classroom Environment Checklist: Observed and Reported Frequencies for School K

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	3	0	0		+	+	+							
big books	3	0	3		+	+	+					+	+	+
classroom library	2	1	3		+	+					+	+	+	+
comfortable reading area	2	1	3		+	+					+	+	+	+
cooperative/collaborative learning	2	1	3		+	+					+	+	+	+
extended blocks of time for reading/writing	2	2	3		+	+				+	+	+	+	+
flexible scheduling	2	2	2		+	+				+	+		+	+
learning games	3	0	3		+	+	+					+	+	+
grouped desks/tables	2	1	3		+	+					+	+	+	+
independent reading	3	0	3		+	+	+					+	+	+
independent research	2	0	0			+	+							
individualized attention to students	3	2	3		+	+	+		+	+		+	+	+
integrating language with music/art/drama	3	1	0		+	+	+		+					
journaling	3	0	3		+	+	+					+	+	+
language experience	3	0	1		+	+	+						+	
learning centers	3	0	3		+	+	+					+	+	+
multicultural activities	2	0	0			+	+							
multi-modality (visual, auditory, tactile)	3	0	2		+	+	+					+	+	
neatness and organization	3	0	2		+	+	+					+		+
open-ended writing assignments	3	0	1		+	+	+						+	
oral language activities	3	1	3		+	+	+			+		+	+	+
poetry or wordplay	2	1	3		+	+					+	+	+	+
positive climate	2	2	3		+	+			+		+	+	+	+
print-rich environment	3	1	3		+	+	+		+			+	+	+
reading aloud to students	2	3	3		+	+			+	+	+	+	+	+
recognition of achievement/progress	1	1	0			+					+			
shared or choral reading	2	1	1		+	+					+		+	
small group instruction	2	1	3		+	+					+	+	+	+
SSR (silent sustained reading)	1	1	1			+					+		+	
student choice or student interests	3	0	0		+	+	+							
student self-assessment	1	0	0			+								
student work displayed	3	0	1		+	+	+						+	
student-led activities	1	0	0			+								
teacher circulates during reading/writing	2	1	3		+	+					+	+	+	+
technology or multi-media	2	1	1		+	+					+			+
word walls	2	0	2		+	+						+	+	

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School L Snapshot

"When I came here four years ago, they were using whole language with the mistaken notion that you didn't include phonics. A few were doing phonics on the side and hiding it well. I explained that you had to have an integrated approach, you had to work with every child's learning style, and have to integrate the resources. So we spent a lot of money for training and resources and made huge changes in what they were doing."

--School Principal

Turning around an urban school with a history of poor performance and a 97% poverty rate would be a challenge for any school principal. However, the woman who heads FY99 Cohort School L is not just "any school principal." When this dynamic woman arrived on the scene four years ago, she discovered that teachers were not teaching reading in any but the primary grades. Fourth grade reading proficiency pass rates were at an abysmal 37%, a figure not atypical for a 62% minority urban school in this income bracket, especially in a school with a 40% annual student turnover rate. (See Table 13.) Working with a staff of experienced teachers, the principal became the leading force for change.

Phonics and phonemic awareness activities were added to the curriculum. Title I teachers were put into the first grades to teach the teachers how to take running records. Computer programs like *CCC* and *Fast Forward* were purchased with grant monies because of their promise to improve literacy. *Guided Reading* was implemented in the fifth and sixth grades with plans to bring this training to the primary grade teachers in the near future. The school instituted "looping" that allows one teacher to move on to the next grade level with her students. The principal feels that this enables teachers to get to know children well enough to teach to their strengths. *Balanced Reading* became a part of the extended day program available to any students in grades K-6 whose parents want them in this program. Parents with children "closest to the bubble" for passing the proficiency were urged to enroll their children in extended day.

The principal notes sadly that students in the school can read but that they "don't have comprehension." The computer learning program *Fast Forward* which targets all levels of comprehension, from literal to critical thinking was implemented in grades K-4. The lowest performing students receive 100 minutes per day of this brain-based research program. Students were pre-tested before entering the extended day or computer programs. The teachers and principal researched many types of phonics materials and chose *Sadlier Phonics* because everything in that program is leveled by *Reading Recovery* capabilities. *Ohio Reads* grant money funds an after school tutoring program that uses local Rotary members and business executives to work with the most needy children. According to the school principal, the hardest thing for teachers to do is to use assessment to inform instruction. "Being able to utilize what they know about each child to do their lessons is the toughest." The next weakness that the principal plans to address is questioning skills. She feels that teachers need to help children climb to higher levels of comprehension. The principal feels that the proficiency test has shown them where they need to be. She perceives that because the students are from low income poorly educated families, teachers have not expected enough of the students. A new crop of teachers is arriving in this school having already been trained in guided reading. The principal has high hopes for these new recruits.

The principal noticed an unusual finding about the children in this school: they apparently write better than they read. The children are engaged in journal writing and other

forms of writing from the earliest levels on. To address the reading deficits, this principal has had to persuade the teachers to leave their classrooms to attend professional development. She feels that, until recently, teachers may have been reluctant to leave their rooms for fear that someone else might judge them by how poorly the students were doing. The principal has begun taking the *Guided Reading* training, right along with her teachers. The teachers in this building have built "circles of learning" where they teach each other. The budget has been turned over to the teachers so that they can prioritize their needs and purchase books and materials to help them advance in their teaching, as well as helping students advance in their learning. So far, the teachers have used the funds to stock a well-rounded library of multi-genre books for all levels of learning. Teachers and principal are discouraged that so many children move out of the neighborhood when their economic situations improve. Test scores that would have risen because of extensive work with these children now become the test scores of another school in a more financially well-off district.

It is very difficult to get parents involved in this school. Some programs have begun to turn this around by enticing them with food and personal solicitation. The extended day parents are required to come in. The principal tells parents that the most important mission of this school is reading and writing. Children can learn other content area subjects but it must be through reading and writing. Now the teachers have allocated some of the budget for high interest low vocabulary books to supplement the social studies and science curricula. Teachers feel that the basal reader that the district adopted, *Scott Foresman*, does not align with the interests and capabilities of the students in this school. The new library of children's books seems much more appropriate and motivating.

Teachers in School L were not rated as superior in any of the RTI competencies. (See Tables 45a and 45b). Top classroom environment strengths were most often reported as reading aloud to students and shared or choral reading. (See Table 46.)

To all these changes, the principal adds, "It's still in its infancy. We have a long way to go. With the children we have, we will always have a long way to go. We will always need to make sure that we are using research driven techniques. What scares me the most is losing children at the top end, not challenging them enough. Those teachers at the upper level are going to be changing their lesson plans drastically. I think the shocker to our system is the deficit in family life. They are not academically minded. In a child-centered curriculum, they do not challenge children enough. In academic centered, they do not focus on the child enough. We need to combine the two." The fact that proficiency scores have fallen even lower than they were in 1997 is explained by the principal as partly the result of the learning curve of this school's teachers. Teachers had to learn to do things differently, to unlearn some of the practices they had been using for nearly 20 years. With a FY2001 fourth grade reading proficiency pass rate of only 30% (see Table 13), this principal and staff have their work cut out for them.

Table 45a. RTI Competency Scores for School L

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3	2	2	2.33
GRS2	Understanding how language and cognitive development relate to literacy	3	2	1	2.00
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	2	2	2.33
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	2	2	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	3	2	1	2.00
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	2	2	1	1.67
GRS7	Helping readers apply different comprehension strategies for different purposes	1	1	1	1.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	1	3	2.33
GRS9	Communicating pertinent information with parents and support personnel	1	2	2	1.67
GRS10	Understanding and applying research on reading	3	1	1	1.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	2	1	2	1.67
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	3	1	1	1.67
PS3	Understanding the scope and sequence of effective phonics instruction	1	1	2	1.33
PS4	Recognizing the role of metacognition in phonics instruction	0	1	0	0.33
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	1	1	1.00
Classroom Total		32	22	22	25.33

Table 45b. Competency Means Pareto Distribution for School L

RTI Competency		Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.33
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.33
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	2.33
GRS2	Understanding how language and cognitive development relate to literacy	2.00
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.00
GRS6	Understanding how readers use multiple cueing strategies in the reading process	1.67
GRS9	Communicating pertinent information with parents and support personnel	1.67
GRS10	Understanding research and advancing the field of reading	1.67
PS1	Knowing essential rules, patterns, and concepts of phonics	1.67
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1.67
PS3	Understanding the scope and sequence of effective phonics instruction	1.33
GRS7	Applying different comprehension strategies for different purposes	1.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.00
PS4	Recognizing the role of metacognition in phonics instruction	0.33

Table 46. Classroom Environment Checklist: Observed and Reported Frequencies for School L

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	4	0	0	+	+	+	+	+						
big books	4	1	3	+	+	+	+			+		+	+	+
classroom library	4	1	3	+	+	+	+				+	+	+	+
comfortable reading area	3	0	1	+	+		+					+		
cooperative/collaborative learning	4	0	1	+	+	+	+							+
extended blocks of time for reading/writing	4	1	0	+	+	+	+	+	+					
flexible scheduling	3	0	0	+	+		+	+						
learning games	4	1	2	+	+	+	+				+		+	+
grouped desks/tables	4	1	3	+	+	+	+			+		+	+	+
independent reading	4	0	0	+	+	+	+							
independent research	1	0	0	+										
individualized attention to students	3	0	0	+	+	+								
integrating language with music/art/drama	2	0	1	+	+							+		
journaling	4	0	0	+	+	+	+							
language experience	4	1	1	+	+	+	+		+				+	
learning centers	4	0	1	+	+	+	+					+		
multicultural activities	2	0	0	+			+							
multi-modality (visual, auditory, tactile)	3	1	3	+	+	+			+			+	+	+
neatness and organization	4	1	3	+	+	+	+			+		+	+	+
open-ended writing assignments	4	0	1	+	+	+	+						+	
oral language activities	4	0	0	+	+	+	+							
poetry or wordplay	4	1	3	+	+	+	+				+	+	+	+
positive climate	4	0	3	+	+	+	+	+				+	+	+
print-rich environment	4	1	3	+	+	+	+		+			+	+	+
reading aloud to students	4	2	3	+	+	+	+			+	+	+	+	+
recognition of achievement/progress	4	0	1	+	+	+	+					+		
shared or choral reading	4	2	3	+	+	+	+		+	+		+	+	+
small group instruction	4	1	0	+	+	+	+	+			+			
SSR (silent sustained reading)	2	0	0			+	+							
student choice or student interests	3	0	1	+	+		+						+	
student self-assessment	0	0	0											
student work displayed	3	0	1		+	+	+						+	
student-led activities	2	0	0	+	+									
teacher circulates during reading/writing	4	0	2	+	+	+	+						+	+
technology or multi-media	3	0	3	+	+		+					+	+	+
word walls	4	0	2	+	+	+	+					+	+	

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S=Gr.1 teacher reports element as 1 of 5 top strengths
 2S=Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School M Snapshot

“You can read with mothers and fathers. I like reading with a lot of people.”

--First Grade Boy (strong reader), answering the interview question, “What is fun about reading?”

For this child, reading is a social activity. Unfortunately, many of his fellow students are labeled “high risk, high need,” and are not able to find the same enjoyment. The building is thirty years old with limited space for counseling, testing, and interviewing. The classrooms are cramped but contain books, materials and teachers interested in providing individual help to these needy students. The teachers at School M are experienced, and most hold Masters degrees. Seventy percent of the students are Caucasian. The percentage of students eligible for free or reduced lunch is 66%, and student turnover is high (36%). Poverty is not the only risk factor in this Venture Capital school. Many children suffer from fetal alcohol syndrome or come from large single parent families. Many first graders are placed in transitional classes because of their immaturity.

The phonics program adopted four years ago was *Workshop Way, Instant Personality-Phonics Activities*. This program was chosen because of the presumed fit between the challenged students in this school and the population for whom the program was developed originally by Grace Pilon, a Chicago educator. For example, students are taught “Communication with a Smile,” a procedure that requires them to look directly at teachers or peers with whom they are communicating. This technique was designed to promote and maintain a special relationship between teachers and students—the feeling and, over time, the belief that both parties are intelligent and equally worthy of human dignity. The *Workshop Way* relationship is meant to replace the prevailing paradigm that views the teacher as the authoritarian adult and the student as an “incomplete” submissive human being. Willingness to participate and loving to learn are two side effects of this phonics classroom climate. The program was prescriptive and sequential, with designated concepts taught in each grade. For example, the three letter blends *spl, str, spr, scr* are to be taught in second grade. In the 1997 observation, this phonics program was directed by a Title I teacher who focused much of her time on first grade. However, all teachers used the program with consistency and built upon the prior knowledge introduced in earlier grades.

Phonics instruction had changed in the 2000 observation. Since the prescribed *Workshop Way* content for Kindergarten does not match the local curriculum, the teachers trained in *Workshop Way* began writing their own daily lesson plans which blend the WW format and lessons with the content prescribed in their grade level course of study. New teachers who were not trained in *Workshop Way* are using *Sing, Spell, Read & Write (SSRW): A Total Language Arts Curriculum*. As the name implies, SSRW is a comprehensive and systematic phonics-based curriculum that uses music to teach the language arts.

The Title I teacher who had directed the phonics instruction has retired and was replaced by a person with no training in remediation, reading/ math or phonics. A new teachers’ aide was hired to become the Ohio Proficiency Test Tutor. This aide’s background and experience is in the field of medical records. Such support faculty and staff cannot provide strong resources for improving children’s academic skills. Predictably, the state and district reading tests give a mixed picture of success. There has been steady improvement on the *California Achievement Test* but proficiency was obtained only on one of the four reading sections on the proficiency Test. Non-fiction is a weak reading skill as demonstrated by proficiency test scores. Only one

fourth grader passed all four sections of the Ohio proficiency Test in 2000.

All three observed teachers at School M were rated as superior in communication with parents and literacy support personnel. (See Tables 47a and 47b.) Top classroom environment strengths were most often reported as providing extended blocks of time for reading and writing, individualized attention to students, and small group instruction. (See Table 48.)

The exodus of specialized teachers and the failure to hire qualified replacements makes improving reading and academic abilities of “at risk” children more difficult for the master teachers who remain. These master teachers are the backbone of the reading program, and each has a wealth of strategies for providing sound reading instruction. However, when interviewed, these teachers predicted that their best efforts would be insufficient to enable their very needy students to meet the current performance standard on the Ohio Reading Proficiency Test. Their prediction proved to be accurate. The percentage of fourth graders who attained proficiency decreased from 24.5% to 21%. (See Table 12.)

Table 47a. RTI Competency Scores for School M

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	3	3	1	2.33
GRS2	Understanding how language and cognitive development relate to literacy	3	3	2	2.67
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	3	3	2	2.67
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	3	3	1	2.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	3	3	2	2.67
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	3	2	2	2.33
GRS7	Helping readers apply different comprehension strategies for different purposes	2	3	0	1.67
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	3	3	1	2.33
GRS9	Communicating pertinent information with parents and support personnel	3	3	3	3.00
GRS10	Understanding and applying research on reading	1	1	0	0.67
PS1	Knowing essential phonics rules, spelling patterns, and concepts	3	3	1	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	3	2	2	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2	2	2	2.00
PS4	Recognizing the role of metacognition in phonics instruction	2	2	0	1.33
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2	3	1	2.00
Classroom Total		39	39	20	32.67

Table 47b. Competency Means Pareto Distribution for School M

RTI Competency	Mean ¹	
GRS9	Communicating pertinent information with parents and support personnel	3.00
GRS2	Understanding how language and cognitive development relate to literacy	2.67
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2.67
GRS1	Understanding of the reading process as complex, interactive and constructive	2.33
GRS4	Providing opportunities for extended authentic reading and writing experiences	2.33
GRS6	Understanding how readers use multiple cueing strategies in the reading process	2.33
GRS8	Using multiple assessment indicators to monitor reading progress to inform instruction	2.33
PS1	Knowing essential rules, patterns, and concepts of phonics	2.33
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33
PS3	Understanding the scope and sequence of effective phonics instruction	2.00
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	2.00
GRS7	Applying different comprehension strategies for different purposes	1.67
PS4	Recognizing the role of metacognition in phonics instruction	1.33
GRS10	Understanding research and advancing the field of reading	0.67

Table 48. Classroom Environment Checklist: Observed and Reported Frequencies for School M

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	4	0	1	+	+	+	+						+	
big books	4	0	2	+	+	+	+						+	+
classroom library	4	0	1	+	+	+	+	+					+	
comfortable reading area	4	0	1	+	+	+	+							+
cooperative/collaborative learning	3	0	1	+	+		+						+	
extended blocks of time for reading/writing	4	3	3	+	+	+	+	+	+	+	+	+	+	+
flexible scheduling	4	0	1	+	+	+	+						+	
learning games	4	0	2	+	+	+	+						+	+
grouped desks/tables	4	0	2	+	+	+	+					+	+	
independent reading	4	0	2	+	+	+	+						+	+
independent research	2	0	1	+			+						+	
individualized attention to students	4	3	1	+	+	+	+	+	+	+	+			+
integrating language with music/art/drama	2	0	1		+	+							+	
journaling	4	1	1	+	+	+	+			+				+
language experience	4	0	2	+	+	+	+						+	+
learning centers	4	1	1	+	+	+	+				+		+	
multicultural activities	4	0	0	+	+	+	+							
multi-modality (visual, auditory, tactile)	4	1	3	+	+	+	+		+			+	+	+
neatness and organization	4	0	1	+	+	+	+						+	
open-ended writing assignments	4	1	1	+	+	+	+			+			+	
oral language activities	4	0	2	+	+	+	+						+	+
poetry or wordplay	4	0	2	+	+	+	+						+	+
positive climate	4	1	2	+	+	+	+				+		+	+
print-rich environment	4	0	2	+	+	+	+					+	+	
reading aloud to students	4	1	2	+	+	+	+		+				+	+
recognition of achievement/progress	4	0	1	+	+	+	+	+					+	
shared or choral reading	4	0	1	+	+	+	+						+	
small group instruction	4	2	3	+	+	+	+		+	+		+	+	+
SSR (silent sustained reading)	3	0	1	+		+	+						+	
student choice or student interests	4	0	1	+	+	+	+						+	
student self-assessment	1	0	1	+									+	
student work displayed	4	0	1	+	+	+	+						+	
student-led activities	0	0	0											
teacher circulates during reading/writing	4	0	2	+	+	+	+						+	+
technology or multi-media	4	0	2	+	+	+	+						+	+
word walls	4	0	2	+	+	+	+	+					+	+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

School N Snapshot

"When you're all alone and quiet, you can channel yourself right into a book"
-- Second Grade Boy (strong reader) answering the interview question, "What's fun about reading?"

Located in a town of approximately 10,000, the student population of this school is 95 % Caucasian with 25% eligible for free and reduced lunch. Student turnover is 10%. The phonics program is *Touch Phonics*. In this program, through guided practice and application, letters are manipulated so that they can demonstrate segmentation, sound to symbol correspondence, blending, concrete to symbolic representation, and substitution. Similar phonics activities are based on Patricia M. Cunningham's *Making Words*. In addition, the teachers use *The Four Blocks* model, allotting 2 ½ hours to Language Arts, divided into time segments for Guided Reading, Self-Selected Reading, Writing, and Working with Words. This instruction is neither whole-class nor ability-grouped. Rather, the teacher uses a variety of material and cooperative formats to make the instruction multilevel—meeting the needs of the different reading levels in the classroom. At different times, teachers work with the whole class, small groups and individual children. Student progress is assessed through dictation in kindergarten first and second grade, and through benchmark text reading assessment. In this assessment, book 1 is leveled for kindergarten, books 1 and 2 for first grade, and books 3 and 4 for second grade. Running records are taken in first grade and second grade and the Gates MacGinite Reading Test or Aprenda (for Spanish) is given in second grade.

There was much variation in RTI competencies between teachers at this school. The Kindergarten teacher scores were less than adequate in most competencies. The first grade teacher's scores were superior in several competencies, and the second grade teacher's scores ranged from inadequate to superior on some competencies. Recognizing the causes of reading difficulties was the highest scoring competency for School N. (See Tables 49a and 49b.) The teachers felt their classroom strengths were in writing, word walls, and multi-modality activities. (See Table 50.) Phonics is taught every day. The sequence of instruction is determined by Cunningham's book, which contains phonics activities "not in drill but in context." The focus is on composing words, word sorts into spelling patterns and sounds. Teachers state that making word lessons with patterns helps in making the transfer to writing. Teachers share the purpose for phonics lessons with students prior to the lesson and encourage students to discuss their learning.

One teacher stated that "struggling readers are helped most by using differentiated texts, teaching more decoding skills, chunking words, word cards and abandoning the 'sound it out' statement." Phonics is also integrated into other subjects, with students writing a book about living and non-living things, reading math word problems, and following written directions in all subjects. Teachers try to involve parents through newsletters which describe strategies parents can use with their children at home, (e.g., how to read with children, how to use flash cards, how to select good informational books, how to involve their children in writing). Teachers indicated that they do not assess phonics formally. They do, however, assess reading through worksheets, running records, DRA leveled books and the Terra Nova. Ohio proficiency reading pass rates increased from 38.2% in 2000 to 64.0% in 2001. (See Table 13.)

Table 49a. RTI Competency Scores for School N

RTI Competency		Grade K	Grade 1	Grade 2	Mean ¹
GRS1	Understanding of the reading process as complex, interactive and constructive	1	2	1	1.33
GRS2	Understanding how language and cognitive development relate to literacy	1	1	3	1.67
GRS3	Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	0	2	2	1.33
GRS4	Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	1	3	0	1.33
GRS5	Recognizing and addressing the multiple causes of reading difficulties	2	2	3	2.33
GRS6	Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	1	3	2	2.00
GRS7	Helping readers apply different comprehension strategies for different purposes	1	2	0	1.00
GRS8	Using multiple assessment indicators to monitor reading progress and to inform instruction	0	3	3	2.00
GRS9	Communicating pertinent information with parents and support personnel	1	3	2	2.00
GRS10	Understanding and applying research on reading	0	3	1	1.33
PS1	Knowing essential phonics rules, spelling patterns, and concepts	1	2	3	2.00
PS2	Recognizing the importance of phonemic and phonological awareness in emergent literacy	1	2	2	1.67
PS3	Understanding the scope and sequence of effective phonics instruction	0	3	3	2.00
PS4	Recognizing the role of metacognition in phonics instruction	0	2	3	1.67
PS5	Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1	2	2	1.67
Classroom Total		11	35	30	25.33

Table 49b. Competency Means Pareto Distribution for School N

RTI Competency	Mean ¹
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.33
GRS6 Understanding how readers use multiple cueing strategies in the reading process	2.00
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	2.00
GRS9 Communicating pertinent information with parents and support personnel	2.00
PS1 Knowing essential rules, patterns, and concepts of phonics	2.00
PS3 Understanding the scope and sequence of effective phonics instruction	2.00
GRS2 Understanding how language and cognitive development relate to literacy	1.67
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	1.67
PS4 Recognizing the role of metacognition in phonics instruction	1.67
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67
GRS1 Understanding of the reading process as complex, interactive and constructive	1.33
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	1.33
GRS4 Providing opportunities for extended authentic reading and writing experiences	1.33
GRS10 Understanding research and advancing the field of reading	1.33
GRS7 Applying different comprehension strategies for different purposes	1.00

Table 50. Classroom Environment Checklist: Observed and Reported Frequencies for School N

Element	#RP	#S	#O	PRP	KRP	1RP	2RP	PS	KS	1S	2S	KO	1O	2O
activities extended beyond the classroom	4	0	0	+	+	+	+							
big books	4	0	3	+	+	+	+					+	+	+
classroom library	4	1	3	+	+	+	+				+	+	+	+
comfortable reading area	4	0	1	+	+	+	+					+		
cooperative/collaborative learning	4	0	2	+	+	+	+					+	+	
extended blocks of time for reading/writing	4	0	0	+	+	+	+	+						
flexible scheduling	3	1	2		+	+	+		+			+	+	
learning games	4	0	0	+	+	+	+							
grouped desks/tables	4	0	2	+	+	+	+					+	+	
independent reading	4	0	1	+	+	+	+						+	
independent research	1	0	0	+										
individualized attention to students	4	0	1	+	+	+	+					+		
integrating language with music/art/drama	4	0	1	+	+	+	+							+
journaling	4	1	0	+	+	+	+	+		+				
language experience	4	0	1	+	+	+	+					+		
learning centers	2	0	1	+		+							+	
multicultural activities	3	1	0	+	+		+		+					
multi-modality (visual, auditory, tactile)	4	3	2	+	+	+	+		+	+	+	+		+
neatness and organization	3	1	1	+		+	+				+			+
open-ended writing assignments	4	0	0	+	+	+	+							
oral language activities	4	0	1	+	+	+	+					+		
poetry or wordplay	4	1	0	+	+	+	+	+	+					
positive climate	4	2	2	+	+	+	+		+		+		+	+
print-rich environment	4	0	3	+	+	+	+	+				+	+	+
reading aloud to students	4	0	2	+	+	+	+					+	+	
recognition of achievement/progress	4	0	0	+	+	+	+							
shared or choral reading	4	1	1	+	+	+	+			+			+	
small group instruction	4	0	1	+	+	+	+						+	
SSR (silent sustained reading)	3	0	0	+		+	+							
student choice or student interests	4	0	0	+	+	+	+							
student self-assessment	3	0	0	+	+	+								
student work displayed	3	0	0	+	+	+								
student-led activities	2	0	0	+	+									
teacher circulates during reading/writing	4	2	1	+	+	+	+			+	+		+	
technology or multi-media	4	0	2	+	+	+	+						+	+
word walls	4	2	3	+	+	+	+	+		+	+	+	+	+

#RP=Number reporting element as present
 #S=Number reporting element as strength
 #O=Number of classrooms where element was observed
 PRP=Principal reports element as present
 KRP=Gr.K teacher reports element as present
 1RP=Gr.1 teacher reports element as present,
 2RP=Gr.2 teacher reports element as present

PS=Principal reports element as 1 of 5 top strengths
 KS=Gr.K teacher reports element as 1 of 5 top strengths
 1S= Gr.1 teacher reports element as 1 of 5 top strengths
 2S= Gr.1 teacher reports element as 1 of 5 top strengths
 KO=Observed in Kindergarten classroom
 1O=Observed in Gr.1 classroom
 2O=Observed in Gr.2 classroom

Effective Schools and The Characteristics That Distinguish Them

To ascertain PDP schools' success in reading improvement, both quantitative and qualitative criteria were considered. Figures 5, 6, and 7 display quantitative criteria for success as evidenced by PDP schools' pass rates on 4th grade reading proficiency tests. Figure 5 indicates that in the five-year period between 1997 and 2001, only Schools K, J, and C had mean 4th grade reading proficiency pass rates at or above the Ohio state mean of 55%. School K (80.5% passing) exceeded the state mean by over 25 percentage points and School J (73.9% passing) exceeded the state mean by nearly 19 percentage points.

Figure 5. 4th Grade Reading Proficiency 1997-2001 Mean Pass Rate for All Schools

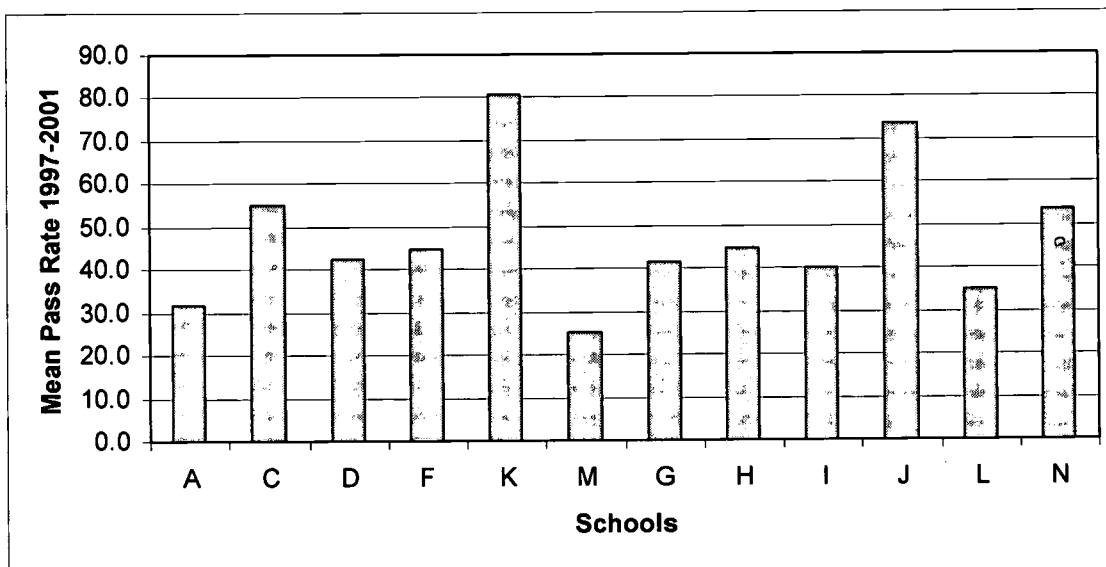


Figure 6 displays the PDP schools' most recent pass rates on the fourth grade reading proficiency test for Spring, 2001. Schools J (87.0% passing), K (82.0% passing), D (72.0% passing), and N (64.0% passing)all exceeded the 57.0% state pass rate, and School C (56% passing) nearly met the state pass rate.

Figure 7 displays the percentage gain or loss in 4th grade reading proficiency pass rates for school year 2000-01 vs. school year 1996-97. This measurement of improvement, shows school progress in reading achievement over time, even if the test scores themselves do not yet meet standards of high achievement. The school with the most improvement over time was School D, with a percentage point gain in pass rate of 195.1%. Other schools showing improvement over time were School A (71.3%), School N (67.5%), School I (37.0%), School J (26.8% improvement), School C (24.2%), and School K (5.1%). Schools with high initial pass rates in 1996-97 (Schools J and K) had a limited potential for pass rate gains compared to schools with formerly low pass rates.

Figure 6. 4th Grade Proficiency Spring, 2001 Pass Rates for All Schools

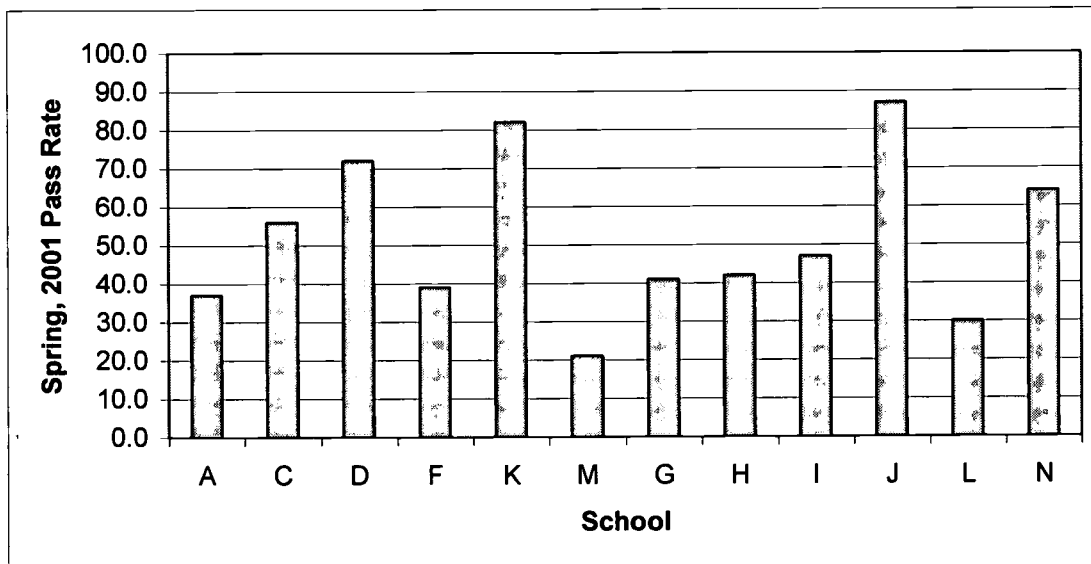


Figure 7. 4th Grade Reading Proficiency Pass Rate Change 1997-2001 for All Schools

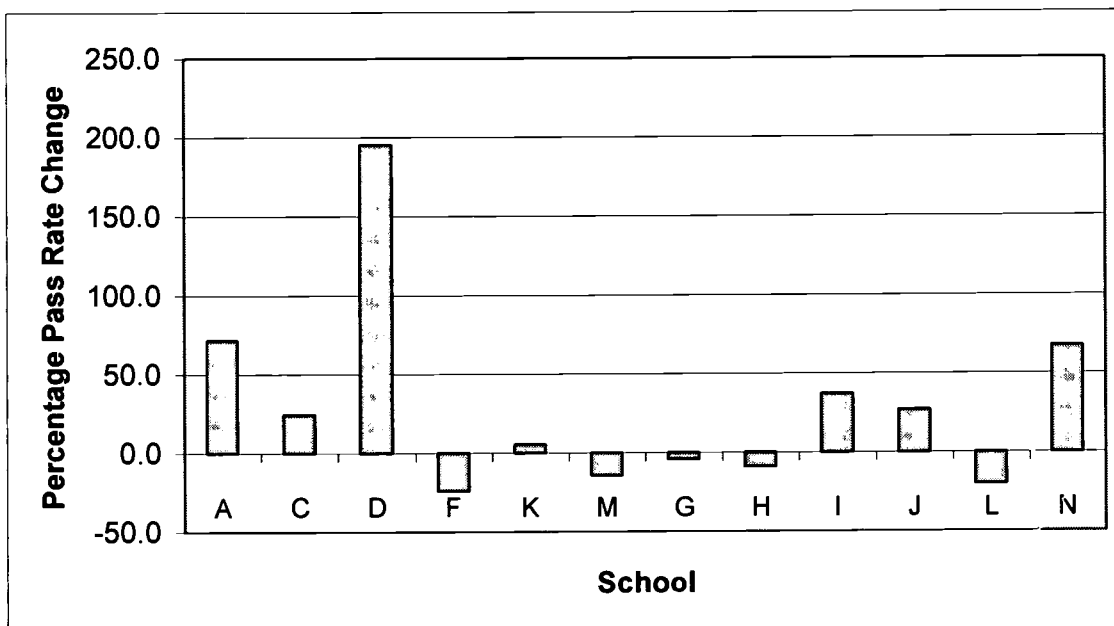


Table 51 summarizes the data from Figures 5, 6, and 7, identifying PDP schools as having successful reading programs if a) their pass rates on the 4th grade reading proficiency test equaled or exceeded the state pass rate or b) their 2001 pass rates exceeded their 1997 pass rates. Seven PDP schools met these criteria: Schools A, C, D, I, J, K, and N.

Table 51. 4th Grade Reading Proficiency Criteria for High-achieving PDP Schools

School	Mean Proficiency Pass Rate 1997-2001 \geq State Mean of 55%	Spring, 2001 Pass Rate \geq State Mean of 57%	% Gain in Pass Rate 1997 vs. 2001 $>0\%$
A			*
C	*	*	*
D		*	***
I			*
J	*	***	*
K	***	*	*
N		*	*

*** = highest rating in this category among PDP case study schools

Demographics for high-achieving PDP schools are summarized in Table 52. These schools are located in all types of settings, from urban to suburban to rural. Four of the seven have over 50% minority students and three have less than 10% minorities. Four of the seven have poverty rates that exceed 40% based on eligibility for free/reduced cost lunch. Three of the seven have poverty rates under 20%. One characteristic that all seven schools share is that student turnover is low. As far as teacher variables are concerned, teacher turnover, as well as teacher education and experience appear to play a role in student success. In high-achieving schools, the teachers have an average of 14 years of teaching experience. More than 50% of the teachers in five of the seven high-achieving schools hold Master's degrees or higher. In addition, at least a third of the teachers in these schools have been in the building over ten years (except for the one school that was reorganized with a new faculty during that time period).

Table 52. Demographics in High-achieving PDP Schools

School	Location	% Minority Students	% Eligible F/R Lunch	% Student Turnover	Mean #Years Teaching	% Teachers In Building 10+ Yrs	% Masters Degree or Higher
A	small city	75	95	**	**	45	**
C	rural	1.5	43	10	12	47	31
D	urban	62	69	8	14	0*	50
I	urban	55	55	7	12	46	83
J	suburban	9	9	2	16	32	64
K	rural	2	18	2	14	52	65
N	small town	5	5	10	16	33	26

*School reorganized with new faculty less than 10 years ago

**missing data

Table 53 displays the literacy practices, programs, and professional development of high-achieving PDP schools. Five schools in this group have been in the PDP program for 4 years;

Table 53. Reading and Phonics Practices in High-achieving PDP Schools

School	Yrs in PDP	School Wide Literacy Programs/Practices/Professional Development	Reading Program	Phonics Program	Assessments
A	4	Guided Reading Balanced Literacy Grab a Book, Grab a Child Reading Renaissance	HB	Logical Phonics	Teacher-made rubrics District rubrics
C	4	Four Blocks Guided Reading Reading Recovery Parent Center On-site consultants Coaching Groups America Reads Grant Title I Parent in-services	HBJ	Logical Phonics Working with Words Phonics Week by Week	Dolch Sight Word Tests Off Year Proficiencies ¹ WISC Teacher-made tests District rubrics
D	4	Yearly pre-post testing Coaching Groups On-site consultants Guided Reading Book discussion seminars Take-home books Cooperative learning	HB Lit-Based	MCP	DRAs 1-minute probes Running Records Basal Tests Proficiency-style tests ¹ Teacher-made rubrics Speaking portfolios
I	2	Trust, risk-taking, friendship taught America Reads Grant Four Blocks Guided Reading Project Adventure	HMifflin	Process Phonics Phonics They Use	DRAs Target Teach Tests District rubrics Burns & Roe IRIs MAT Basal Tests
J	2	Leadership for Literacy Book-It Peer tutoring Reading Recovery	HMifflin Lit-Based	Logical Phonics	Basal Tests Woodcock Mastery Gates-Macginnite Off-Year Proficiencies Teacher-made tests
K	4	Extensive computers/networking Four Blocks Guided Reading Reading Recovery SIRI ²	HMifflin	Char-L Phonics Phonics They Use	Teacher-made rubrics Off-Year Proficiencies
N	4	Four Blocks Guided Reading	Lit-Based	Touch Phonics Making Words	Gates-MacGinitie DRAs Basal tests Running Records Terra Nova

¹Item analyses performed by teachers and instruction modified based on results

² Summer Institute for Reading Improvement

two have been in the program for 2 years. The group as a whole has provided teachers with training in several literacy initiatives. Six of the seven schools incorporate Guided Reading into their programs. Several have tutoring or coaching programs and several incorporate Reading Recovery techniques. Most involve the community in their literacy programs through after school or other programs. All of the high-achieving schools use informal assessments, from informal reading inventories to teacher-made tests and rubrics. Four use off-year proficiencies or proficiency-style tests. Six of the seven schools use basal readers and one uses leveled literature-based instruction. Phonics programs are varied within the group and several schools use more than one phonics program.

Table 54 displays the RTI competency scores for high-achieving PDP schools. The competency in which all of these schools were rated adequate to superior was communicating

Table 54. Mean RTI Competency Scores for High-achieving PDP Schools

School	A	C	D	I	J	K	N	#Schools Scoring ≥ 2.0
GRS9 Communicating pertinent information with parents and support personnel	2.33	2.50	2.67	2.00	2.33	3.00	2.00	7
GRS1 Understanding of the reading process as complex, interactive and constructive	3.00	2.50	2.33	3.00	2.00	2.33	1.33	6
GRS4 Providing opportunities for extended authentic reading and writing experiences	2.67	2.50	2.33	2.67	2.67	3.00	1.33	6
GRS8 Using multiple assessment indicators to monitor reading progress to inform instruction	3.00	3.00	2.33	2.00	1.67	3.00	2.00	6
PS1 Knowing essential rules, patterns, and concepts of phonics	2.00	2.00	1.67	2.33	2.33	2.67	2.00	6
GRS3 Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	2.67	2.50	2.00	2.33	1.33	3.00	1.33	5
GRS5 Recognizing and addressing the multiple causes of reading difficulties	2.00	2.00	2.33	2.33	1.67	2.00	2.33	5
PS2 Recognizing the importance of phonemic and phonological awareness in emergent literacy	2.33	2.00	2.67	2.33	1.33	2.33	1.67	5
PS3 Understanding the scope and sequence of effective phonics instruction	2.67	3.00	1.33	1.67	2.33	3.00	2.00	5
GRS2 Understanding how language and cognitive development relate to literacy	2.00	1.50	2.00	2.33	1.33	2.33	1.67	4
GRS7 Applying different comprehension strategies for different purposes	2.00	2.50	1.33	2.33	1.67	3.00	1.00	4
GRS6 Understanding how readers use multiple cueing strategies in reading process	1.33	1.50	1.67	1.33	1.67	2.67	2.00	2
GRS10 Understanding research and advancing the field of reading	2.33	2.00	0.67	1.67	1.00	1.67	1.33	2
PS4 Recognizing the role of metacognition in phonics instruction	1.00	1.50	1.67	2.33	1.67	2.67	1.67	2
PS5 Understanding the importance of phonics automaticity in reading comprehension and writing fluency	1.67	1.50	1.67	1.67	1.67	2.00	1.67	1

with parents and support personnel. Five of the seven schools scored adequate to superior on understanding of the reading process, extended authentic literacy experiences, use of assessment to inform instruction, knowing the rules of phonics, using developmentally appropriate methods and materials, recognizing and addressing the causes of reading difficulties, recognizing the importance of phonemic/phonological awareness, and understanding the scope and sequence of phonics instruction. Four of the seven schools scored adequate to superior on understanding how language and cognitive development relate to literacy and applying different comprehension strategies for different purposes. Only two of the seven schools scored in the adequate to superior range on understanding how readers use multiple cueing strategies, understanding and applying research, and recognizing the role of metacognition in phonics instruction. Only one of the seven was rated adequate in understanding how automaticity and fluency impact reading comprehension.

Table 55 displays frequencies for classroom environment elements as reported over the entire group of high-achieving PDP schools. (See Appendix R for individual school frequencies.) Totals for each element on the checklist were obtained by combining the number of principals and teachers reporting the element as present with the number of sources reporting the element as one of top five strengths. A well-stocked classroom library and positive climate were the most frequently reported strengths. Also frequently selected were reading aloud to students, extended blocks of time for reading/writing, multi-modality learning, neatness and organization, cooperative and collaborative learning, big books, individualized attention to students, and print-rich environment. Out of 43 people completing the checklist, over half indicated that small group instruction, oral language activities, grouped desks/tables, and technology/multi-media were important to their classroom environments.

It is important to note that this group of high-achieving schools does not include all the PDP schools that appeared, based on observations and interviews, to have exemplary reading programs. Some of the PDP schools that were observed to have exemplary reading programs do not show the improvement in test scores that one might expect. In many cases, there are mitigating factors such as students moving out of the community when their families become more affluent, students moving into the community and taking the proficiency tests before school literacy programs have had time to take effect, teachers moving out of low paying schools to higher paying locations, difficulty in getting parents involved with their children's education, high numbers of at-risk students with low language and cognitive skills on entering school, and home environments that are not conducive to school success.

Table 55. Pareto Distribution of Classroom Strengths Reported by High-achieving PDP Schools

Element	Total
classroom library	31
positive climate	31
reading aloud to students	29
extended blocks of time for reading/writing	28
multi-modality (visual, auditory, tactile)	28
neatness and organization	27
cooperative/collaborative learning	27
big books	27
teacher circulates during reading/writing	26
individualized attention to students	25
print-rich environment	24
small group instruction	23
oral language activities	23
grouped desks/tables	23
technology or multi-media	22
independent reading	21
shared or choral reading	21
comfortable reading area	21
journaling	20
learning centers	20
recognition of achievement/progress	20
poetry or wordplay	20
learning games	19
word walls	19
open-ended writing assignments	18
student work displayed	18
SSR (silent sustained reading)	17
language experience	17
integrating language with music/art/drama	16
multicultural activities	16
flexible scheduling	16
activities extended beyond the classroom	15
student choice or student interests	14
student self-assessment	12
independent research	9
student-led activities	8

Snapshot of a Successful School

The school with a successful reading program is one whose teachers have a deep understanding of the reading process and its complex and interactive nature. With this understanding, teachers help children to strategically decode and comprehend what they read as they are introduced to literature that is meaningful and challenging. In this school, teachers recognize individual children's stages of language and cognitive development and present them with developmentally appropriate literacy instruction that helps children see themselves as successful readers. If language or experiential background is less than adequate for learning, the school environment is supplemented with life experiences that help children understand what they read. The classrooms and school library are well stocked with both fiction and nonfiction of quality and variety, with books displayed in ways that make them irresistible to students. Teachers and librarians work to develop lifelong readers who love books. They know being a successful reader means being a successful learner. Literacy support personnel assist teachers in selecting books that match student interests and that represent and respect a diversity of cultures and ethnicities.

Reading and writing experiences in classrooms are not restricted to regimented time slots, but allow children to engage and become immersed in literacy activities for extended periods of time. Content areas such as math, science, and social studies are integrated with reading throughout the curriculum. Teachers use these content areas to teach and reinforce reading and phonics concepts and to help children transfer the skills that they learn in reading to other areas of learning. Teachers know that by providing large blocks of time for reading and writing and by providing small group and individual instruction, children will get the practice they need to improve their literacy skills. When reading difficulties arise, teachers have learned to recognize and address a host of underlying causes. They are cognizant of the importance of phonemic/phonological awareness in developing readers and are well-grounded in the important phonics concepts that are necessary for beginning readers to achieve success and independence. When teachers are unsuccessful in uncovering the causes of reading difficulties or when they are unsure of how to ameliorate them, they consult with knowledgeable and helpful literacy support personnel and work together to ensure every child's growth in reading and writing.

Children in this school work to become fluent readers by accessing a variety of cueing systems without over-dependence on any one word recognition strategy. They know that using phonics and other decoding aids is a means to the end of reading comprehension. Children practice repeated reading and build fluency to the point where decoding becomes automatic and their minds are freed to concentrate on the meaning of what they read. Teachers work with students to help them develop and adapt comprehension strategies that are appropriate to different purposes for reading. Students are coached in literal, critical, and inferential comprehension skills that help them construct and extend the meaning of what they read.

Teachers are proficient in using both formal and informal assessments to monitor progress in reading and to adjust instruction to the needs of their students. Principals, teachers, and literacy support personnel get together regularly to analyze test results, brainstorming ways to modify teaching techniques to address categories of items on which their students performed less than satisfactorily. Informal assessments are used on a daily basis and students are taught how to self-assess and monitor their own reading and writing progress. By doing this, students learn to become independent learners who do not always turn to the teacher for direction or assistance. Parents are encouraged to become involved in their children's literacy education

through frequent and timely communication with children's teachers. Ideas for supporting literacy at home are regularly transmitted to parents, and special assistance is provided for children who need extra help in reading and writing. Well organized after-school tutoring programs are available for all students to provide the extra practice and assistance they need to become proficient. Parents are valued as part of the literacy team, and teachers confer with them as equal partners in the literacy education of their children.

Professional development is actively promoted by the school principal so that teachers can be well trained in the latest research-based literacy initiatives. If the school is located in an economically depressed area, the principal is proactive in seeking grants to supplement the school budget so that students in this school can have the opportunities that are readily available in more affluent communities. The principal makes sure that teachers have a voice in the selection of literacy grants, programs, and instructional materials so that they become stakeholders in the success of the school. Teachers and literacy support personnel work together before and after school and during summers to integrate successful practices developed through earlier grants into promising new programs funded by more recent grants. Students in this school are expected to succeed and are encouraged to see themselves as successful readers and writers. Both students and teachers support each other through peer coaching and mentoring because they know that in helping others to succeed, they themselves grow as learners and as human beings.

CONCLUSIONS AND RECOMMENDATIONS

The 2001 Phonics Demonstration Project evaluation was undertaken to seek answers to five questions posed by the Ohio Department of Education in conjunction with the Ohio Legislature. The conclusions that follow are organized in relation to these five questions as they relate to reading and phonics in Ohio's elementary schools and teacher preparation programs.

This evaluation was conducted at a time when public elementary schools and teacher preparation programs were undergoing rapid change. In fact, so many changes were going on simultaneously in Ohio's schools that isolating the effects of one of these changes, in this case the addition of systematic and intensive phonics instruction in the primary grades, presented a difficult measurement challenge.

The desire to capture the complex and dynamic nature of early reading instruction in Ohio's schools seemed to dictate a case study approach. This approach provided rich and detailed descriptions of the current practices and environmental features of individual PDP schools that were integrated with demographic and student achievement data. Hence, the conclusions that follow are based on case studies of 12 of 50 elementary schools that received PDP grants in FY97 and FY99.

In the interest of generalizability, efforts were made to ensure that the 12 schools selected were representative of the many different kinds of elementary schools and phonics programs being used in Ohio. Six of the twelve schools visited during the formative evaluation in 1997 were asked to participate in the current evaluation. These schools varied on a number of demographic dimensions and were selected only after telephone interviews with contact persons at each school confirmed that the schools were continuing to implement systematic phonics instruction. Once the FY97 schools had been identified, FY99 schools that matched the demographic characteristics of the FY97 schools were recruited. While the matches were not perfect, the case study schools in both the FY97 and FY99 cohorts do represent a good cross section of Ohio schools in terms of size, location, student variables, teacher variables, and reading and phonics programs.

The approach used with teacher preparation programs was more comprehensive. All 48 colleges and universities in Ohio that prepare elementary school teachers were asked to submit documentation about how they prepare future teachers of reading. Thirty institutions, including 9 of the 13 public institutions and 21 of the 35 private institutions, provided the information requested. Repeated but unsuccessful attempts were made to elicit the cooperation of the non-responding institutions. Their reasons for not responding are unknown and may or may not reflect concerns regarding their programs for preparing reading teachers. The data set for teacher preparation institutions also included institutional "Report Cards" for the 30 participating colleges and universities and scores on (RTPI) tests of general reading and phonics, administered to students at four of the participating institutions. Since the overall number of test takers was small in comparison to the total number of students enrolled in Ohio's teacher preparation programs, general reading and phonics test scores should be viewed as indicative of the variability in teacher preparation programs, rather than as accurate estimates of statewide performance. With the above qualifications, the following conclusions are warranted.

Research Question #1:

Do Ohio colleges of education prepare primary and elementary school teachers to teach reading effectively for children with different learning styles and different early childhood experiences?

Identifying Standards of Effective Reading Instruction for Diverse Learners¹

Standards for the effective teaching of reading to diverse learners are articulated in the General Reading Strand of the Reading Teacher Preparation Inventory (RTPI) and the Reading Teacher Inventory (RTI), two research-based instruments developed for the study to assess the preparation and delivery of effective reading and phonics instruction. In order to prepare teachers to deliver quality reading instruction to diverse learners, colleges of education need to assure that their graduates understand and apply central concepts relating to 1) the nature of the reading process, 2) the development of literacy, 3) selecting appropriate texts and methods, 4) providing authentic reading/writing experiences, 5) ameliorating the causes of reading difficulties, 6) interaction of multiple cueing strategies, 7) facilitating the application of comprehension strategies, 8) using assessment indicators to drive instruction, 9) developing effective communication with parents and literacy support personnel, and 10) engaging in literacy research in the classroom. In addition to these ten core concepts, graduates of teacher education programs need to have acquired a level of experiential background that enables them to start building successful literacy programs when they begin teaching. Three central areas of academic/experiential background that are crucial to beginning teachers of reading are 1) thorough preparation in reading/language arts methods and materials, 2) extensive professional experiences working with diverse learners, and 3) extensive supervised experiences in teaching reading.

Assessing the Preparation of Reading Teachers for Diverse Learners

Among the 30 institutions in the study, there is wide variation in the preparation of reading teachers who can work effectively with diverse learners. Added to a lack of consistency in course content across institutions, there are substantial differences in the opportunities for students to apply knowledge of the core competencies through interactions with school children. These differences in teacher candidate requirements also exist among licensure areas within institutions (Early Childhood, Middle Childhood, Intervention Specialist, and Reading Specialist). There is, however, a clear trend of improvement on all of the areas of reading teacher preparation since the institutions moved from certification to licensure.

In the most comprehensive areas of licensure within each institution, the core competencies in which Ohio's teacher education institutions were the strongest were 1) preparation in basic reading/language arts pedagogy, 2) facility with multiple types of assessment, and 3) developing authentic reading/writing experiences. The weakest areas of Ohio's reading teacher preparation programs relate to 1) professional experiences working with diverse learners, 2) developing facility in communicating with parents, 3) supervised practice teaching reading, and 4) understanding and applying literacy research in the classroom. Results of the RTPI General Reading Test also indicate that students may have a weakness in the evaluation and selection of developmentally appropriate texts and methods and instructing children in the use of multiple cueing strategies. Although there is documented course content in developmentally appropriate texts and methods, student test results indicate that there may be a difficulty with retention and transfer of this knowledge.

¹The term "diverse learners" is used to represent "students with different learning styles and early childhood experiences."

Respect for diversity and a commitment to providing teacher education students with the knowledge, skills, and attitudes necessary for working with diverse students are frequently included in institutional program goals and course objectives. However, despite thorough examination of submitted course syllabi and supplementary materials, there is little, if any, documentation that these goals and objectives are actually translated into real-life experiences in the field with diverse learners. It may be that institutions do arrange for their teacher candidates to have such experiences, but without documentation, it is not possible to confirm that teacher candidates are getting the experience they need in working with children of different learning styles and early childhood experiences.

The ability to communicate effectively with the parents of developing readers and writers is crucial to building successful literacy programs in our nation's schools. This is one area that receives little mention in reading component of teacher preparation programs. Even if parent communication is covered in courses outside of reading/language arts requirements, there is no guarantee that teacher candidates will learn about how to encourage parents to support their children's literacy.

The degree of variation within and across institutions in required hours of field experience and student teaching is substantial. Some programs are gratifyingly thorough while others barely meet the minimums for accreditation. In many teacher preparation programs, course descriptions and syllabi for student teaching and other field experiences make no mention of teaching reading. It is assumed that most field experiences will include some reading; however, if not explicitly stated in assignments and course requirements, there is no assurance that students are engaging in reading instruction and are being evaluated on their delivery of such instruction.

A primary purpose of field experience in reading is to provide students with opportunities to apply what they have learned in the college classroom. In the majority of Ohio's teacher education institutions, full-time faculty teach the reading/language arts methods courses while adjunct faculty and other part-time faculty supervise student teachers. If field experience supervisors are not those who teach the methods courses, this creates a potential problem when evaluating students on their delivery of instruction in the classroom. Unless field supervisors are familiar with course content, it would be difficult for them to determine how well student teachers are applying what they were taught and are expected to know. Examining how teacher education institutions train adjunct field supervisors in methods course content and field experience evaluation criteria was outside the scope of the present evaluation, and no documentation of such training was requested or received. However, the institutional "report cards" demonstrate that it is common practice to have different professional educators doing the on campus and field components of teacher preparation. For this reason, the potential slippage between the theory and practice arms of teacher preparation is a concern that warrants further examination by the ODE and by teacher preparation personnel.

The ability of teacher candidates to learn from student teaching and other field experiences is also impacted by the quality and amount of supervision they receive. In some of Ohio's teacher education institutions, there are low ratios between student teachers and supervisors, allowing for multiple visits, feedback, and mentoring necessary for developing competent teachers. In other institutions, however, the student teacher to faculty supervisor ratio climbs as high as 14 to 1. There is little doubt that such disproportionate ratios translate into far less supervision of student teachers, a factor that may seriously impact the development of effective reading teachers.

In recent years, a plethora of literacy research has spawned the creation of exciting new delivery systems for teaching reading and language arts. High-achieving public schools provide their teachers with extensive professional development opportunities so that they may be trained

in research-based techniques. Many teachers informed PDP interviewers that the training they received through professional development workshops and seminars had been far more helpful to their development as effective reading teachers than anything that they had learned in college. Unfortunately, such training rarely, if ever, is extended to teacher candidates within Ohio's teacher preparation programs. Must graduates of Ohio's teacher education institutions await employment as teachers to be trained in research-based literacy techniques? The results of this evaluation indicate that the answer to the question is "yes," unless changes are made in teacher education programs.

As indicated by the above discussion, there are numerous activities that impact the preparation of reading teachers. Based on the responses of the 30 teacher preparation programs, there is considerable variation in how these activities are implemented in Ohio's colleges and universities. In summary, the effectiveness of the preparation for teaching reading appears to range from minimally adequate to grossly inadequate in some programs and adequate to superior in other programs.

Recommendations in Preparing Effective Teachers of Reading

To promote the development of reading teachers skilled in working with diverse learners, the following recommendations are made. Most importantly, teacher education institutions need to provide extensive, well-supervised experiences for teacher candidates in working with diverse learners, prior to their employment as teachers. To assure consistency in teacher preparation, opportunities for working with diverse learners need to be a) documented in program descriptions, course requirements, and course assignments, and b) supervised by experts familiar with methods course content, as well as the philosophy and mission of their institutions' college or department of education.

Teacher preparation programs, if they are not already doing so, need to provide their students with sufficient opportunities to develop expertise in communication with parents and literacy support personnel, especially in relation to children's development in reading and writing. Such opportunities need to be real and not simulated or theoretical.

Students need extensive supervised practice in the teaching of reading as part of their teacher preparation program. Only through such experience will students become skilled in the diagnosis and correction of reading difficulties so critical to the success of young learners. This need provides a perfect opportunity for teacher candidates to help struggling readers in Ohio's schools by providing one-on-one tutoring as part of their reading requirements. College tutors need to be trained in helping children develop cueing and comprehension strategies necessary for proficiency in reading and writing. For those institutions that do not already have such a program in place, it is important to form ongoing partnerships with public schools to facilitate placement of college tutors with the most needy children.

Teacher education programs need to incorporate research-based professional development and training into teacher preparation programs. Graduates of teacher education programs need to be familiarized with the language arts programs such as Four Blocks, Guided Reading, and Balanced Literacy that are being used in the most effective of Ohio's public schools. Teacher candidates need to learn how to transfer knowledge of theory learned in methods courses to research-based materials and programs. Students should not have to await employment as teachers to receive training in such research-based materials and programs. It is recommended that the reasons why the majority of Ohio's teacher preparation programs do not include coverage of the new language arts programs being used in high-achieving public schools be explored.

It is further recommended that the evaluation of teacher preparation in reading and phonics be extended to all of Ohio's teacher education institutions and not just limited to

institutions submitting materials for this study. The RTPI and/or other research-based instruments could be used to assess the degree to which all teacher education graduates are prepared to teach children with different learning styles and early childhood experiences. The results of such an assessment could be used to help Ohio's teacher education institutions achieve consistency in the quality of programs that prepare teachers of reading.

It is unlikely that colleges and universities will take it upon themselves to implement the above recommendations without some external stimulus. Simply listing content in course syllabi or program descriptions does little to ensure its inclusion in the program in an effective manner. Monitoring of teacher education programs should be extended and improved, and the impetus for planning and conducting such monitoring should, of necessity, come from the Ohio Department of Education. It should not be expected, however, that the Department will assume such responsibility without additional funding and resources.

Research Question #2:

In preparing teachers to teach reading, do Ohio colleges of education include how to teach phonics effectively?

Identifying Standards Of Effective Phonics Instruction

Standards for the effective teaching of phonics are articulated in the Phonics Strand of the Reading Teacher Preparation Inventory (RTPI) and the Reading Teacher Inventory (RTI). Effective phonics instruction requires application level knowledge in five key areas: 1) basic phonics rules, concepts, and spelling patterns, 2) the importance of phonemic and phonological awareness in literacy development, 3) the scope and sequence of phonics instruction, 4) the role of metacognition in phonics instruction, and 5) the importance of automaticity and its relationship to reading comprehension and writing fluency. Mastery of basic phonics rules and concepts, as well as knowledge of how phonemic and phonological awareness develops, enables beginning teachers to accurately assess the needs of young readers and writers. Knowledge of the scope and sequence of phonics instruction enables teachers to plan and deliver coherent and timely presentation of phonics concepts to young learners at strategic points in their literacy development. If teachers are aware of the role of metacognition in phonics instruction, they are in a position to help young learners monitor and assess the effectiveness of the strategies they use to decode unknown words. Finally, teachers who recognize the importance of developing automaticity will be able to help their students attain the fluency necessary for effective comprehension, and will be able to diagnose and remediate struggling readers who over-rely on phonics to the point that it impairs comprehension.

Assessing the Preparation of Teachers in Delivering Phonics Instruction

Document sets addressing the reading curriculum in teacher preparation programs in Ohio indicate that a) phonics was not addressed very effectively in most K-8 certification programs, and b) phonics is being given considerably more time and attention in new licensure programs. Teacher preparation institutions have complied with the state mandate to include a course in phonics in early childhood, middle childhood, and intervention specialist licensure programs, although there does appear to be some reluctance on the part of a few institutions to comply with the spirit as well as the letter of the law. For example, in some programs much of the content of the phonics course is devoted to topics unrelated to phonics. One university even uses an "anti-phonics" textbook as the text for the phonics course.

Few institutions include a field experience component with their phonics courses,

suggesting that the opportunities for preservice teachers to practice what they have learned in their phonics course are limited. Such opportunities may exist in field experiences associated with other courses in their programs, but there was little or no documentation suggesting that this occurs in any systematic fashion.

Scores on the RTPI Phonics Test administered to teacher education students at four Ohio institutions suggest that many preservice teachers have not mastered basic phonics rules and spelling patterns necessary for effective teaching. The mean number correct on the 50-item Phonics Test for students completing certification programs was only 27.44. The mean for licensure students was higher (34.63) but even that mean represents a score of 69.2%. Fourth graders needed to answer 85% of items on Ohio's fourth grade reading proficiency test in the spring of 2000 to attain proficiency. Should we expect less of their teachers?

Unfortunately, the document sets submitted by institutions preparing teachers did not always include syllabi and/or sufficient detail to ascertain the precise nature of phonics instruction. Sometimes, this occurred because the institutions had not yet taught all the courses in the new licensure programs so the syllabi were still "under construction." Based on the documents that were reviewed, it appears that the weakest areas of instruction relate to a) how to teach children to be aware of the phonics and other word recognition strategies they use to read and write, and b) how to integrate phonics into content area reading and writing. Both document sets and the results of the RTPI Phonics Test suggested that preservice teachers tended to be unaware of the subtle interplay between phonics and comprehension and failed to understand how the fluency of word recognition impacts reading comprehension.

In summary, it cannot be concluded that phonics instruction is adequate for most of the teacher education programs. If the submitted materials accurately reflect the instruction students are currently receiving, it can be concluded that phonics instruction in many institutions is inadequate.

Recommendations in Preparing Effective Teachers of Phonics

Although teacher preparation institutions have incorporated phonics and are presenting a more balanced reading curriculum, there is still room for improvement. Several suggestions emerged from the evaluation. First, it is recommended that teacher preparation institutions review their field requirements to ensure that all preservice teachers are provided sufficient opportunities to attain proficiency in teaching phonics. Second, it is recommended that teacher preparation institutions that have not already done so develop assessment procedures to ensure that their graduates have the knowledge and skills needed to teach phonics effectively. Third, it is recommended that teacher preparation institutions review their reading curricula to verify that these important concepts are adequately addressed. Again, in order to enhance the implementation of these recommendations, improved monitoring by the Department is suggested.

Research Question #3:

What reading instruction practices are used by schools that are effective in teaching children with a variety of learning styles and early childhood experiences?

Identifying Schools with Effective Reading Instruction for Diverse Learners

To identify programs that deliver effective reading instruction to diverse learners, both quantitative and qualitative criteria must be considered. It can be argued that the most effective schools are the ones with the highest test scores. It can also be argued that the effective schools

are those who have been successful in improving their test scores. However, there are other factors involved in successful reading programs that are not measurable by objective means. Some of the more intangible factors such as fostering a love of reading, books, and learning are the ones that may, in the long run, be even more crucial to growth and development than performance on standardized tests at any given point in time. Student achievement in reading has affective, as well as cognitive and psycho-motor components. Ideally, a successful school is one that promotes both qualitative and quantitative growth in its students as readers and writers.

PDP schools achieved varying levels of success in balancing the demands for improved test scores with their mission to help children develop into lifelong learners who become positive contributors to the society in which they live. Based on 4th grade reading proficiency pass rates and improvement over time, seven PDP schools were identified as successful in both quantitative and qualitative terms. Students in these high-achieving schools have a diversity of backgrounds, early childhood experiences and learning styles. The schools themselves are located in urban, rural, and suburban settings. Student populations in these schools come from families with whose socio-economic status ranges from low to high. Several of the schools have large numbers of "at risk" students who come to school lacking the language and cognitive background necessary for literacy development. Differences in dispositions, backgrounds, environmental factors, cognitive levels, and language development predispose children to different learning styles, based on their individual needs and capabilities. Reading programs must take these differences into consideration if they are to be successful with all learners.

Some factors in reading success or the lack of it are beyond the control of schools, and even when schools are "doing all the right things," objective measures and test scores still fall below what might be expected, even when schools are "doing all the right things." Improving reading achievement is difficult when schools have an unstable student population and when students have had insufficient time in the program before taking proficiency tests. Improving reading achievement is also difficult when there are large numbers of students whose language and cognitive deficits take years to ameliorate or students whose home environments are not literacy supportive. The reading achievements of schools with large numbers of high-risk students with special needs should not be measured on the same scale as schools whose students come to school with the background, support, and skills needed for reading success. Other factors beyond the control of individual schools involve the loss of exemplary teachers to higher paying districts, a cultural climate that makes it difficult to involve parents in their children's education, and insufficient resources for providing teachers with the professional development they need to grow as professionals.

Identifying General Reading Practices in Effective Schools

When high-achieving PDP schools were identified, several common teaching practices and programs emerged. Reading programs in these schools do not end at the school door, nor do they end at the close of the school day. Parents are educated in helping their children to succeed in reading and writing through inservices, parent centers, and ongoing communication between teacher, principal, literacy specialist, parent, and students. Well-organized tutoring programs are offered after school hours for struggling readers, drawing tutors from community leaders, senior citizens, high school students, and classroom teachers. Teachers use their understanding of the reading process to foster both word recognition and comprehension skills through programs like Guided Reading, Four Blocks, Reading Recovery, and Balanced Literacy. School principals are active in obtaining grants and other funding to provide teachers with intensive professional development in these and other research-based literacy initiatives.

Reading and language arts are scheduled in large blocks of time of 120 minutes or more

each day. During the language arts block, students are given the opportunity to integrate reading and writing, to read independently, and to select quality literature aligned with their differing needs and levels of development. In addition to whole group instruction, teachers meet with small homogeneous groups and individual students who needed extra help. Students are encouraged to partner with reading and writing buddies who read to each other and help each other out with word recognition and comprehension. In Guided Reading programs, teachers circulate and listen to several children who are each reading aloud at their own individual paces, assisting individuals as the need arises. Students are guided in prediction and other comprehension skills with questions that set purposes for reading at several points within individual reading selections. Students are encouraged to respond to reading through discussions and seminars where they share their reactions and understandings of the reading material.

Both formal and informal assessments are a vital part of the reading and language arts program. Teams of teachers within schools develop their own tests and rubrics and perform item analyses on off-year proficiency tests or proficiency-style tests. When student weaknesses are uncovered through these analyses, teachers modify their instruction to address and correct the deficits. Classrooms are stocked with libraries laden with quality literature, both fiction and non-fiction. Students are exposed to a smorgasbord of literary genres, authors, and illustrators. In some schools, special attention is given to non-fiction because proficiency tests have shown this to be an area of weakness for young students. Children are mentored by teachers, literacy support personnel, coaches, and even school principals in expanding their vocabulary and developing background knowledge needed for reading comprehension.

Teachers read aloud to students daily, modeling expressive reading and sharing their own love of reading and fascination with books. High on the priority list of teachers and principals is developing a positive classroom climate where children feel safe, supported, and valued. Students are actively taught to care about each other, to help each other out, and to build bonds of trust and friendship. Children feel free to take risks in these classrooms, without fear of ridicule from teachers or peers if they make a mistake. Humor and drama are frequently added to literacy lessons, helping children to associate reading, writing, and learning with pleasurable and positive feelings.

In interviews with diverse learners, it was determined that all of the PDP case study schools had been successful in some of the more affective goals of reading achievement. Young children in these schools overwhelmingly view themselves as successful competent readers because their teachers and parents have encouraged them in that vision. Students delight in the sense of mastery they feel when figuring out unknown words and in the sense of self-worth they feel when helping out others with reading or writing. Many of the students can articulate the self-sufficient strategies they use when encountering unknown words, taking pride in the independence they are achieving. They already know that the best way to improve in reading is to read "lots and lots of books." The vast majority of young children in PDP schools had no difficulty in describing favorite books that they read outside the school setting, favorite characters, and favorite authors. It is clear that large numbers of these young children have already developed a love of reading and books. If teachers and parents help students to retain this positive attitude throughout their school years, there is a good chance that they will make reading a daily habit and advance to become skilled and successful readers.

Recommendations in Building Effective Reading Programs for Diverse Learners

It is recommended that Ohio's public elementary schools be encouraged and supported in building reading and language arts programs that integrate reading, writing, listening, and speaking activities into all areas of the curriculum. It is particularly important that schools be

recognized for continuous improvement in reading achievement, as well as for high test scores and proficiency pass rates. Such recognition provides an attainable goal that can keep motivation and effort high in schools that have far to go to raise pass rates to acceptable levels.

A greater emphasis on continuous improvement could have other benefits as well. It might prompt a reconceptualization of the purposes and value of proficiency testing. Critics argue that proficiency tests do little more than identify successful and unsuccessful students, teachers, and schools and blame the victims. If proficiency test results were used more as tools for identifying a) what methods work well, b) where help is needed, and c) how limited resources should be allocated, then the State's testing program might receive wider acceptance. This will not happen unless schools with large numbers of at-risk children receive the additional resources they need to lower student/teacher ratios and to provide intensive and timely interventions before reading problems develop into a cycle of school failure. Teachers from schools with low reading achievement can benefit from programs that enable the sharing of techniques and ideas among schools across district lines. Teachers who have developed successful practices in the teaching of reading and writing are often quite eager to share what they have learned with colleagues who teach the same grades or who work with similar populations of students. Such programs could augment and supplement, but not replace, professional development programs already offered to teachers. Coordination of programs with Regional Professional Development Centers would be helpful in meeting professional development needs.

Schools with less than satisfactory progress in reading improvement need assistance in learning how to use assessment to inform and modify instruction. This is one of the hardest areas for teachers, especially in the realm of developing reading comprehension at the inferential and critical levels. Professional development that includes on-site mentoring in this area has been of great benefit to some of the most improved PDP schools. Teachers need to be compensated adequately for the time that they spend in item analysis and curriculum revision. Currently, most teachers who engage in these activities are uncompensated and often work late into the evening, over weekends, and over the summer.

Schools that are experiencing difficulty in involving parents in the reading and writing education of their children could benefit from assistance in developing programs that would help them to include this crucial factor in children's literacy development. All schools could benefit from a Parent Center where parents and caretakers could learn how to help their children succeed in school.

Finally, schools could benefit from some assistance in obtaining funds to develop well-stocked classroom libraries, replete with books of every genre. It is especially important to include more non-fiction books in these libraries so that students can gain the proficiency they need to construct and extend meaning in this genre. Exposure to good books can help to promote a love of reading that will have lifelong benefits for young readers and writers.

Research Question #4:

What part does phonics play in teaching children to read in schools that are effective in teaching reading to children with a variety of learning styles?

Identifying Phonics Practices in Effective Schools

When the formative evaluation of the Phonics Demonstration Project was conducted during its initial year of funding in 1997, many teachers had inadequate preparation for teaching phonics. In fact, many reported having had one week or less of phonics instruction during their teacher preparation. As a result, many of these teachers were one step ahead of their students in learning phonics concepts, and many depended on phonics program teachers' manuals for their

own education about phonics. Teaching phonics as an isolated set of skills had made it difficult for students in PDP schools to transfer and apply phonics concepts across all contexts for reading. In some buildings, these problems continued beyond the initial year of the PDP because funds were not available for ongoing teacher support and professional development or for initial training of teachers new to the building.

Much has changed in the delivery of phonics instruction since the formative evaluation in 1997. Although the most recent graduates of teacher education programs have received considerably more preparation to teach phonics than those that came before them, teachers in high-achieving PDP schools have mastered basic phonics concepts through experience with the program and through extensive professional development in new research-based literacy programs that include a phonics component. Dedicated teachers in high-achieving PDP schools have worked together to develop strategies for integrating their original phonics programs into the new literacy models which integrate the teaching of reading and phonics throughout the curriculum. Most high-achieving PDP schools have obtained additional funding for ongoing professional development through the acquisition of multiple grants.

A number of effective practices in the teaching of phonics were discovered in high-achieving PDP schools. Teachers begin building phonemic and phonological awareness in students at the kindergarten level. Most kindergarten graduates are already reading when they enter first grade. In some schools, high-achieving kindergarteners are paired with low-achieving first graders and given intensive small group instruction in phonemic and phonological awareness by literacy specialists. In other schools, teachers build awareness of the sounds and symbols of language through learning games, dramatization, music, and art. Different learning needs of children are addressed through visual, auditory, and psycho-motor activities that build phonological foundations for reading. Children are encouraged to play with language through poetry and nonsense words and through manipulation of letter tiles that they arrange to break words apart and reconstruct them. Manipulatives are also used to help children construct and deconstruct words with roots and affixes. Children are taught to stretch out the sounds of words to better hear the phonemes within them as they read and write. Children are also taught the technique of "chunking"--breaking larger words into smaller, more familiar components. Teachers help children to create analogies between the spelling of known and unknown words, focusing on groups of words with similar spelling patterns. Word walls and word lists are displayed around the classroom to help familiarize children with the spelling patterns and word families.

One fourth of the daily 120-minute language arts block is devoted to phonics and phonics-related activities in several exemplary PDP schools that incorporate the Four Blocks system. During this segment, children are taught through whole group instruction and are encouraged to work with partners and small groups while the teacher circulates to help those who need extra attention. Teachers have a grasp of the scope and sequence of phonics instruction that frees them from over-reliance on teachers' manuals and allows them to adapt the order in which phonics concepts are introduced based on the changing reading and writing needs of their students. Phonics is consistently embedded into authentic reading and writing activities. Children's use of the phonics concepts is monitored in writing activities that range from shared reading and writing to journal writing, creative writing, and expository writing. Teachers help children to articulate the phonics strategies they use, encouraging them to be aware that phonics is one of an array of strategies for decoding unknown words.

"Big books," daily chart paper letters to students, and language experience writing are used to instruct children in phonics concepts. In these activities, children apply highlighter tape to words that illustrate phonics rules and spelling patterns; they frequently focus on word spellings by circling words or filling in missing parts of words. Children whose facility with

phonics lags behind their peers are exposed to peer modeling as they engage in large group choral reading from big books and stories displayed in large print on easels. Teachers seize the "teachable moment" whenever the opportunity arises to integrate phonics instruction into daily learning activities.

Recommendations in Building Effective Phonics Programs for Diverse Learners

As educational research suggests ways to refine and improve the teaching of reading and language arts, teachers could benefit from some assistance in integrating their phonics programs with new research-driven reading programs. The art of teaching reading is not static. Effective teachers continue to learn better ways of doing things throughout their teaching careers. A model in which funding is only provided for the initial year of phonics programs does not take into account the evolving nature of reading and language arts instruction. Today, much more is known about the effective teaching of phonics for diverse learners than was known in 1997. Five years from now, even more will be known. Funds for periodically reviewing and updating current phonics programs would be well-spent. As new teachers become a part of a school's faculty, resources are needed to train and mentor them in the phonics programs that are already in place. To not do so is to deprive students of the effective instruction that they deserve. Some PDP schools have found alternate sources of funding to integrate their phonics programs into current literacy programs, to provide ongoing PDP support for teachers, and to train new teachers in the PDP programs; however, there are several schools that need assistance in obtaining such funding.

Research Question #5:

What is the impact of intensive systematic phonics instruction on student achievement in reading and language arts?

Examining Relationships Between Phonics Instruction and Reading/Language Arts Achievement

Schools whose students have been in the PDP program the longest achieved the highest gains in proficiency pass rates. That this result was seen so consistently indicates a strong relationship between direct systematic phonics instruction throughout the primary grade years and gains in reading achievement.

Research supports the finding that phonics is a necessary but not sufficient part of a well-rounded reading and language arts program. The purpose of phonics instruction is to enable readers and writers to gain a measure of independence. When children know phonics rules and spelling patterns, they are encouraged to apply this knowledge as part of an array of strategies they use to decode and encode words whose spelling is unfamiliar to them. It is important that children not use phonics as their only strategy for decoding unknown words, as is frequently the case with learning disabled students. An over-reliance on phonics slows down the reading process and distracts children's attention from comprehending what they are reading. When children encounter unfamiliar words, they need to use phonics in conjunction with the cueing systems of context, syntax, structural analysis, picture clues, and background knowledge. The application of phonics is used less and less as children advance as readers and recognize more and more words by sight. Consequently, mature readers use phonics only to decode words that are completely unfamiliar to them and to confirm word choices arrived at through other cueing systems.

The role of phonics as children advance in literacy changes from being a tool that is used mostly for reading to one that is used mostly for writing and spelling. Children use phonics to

help them connect words in print with words that they hear and use in their own speech. They also use phonics to help them write the words that they have learned through reading. Emergent writers use their understanding of phonics to generate "invented spelling" to help them write far more words than they know how to spell conventionally. Teachers who support and encourage invented spelling help their children to write creatively and articulately, unhindered by adherence to correct spelling, grammar, and syntax. Over time, children's invented spelling becomes more and more conventional as they master the more advanced phonics rules and spelling patterns, as well as exceptions to phonics rules and generalizations. Eventually, children apply phonics concepts to structural analysis of words as they learn how to build word forms through the addition of prefixes and suffixes.

Although very bright children sometimes learn to abstract phonics rules and spelling patterns without direct instruction, for most children phonics strategies are learned through direct systematic instruction, adjusted to their growing needs as readers and writers. Direct phonics instruction is especially essential for at-risk children who come to school with low cognitive and language skills, for learning disabled students, for those who have different learning styles and background experiences, for students whose native language is not English, and for those whose rate of literacy development is slower than that of their peers. Effective teachers help their students to articulate the phonics strategies that they use so that both student and teacher can ascertain whether phonics is being used in ways that help learners grow as readers and writers.

Recommendations Regarding the Place of Phonics in Reading and Language Arts Programs

Teachers and principals in PDP case study schools overwhelming support the inclusion of phonics in the reading and language arts program. In interviews with PDP evaluators, teachers and principals conveyed their enthusiasm for the impact that direct systematic phonics instruction has had on their students' reading and writing. It is recommended that funding and support for intensive systematic phonics instruction be continued, based on the critical role that phonics plays in early reading and writing independence and based on the value placed on phonics programs by PDP teachers and principals. It is the conclusion of this study that support for PDP programs is a worthwhile investment in the future of Ohio's young children.

References

- Allington, R. L. (2001). What really matters for struggling readers: Designing research-based programs. New York: Longman.
- Bloom, B. S. (1964). Taxonomy of educational objectives: The classification of educational goals. New York: McKay.
- Axtmann, M., Brams, J. S., Nay, P., and Tong, D. (1995). Show what you know on Ohio's Fourth Grade Proficiency Test. Columbus, Ohio: The Ohio Proficiency Test Review.
- Cain, K., Oakhill, J., & Bryant, P. (2000). Phonological skills and comprehension failure: A test of the phonological processing deficit hypothesis. Reading and Writing, 13, 1/2, 31-56.
- Center for the Improvement of Early Reading Achievement. (1998). Improving the reading achievement of America's children: 10 research-based principles. [On-line] Available: <http://www.ciera.org/ciera/information/principles/principles.html>
- Cheek, E. H., Jr., Flippo, R. F., & Lindsey, J. D. (1997). Reading for success in elementary schools. Madison Wisconsin: Brown & Benchmark.
- Cunningham, P. M. (1995). Phonics they use: Words for reading and writing. New York: HarperCollins.
- Darling-Hammond, L. (1999, January-February). Educating Teachers: The academy's greatest failure or its most important future? Academe 26-33.
- DeFord, D. E. (1991). Fluency in initial reading instruction: A Reading Recovery lesson. Theory Into Practice, 30 (3), 201-210.
- Diorio, F. L. (1996). Viewing the writing process of young children: Phonics? It's in there! Ohio Journal of the English Language Arts, 37, (2), 5-12.
- Durkin, D. (1990a). Dolores Durkin speaks on instruction. The Reading Teacher, 43, 472-476.
- Durkin, D. (1990b). Matching classroom instruction with reading abilities: An unmet need. Remedial and Special Education, 11 (3), 23-28.
- Durkin, D. (1993). Teaching them to read (6th ed.). New York: Allyn & Bacon.
- Educational Testing Service. (2000a). Education in the elementary school. The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0010.pdf>
- Educational Testing Service. (2000b). Elementary education: Curriculum, instruction, and assessment. The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0011.pdf>
- Educational Testing Service. (2000c). Elementary education: Content knowledge. The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0014.pdf>
- Educational Testing Service. (2000d). Elementary education: Curriculum, instruction, and assessment (K-5). The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0016.pdf>
- Educational Testing Service. (2000e). Early childhood education. The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0020.pdf>
- Educational Testing Service. (2000f). Introduction to the teaching of reading. The Praxis series: Professional assessments for beginning teachers. [On-line] Available: <ftp://etsi1.ets.org/pub/tandl/0200.pdf>
- Eldredge, J. L. (1993). Exploring Relationships between Phonics Knowledge and Other Reading Related Variables. ERIC Document Reproduction Service No. ED 365942
- Fawson, P. C. & Reutzler, D. R. (2000). But I only have a basal: Implementing guided reading in the early grades. The Reading Teacher, 54, 84-97.
- Fredericks, A. D., Blake-Kline, B. & Kristo, J. V. (1997). Teaching the integrated language arts: Process and practice. New York: Longman.
- Gayton, E. & Byrd, D. (Eds.). (2000). Standards for field experiences in teacher education. Reston, Virginia: Association of Teacher Educators, Joint Task Force on Field Experience Standards.
- Gifford, M., Cochran, J., Graham, G., & Wiersma, W. (1997). Evaluation Of Ohio's Phonics Demonstration Project. (ERIC Document Reproduction Service No. ED 424 565)
- Gillet, J. W. & Temple, C. A. (1994). Understanding reading problems. New York: HarperCollins.
- Goodlad, J. I. (1990). Teachers for our nation's schools. San Francisco: Jossey Bass.
- Graves, M. F., Juel, C., & Graves, B. B. (1998). Teaching reading in the 21st century. Boston: Allyn & Bacon.
- Goldstein, A. (1999). Improving students' reading fluency. ERIC Document Reproduction Service ED433498
- Griffith, P. L. & Olson, M. W. (1992). Phonemic awareness helps beginning readers break the code. The Reading Teacher, 45, 516-522.

- Groff, P. (1989). Modern phonics instruction. ERIC Document Reproduction Service No. ED 328900
- Harp, B. & Brewer, J. A. (1996). Reading and writing: Teaching for the connections. Fort Worth: Harcourt Brace.
- Heilman, A. W. (1993). Phonics in proper perspective. New York: Merrill.
- International Reading Association. (1992). Standards for reading professionals. Newark, Delaware: Author.
- International Reading Association. (1998a). Standards for reading professionals. [On-line] Available: http://www.reading.org/research/standards/free_part2.html#CP
- International Reading Association. (1998b). Learning to read and write: A position statement of the International Reading Association. The Reading Teacher, 52, 193-215.
- International Reading Association. (1999). Using multiple methods of beginning reading instruction. A position statement of the International Reading Association. Newark, Delaware: Author.
- International Reading Association. (2000a). Excellent reading teachers. A position statement of the International Reading Association. The Reading Teacher, 54, 239.
- International Reading Association. (2000b). Making a difference means making it different: Honoring children's rights to excellent reading instruction. A position statement of the International Reading Association. Newark, Delaware: Author.
- International Reading Association. (2000c). The role of phonics in reading instruction: A position statement of the International Reading Association. ERIC Document Reproduction Service No. ED 437647
- Kamil, M. L., Mosenthal, P. B., Pearson, P. D. & Barr, R. (Eds.), (2000). Handbook of Reading Research: Volume III. Newark, Delaware: International Reading Association.
- Lapp, D. & Flood, J. (1997). Where's the phonics? Making the case (again) for integrated code instruction. The Reading Teacher, 50, 696-700.
- Leu, D. J. & Kinzer, C. K. (1995). Effective reading instruction, K-8. Englewood Cliffs, New Jersey: Merrill.
- Moustafa, M. (1997). Beyond traditional phonics: Research discoveries and reading instruction. Portsmouth, New Hampshire: Heinemann.
- National Association for the Education of Young Children. (1994). NCATE program standards: Initial and advanced programs in early childhood education. Washington, D. C.: Author.
- National Association for the Education of Young Children. (1996). Phonics and whole language learning: A balanced approach to beginning reading. Washington, D. C.: Author.
- National Center for Education Statistics. In consultation with the Office of Postsecondary Education and other offices in the Department. (2000). Reference and reporting guide for preparing state and institutional reports on the quality of teacher preparation: Title II, Higher Education Act. OMB Control No.: 1840-0744. Washington, DC: Author.
- Ohio Department of Education. (2000). Title II procedures: Preliminary report. Columbus, Ohio: Center for the Teaching Profession.
- Ohio Department of Education (2001). Report on the quality of teacher education in Ohio. [On-line] Available: <http://www.ode.state.oh.us/tp/ctp/>
- National Council for Accreditation of Teacher Education. (2000). Program Standards for Elementary Teacher Preparation. [On-line] Available: <http://www.ncate.org/standard/elemstds.pdf>
- 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. [On-line] Available: http://www.nationalreadingpanel.org/Documents/pr_finalreport.htm
- Ohio Revised Code. (1996). Bill Number: Amended Sub. S.B. 230. Section 3319.24.
- Olmscheid, C. (1999). Reading fluency: A critical component of reading instruction. ERIC Document Reproduction Service ED430208
- O'Shea, L. J., Sindelar, P.T., & O'Shea, D. J. (1985). The effects of repeated readings and attentional cues on reading fluency and comprehension. Journal of Reading Behavior, 17 (2), 129-142.
- Paulu, N. (1988). What we know about phonics: Research in brief. ERIC Document Reproduction Service No. ED297298
- Raven, J. N. (1997). Phonics and whole language: Friends or foes? ERIC Document Reproduction Service No. ED 413583
- Rasisnski, R.B. (1989). Fluency for everyone: Incorporating fluency instruction in the classroom. The Reading Teacher, 42 (9), 690-693.
- Savage, J. F. (1998). Teaching reading and writing: Combining skills, strategies, and literature. Boston: McGraw Hill.
- Taylor, B. M., Pearson, P. D., Clark, K. F., & Walpole, S. (1999). Beating the odds in teaching all children to read. CIERA Report #2-006. [On-line] Available: <http://www.ciera.org/ciera/publications/report-series/inquiry-2/2-006.pdf>

- Teale, W. H. (1988). Developmentally appropriate assessment of reading and writing in the early childhood curriculum. The Elementary School Journal, 89, 173-183.
- Templeton, S. (1995). Children's literacy: Contexts for meaningful learning. Boston: Houghton Mifflin.
- Trachtenburg, P. (1990). Using children's literature to enhance phonics instruction. The Reading Teacher, 44, 648-652.
- Vacca, J. A., Vacca, R. T., & Gove, M. K. (1995). Reading and learning to read. New York: HarperCollins.
- Wilde, S. (1997). What's a schwa sound, anyway? A holistic guide to phonetics, phonics, and spelling. Portsmouth, NH: Heinemann.
- Wilmore, E. (1996). Brave new world: Field-based teacher preparation. Educational Leadership, 56, (6), 59-63.
- Yellin, D. & Blake, M. E. (1994). Integrating language arts: A holistic approach. New York: HarperCollins.
- Yopp, H. K. (1992). Developing phonemic awareness in young children. The Reading Teacher, 45, 696-703.

Appendix A--Letters to Institutions Requesting Materials

Initial Letter to Institutions Requesting Materials

TO: Teacher Preparation Program Contact Persons
FROM: L.H., ODE Consultant
DATE: October 2, 2000
RE: Materials requested as part of PDP Evaluation

You have been identified as the contact person to assist our evaluation team in collecting information about the changes your institution has made in instructional programs in reading/language arts as a result of the shift from K-8 certification to early and middle childhood and intervention specialist licensure. This evaluation addresses only initial teacher preparation programs, not advanced programs.

We request that you send us three types of information about each of the reading/language arts courses in both your old and new programs: catalog descriptions, course syllabi, and course packs or other supplementary materials you distribute. The reason we are requesting supplementary materials is because we are using a scoring rubric to evaluate your documents. Depending on how detailed your syllabi are, we may or may not be able to get an adequate sense of what your students are required to know and be able to do. For example, a syllabus might say the students will teach a phonics lesson. However, supplementary materials might make it clear that you expect students to incorporate specific strategies in such a lesson-strategies that reading research has indicated are likely to promote meaningful learning, transfer, etc. In deciding what supplementary materials to include, your guiding principle should be to include documents that will help us understand more clearly the specific knowledge and skills your students are expected to learn.

The form for submission of your documents is included on subsequent pages of this message. Samples of the way in which we want you to list your course descriptions are included as well.

If you have any questions, please do not hesitate to email me. We have tried to anticipate your questions, but we've undoubtedly missed some.

Phonics Demonstration Project Evaluation: Teacher Preparation Component Fall, 2000

Responding Institution:

Name of Institutional Contact Person: E-mail Address of Contact Person:

PART I: K-8 Certification Program Courses in Reading

Identify all required courses in the "old program" whose goals and objectives focus on teaching reading effectively. Provide the catalog description (including course name, number, and quarter or semester credit hours) for each of these courses.

Notes.

- A) If reading instruction is part of an integrated course, include the percentage of course time allotted to reading.
- B) If a field component is embedded within a course rather than standing alone as a separate course, include the number of hours spent in the field.
- C) Do not include syllabi or supplementary materials here. However, following each course description, insert (1) to indicate that a course syllabus will be appended and (2) to indicate that a course pack or other supplementary material will be appended. (The form for attaching appendices is discussed below.)

D) Sample course descriptions are included at the end of this document.

PART II: Early Grades, Middle Grades, and Intervention Specialist Licensure Program Courses in Reading
Identify all required courses in each new licensure program whose goals and objectives focus on teaching reading effectively. Begin with the Early Grades program, followed by the Middle Grades and Intervention Specialist programs, in that order. For each program, provide the catalog description (including course name, number, and semester or quarter credit hours) for each required course. If the same course is required in multiple programs, provide the full description for the first program mentioned and list only the course name and number in subsequent programs.

Notes. All the notes described in Part I apply to Part II as well. If a course that is required in multiple programs has different course requirements for students in each program, include supplementary materials in your appendices that clarify these differences.

We are aware that some institutions have not taught all the courses in their new licensure programs. If you have not yet developed syllabi for some of your new courses, we do not expect you to develop them for this project. In such cases, submit your catalog descriptions. In addition, if you submitted detailed course proposals to the state when you applied for approval of your new licensure programs, copies of those course proposals would be helpful as well.

PART III: Program Modification Summary

Provide a summary of not more than four pages explaining how the new course of instruction in reading evolved from the old and a rationale for the changes you have made. If possible, this summary should be written by faculty members who were involved in the development of new courses in reading.

PART IV: Appendices

This section should include an Appendix for each reading/language arts course in your old and new programs, beginning with the first course you described in Part I and ending with the last course described in Part II. Each course appendix should include the course syllabus and any supplementary materials used in the course that will clarify the knowledge and skills students are expected to acquire.

Submission Instructions:

Please mail your complete packet of materials no later than November 3, 2000 to Dr. Glenn Graham, College of Education and Human Services, Wright State University, 3640 Colonel Glenn Highway, Dayton, Ohio 45435.

Sample Institutional Responses to Parts I and II

CI 3430: Phonics and Word Identification for Early Childhood (3 semester hours). Methods for using phonics and word identification strategies with preschool and kindergarten-primary learners. Focus on phonological and morphological underpinnings of English, nature and role of word recognition in reading proficiency, phonemic awareness, decoding and spelling, reading deficits and disabilities. Assessment of reading. (1) (2)

CI 3010: Teaching Elementary Reading, Language Arts and Social Studies (7 semester hours). Integration of instruction in listening, talking, writing, and reading skills with purposes, scope and sequence of Social Studies. Ways to help children grow and develop in these areas. Preparation of an integrated unit. Prerequisite: Advanced professional standing; EDP 3210. Co-requisite: CI 3020. (40% reading) (1) (2)

CI 30020: Integrated Elementary Field Experience (3 semester hours). Prepare and teach integrated language arts/social studies unit, and teach reading/language arts in an elementary or middle school classroom. Co-requisite: CI 3010. (50% reading) (1) (2)

Follow-Up Letter to Institutions Requesting Additional Materials

TO: Teacher Education Contact Persons

FROM: L. H., Consultant
Phonics Demonstration Project Evaluation

DATE: January 13, 2001

RE: Documentation of Reading Preparation in
Early and Middle Childhood and Intervention
Specialist Licensure Programs

We have completed an initial review of the materials submitted by institutions preparing teachers as part of the Phonics Demonstration Project Evaluation. In general, the materials were sufficiently detailed to enable us to apply the General Reading and Phonics Strands of the scoring rubric designed for the evaluation project. However, this was not the case for information regarding field and/or clinical experiences. These experiences comprise a critical component of teacher preparation programs and are documented in the Experiential Strand of our rubric. After consultation with several teacher educators, we concluded that the most efficient way to obtain complete and accurate information about this aspect of programs would be to survey field experience directors/coordinators at participating institutions. I am requesting, therefore, that you send me, via return email, the name and email address of your field experience director/coordinator.

The review of materials submitted by your particular institution has determined that some materials were either incomplete or missing. Please provide the information requested below as soon as possible:

[LIST OF MISSING INFORMATION REQUESTED FROM SPECIFIC INSTITUTIONS]

Once again, let me thank you on behalf of the evaluation team for your prompt and careful attention to our requests.

Appendix B--Participating and Non-Participating Institutions

Participating Institutions

Akron, the University of
Ashland University
Baldwin Wallace College
Bluffton College
Bowling Green State University
Capital University
Cedarville College
Cleveland State University
Dayton, University of
Defiance College
Findlay, The University of
Franciscan University of Steubenville
John Carroll University
Kent State University
Malone College
Marietta College
Mount St. Joseph, College of the
Ohio Dominican College
Ohio State University, The
Ohio University
Ohio Wesleyan University
Otterbein College
Rio Grande, University of
Shawnee State University
Toledo, University of
Urbana University
Walsh University
Wilmington College
Wittenberg University
Wright State University

Non-Participating Institutions

Antioch College
Case Western Reserve University
Central State University
Cincinnati, University of
Denison University
Heidelberg College
Hiram College
Lake Erie College
Lourdes College
Miami University
Mount Union College
Mt. Vernon Nazarene College
Muskingum College
Notre Dame College
Oberlin College
Ohio Northern University
Ursuline College
Wooster, The College of
Xavier University
Youngstown State University

Appendix C--Reading Teacher Preparation Inventory (RTPI)

The Reading Teacher Preparation Inventory (RTPI) is designed to assess the degree to which undergraduate teacher education programs prepare their students to teach reading effectively. Items on the RTPI are aligned with research-supported principles for the effective teaching of reading, including those supported by the International Reading Association (IRA, 1998a, 1998b, 1999, 2000a, 2000b, 2000c) the National Association for the Education of Young Children (NAEYC, 1994, 1996, 2000), the National Reading Panel (2000), the Educational Testing Service Praxis II Series (ETS, 2000a, 2000b, 2000c, 2000d, 2000e, 2000f), the Center for the Improvement of Early Reading Achievement (CIERA, 1998), and widely-used pedagogical literature. The RTPI can be used most effectively when applied to teacher education programs in Early Childhood Education and Elementary Education.

Scoring the Rubric: The RTPI rubric generates scores which reflect depth of knowledge in teaching reading required for teacher education programs in early childhood education and elementary education. Depth of knowledge is classified with reference to Bloom's (1956) taxonomy of cognition, from the simplest levels--knowledge and comprehension--to the most complex levels--application, analysis, synthesis and evaluation. For example, requiring students to read about a teaching principle and pass a written test would generate scores representing knowledge and comprehension levels. Requiring students to design a lesson based on that teaching principle would generate scores representing the application level. Requiring students to present that lesson in a real classroom and evaluate the lesson's effectiveness would generate scores representing analysis, synthesis and evaluation levels.

Depth of preparation for teaching reading is additionally indexed by the number of instructional hours required for education students in reading/language arts pedagogy and field experience. Instructional hours are calculated as follows: For institutions using a semester year calendar, each semester hour represents a minimum of 15 clock hours of instruction. For institutions using a quarter year calendar, each quarter hour represents a minimum of 10 clock hours of instruction. The term "instructional hours" is used to represent clock hours of instruction.

RTPI Strands

The RTPI targets three strands of teacher preparation in the area of reading: General Reading, Phonics, and Academic/Experiential Preparation. Each item on the inventory represents a cluster of skills and concepts identified as crucial to the effective teaching of reading. Because inventory items are necessarily broad in scope, it is recommended that the RTPI be supplemented with the RTPI General Reading and Phonics Tests to provide further insight into the depth of student learning.

General Reading Strand

Items on the RTPI General Reading Strand (designated GRS) focus on knowledge about the reading process, literacy development, instructional materials, and teaching strategies. In addition, this strand targets the ability to recognize and adjust for individual differences, to assess and remediate reading difficulties, to employ research-based practices, and to communicate effectively with literacy stakeholders.

Competency GRS1: Understanding the nature of the reading process as complex, interactive, and constructive.

If the act of reading involved merely identifying words in print, then learning to read would indeed be a simple matter. Word identification, however, is just the beginning of the process of reading. Once written words have been identified, the reader must call upon his/her past experience and concept knowledge about the world, about language, and about literature to test for understanding of the meaning behind the words. Beginning readers must do all this while marshalling their energies to identify the words, switching mental gears between decoding the words and comprehending their meaning. Unless future reading teachers understand the complexity of this process, they may not realize the importance of building background for understanding as well as building skills for decoding words.

Competency GRS2: Knowing how language development and cognition relate to literacy development. The ability to read and write develops over time in a manner similar to that of oral language development. Children build upon their knowledge of spoken language sounds, structure, and meaning to develop knowledge of written language. The rate of development for both language acquisition and cognitive competence varies significantly among learners. Future teachers of reading must learn to recognize students' stages of language and cognitive development in order to present them with developmentally appropriate literacy instruction. Teacher candidates also need to be aware of the need to integrate instruction in reading, writing, listening, and speaking.

Competency GRS3: Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure. Effective reading teachers help students to become lifelong readers who love and seek out books to enrich and inform their lives. Teachers have a unique opportunity to acquaint readers with a variety of quality literature which can motivate them to put forth the effort it takes to become proficient readers. To do this, teachers need a broad knowledge of different genres of literature developmentally appropriate text forms as well as an appreciation for the diversity of cultural, ethnic, and social identities of their students. Excellent reading teachers use multiple methods to build positive connections between beginning readers with literature and reading. Future reading teachers need to be acquainted with criteria for evaluation and selection of literature and instructional methods that match learners' interests, levels of development, and needs.

Competency GRS4: Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum. Reading is a skill that, like any other skill, requires regular practice in order to develop and flourish. Basal reading series are helpful to beginning teachers in that they provide regular reading practice through a structured scope and sequence of skills. Effective reading teachers have learned to use basal readers intelligently, as a resource rather than as the total reading curriculum. To help readers practice word attack and comprehension skills, effective teachers consistently relate these skills to a context of real literature, rather than working on skills in isolation. Future reading teachers need to know how to provide reading and writing opportunities beyond the limited selections of basal readers and worksheets. Reading instruction should permeate the entire curriculum, rather than being relegated to a specific time slot of the school day. Effective teachers regularly provide their students with opportunities for extended engagement in purposeful independent reading and writing.

Competency GRS5: Recognizing and addressing the multiple causes of reading difficulties.

Effective teachers do not use a one-size-fits-all strategy for teaching reading because they recognize the role that individual differences play in reading success. The causes of reading difficulties, as well as the ability to respond to any particular instructional strategy reflect a host of individual factors including learners' cultural/ethnic/socioeconomic background, learning modality preferences, academic and experiential history, emotional and behavioral considerations, cognitive and perceptual abilities, language development, family and environment, interest and motivation. The potential of future reading teachers to recognize and address learners' reading difficulties depends on their ability to synthesize and apply knowledge gained throughout the teacher education program to determine an appropriate course of action for individual students.

Competency GRS6: Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process.

When readers encounter unknown words, they access one or more cueing strategies that have worked for them in the past. By applying their knowledge of phonics, context, syntax, or structural analysis, readers garner "clues" about unknown words. Fluent readers differ from struggling readers in the number and type of cueing strategies they are likely to use to identify words. Future reading teachers need to understand how each of these cueing strategies function, how to identify and assess cueing strategies used by readers, and when readers need help in accessing cueing strategies. This information is crucial in informing instruction to maximize reading fluency.

Competency GRS7: Helping readers apply different comprehension strategies for different purposes.

Comprehension is at the heart of the reading process. It is, in fact, the ultimate purpose for reading. However, the type of comprehension required of readers is dependent upon the genre of the reading material and the reader's purpose in reading that material. Through guided reading, modeling, and other instructional strategies, future reading teachers need to know how to instruct readers in the use of comprehension strategies that match the type of information they wish to gain from reading. Future reading teachers also need to know how to help readers in ways that enhance reading comprehension.

Competency GRS8: Using multiple assessment indicators to monitor reading progress and to inform instruction.

Effective reading teachers use both formal and informal assessments to monitor and document reading progress and to help them plan instruction to match the needs of their students. Information gained from standardized and criterion-referenced formal measures are supplemented with informal assessments that include observation, anecdotal records, informal reading inventories, reading miscue inventories, activity response to literature, teacher-designed instruments, and portfolio assessment. Future reading teachers need to know how to administer and interpret both formal and informal measures of reading progress. In addition, future reading teachers need to know how to adjust instructional strategies based on consideration of information gained from varied assessment instruments.

Competency GRS9: Communicating pertinent information about reading with parents and support personnel.

Parents, other teachers, administrators, and members of the professional community can all potentially contribute to the effectiveness of reading teachers. The ability to benefit from these resources is, however, dependent upon communication between teacher and literacy supporters. The future reading teacher needs to know how set up and maintain clear and

regular channels for gathering information as well as dispensing it, acknowledging and valuing the contributions of concerned parties in the literacy process.

Competency GRS10: Understanding and applying research on reading. The learning process never ends for effective reading teachers because they never stop trying to improve their teaching. They become members of the professional community by participating in literacy organizations, reading literacy publications, and engaging in professional literacy activities. Future reading teachers need to know how to access and apply professional research in the classroom, sharing their findings with other members of the professional community; in so doing, they advance the cause of literacy for all learners.

Phonics Strand

Research consistently supports the need for a phonics component in early reading and ESL (English as a Second Language) instruction. Items on the RTPI Phonics Strand (designated PS) assess depth of teacher preparation in phonics content, phonics developmental progression, instructional strategies for teaching phonics, and the role of phonics in the total reading process.

Competency PS1: Knowing essential phonics rules, spelling patterns, and concepts. Before future reading teachers can teach phonics, they need to have a solid base of phonic knowledge. Teachers of phonics need a broader understanding of phonics concepts than do young readers who only need to know how to use phonics to help them read. The broader knowledge required of teachers is necessary to enable them to assess the phonics strengths and weaknesses of their students and to modify their instruction to meet individual needs.

Competency PS2: Recognizing the importance of phonemic and phonological awareness in emergent literacy. Phonemic awareness--the ability to distinguish, identify, and separate the sounds of speech--is an important prerequisite for children learning to apply phonics. Children use phonemic awareness to identify words that rhyme and that have similar beginning, middle, or ending sounds. As phonemic awareness develops, phonics instruction can move toward phonological awareness-- the recognition of sound/symbol relationships combined with the ability to break words down into their component sounds. Future reading teachers need to know how to help children develop phonemic and phonological awareness to facilitate their ability to use phonics in reading.

Competency PS3: Understanding the scope and sequence of effective phonics instruction. The need for regular, systematic instruction in phonics is essential to the success of any beginning reading program. Although professionals may differ on the finer details of phonics scope and sequence, most recognize a limited number of basic phonic skills as essential to early reading independence. Professionals also agree on certain broad, logical principles to follow when determining the order in which phonics skills are introduced. These principles suggest that phonics concepts be introduced in an order based on levels of frequency, regularity, and complexity. Future reading teachers need to be aware of the need for regular, systematic instruction and practice of phonics skills and the need to consistently imbed phonics instruction into the context of authentic reading and writing activities.

Competency PS4: Recognizing the role of metacognition in phonics instruction. As teachers help students learn to apply phonics concepts in their reading, they guide learners to become aware of

the strategies they use to decode unknown words. When students first learn to apply phonics, it is very much a conscious process. In time, word attack strategies become more and more subconscious except when readers encounter words that are difficult to decode. Through metacognition, readers learn to recognize their own strengths and weaknesses, to identify what they do and do not understand, to evaluate which strategies work best for them, and to self-correct errors in their reading. Future reading teachers need to know how to model the strategies they use to decode words in order to help students build metacognitive awareness.

Competency PS5: Understanding the importance of phonics automaticity in reading comprehension and writing fluency. Phonics is a means to an end, not an end in itself. The goal of phonics instruction is to eventually free the mind from preoccupation with word identification so that it can focus on the real purpose for reading, comprehension. The automatic application of phonics concepts whenever they are needed occurs for proficient readers at a less-than-conscious level, the level of automaticity. Readers who experience no difficulty in identifying words do not need phonics instruction in reading, even if they use phonics very infrequently. While phonics is used by beginning readers to gain independence, more proficient readers rely less and less on phonics and more and more on analogy, structural analysis, syntax, and context to identify unknown words. Future teachers need to know how to recognize when phonics instruction becomes counterproductive to reading comprehension. Future teachers also need to know how and when to shift the emphasis in applying phonics from students' reading to their writing, since difficulty in spelling can impede writing fluency for the same reasons that difficulty in decoding can impede reading comprehension.

Academic/Experiential Strand

The ability to teach reading effectively is a skill that develops over time and in a real-world context. Research consistently supports the need for extensive supervised field experience to develop expertise in teaching reading. Tying teacher preparation standards to performance in the elementary school setting, the National Council for Accreditation of Teacher Education (NCATE, 2000) has recently instituted performance-based accreditation for teacher preparation units. NCATE specifies that teacher candidates must now demonstrate that they can have positive effects on [elementary] school students' learning and that prospective teachers have both a solid content knowledge base and the ability to apply that knowledge in instructional settings. Items on the RTPI Academic/Experiential Strand (designated AES) document the number of required hours for teacher education students in both acquisition of knowledge about reading instruction and in application of that knowledge in classrooms with real children. This strand further documents the number of contact hours that teacher education students actually spend with learners with diverse experiences and abilities.

Requirement AES1: Basic reading/language arts instruction. The International Reading Association (IRA, 1998a) and the National Council for the Accreditation of Teacher Education (NCATE, 2000) recommends a minimum of 135 instructional hours in basic reading/language arts courses incorporating the competencies. This would be the equivalent of 9 semester hours or 13.5 quarter hours. To obtain licensure in Early Childhood and Middle Childhood, the Ohio Department of Education requires completion of at least six semester hours (90 instructional hours) of coursework in teaching reading, including at least one separate course of three semester hours (45 instructional hours) in the Understanding the importance of phonics automaticity in reading comprehension and writing fluency, writing, and spelling. The RTPI documents the

number of instructional hours required for teacher education students in courses that address basic reading and language arts instruction.

Requirement AES2: Professional experiences with a wide variety of learners. The National Association for the Education of Young Children recommends that future early childhood teachers engage in a minimum of 300 [instructional] hours in supervised student teaching in at least two different settings, with two different age groups of varying abilities (NAEYC, 1994, p. 296). NAEYC further recommends that future early childhood teachers engage in field experiences to learn to work effectively with children of culturally and linguistically diverse family systems (NAEYC, 1994, p. 295). The RTPI documents the number of professional hours that teacher education students are required to spend with learners of diverse backgrounds and abilities.

Requirement AES3: Supervised practice in teaching reading. The International Reading Association recommends that future reading teachers have extensive supervised practice in the teaching of reading (IRA, 2000a, p. 239). NCATE standards used in licensure in early childhood education specify that field experience supervision be conducted by qualified professionals (NCATE, 2000). The National Association for the Education of Young Children (NAEYC, 1994) recommends that institutions preparing early childhood educators document field experiences, student teaching, and internships, including the amount of time and type of supervision. The RTPI documents the number of hours that teacher education students spend in professionally supervised field experience in teaching reading.

Requirement AES4: Supervised practice in teaching phonics. The Ohio state legislature specifies that in order to obtain a teaching license for grades K through six, educators must have background in the techniques and strategies "used to teach children to match, blend and translate letters of the alphabet into the sounds they represent, which techniques and strategies are systematically integrated and thoroughly practiced in a developmentally appropriate instructional program to assist [students] in learning to read, write, and spell" (Ohio Revised Code, 1996). In order to practice and develop the skills for teaching phonics, future reading teachers need opportunities to apply what they have learned in a setting where they actually assist students in reading, writing, and spelling. The RTPI documents the number of supervised hours that teacher education students spend in these activities.

Reading Teacher Preparation Inventory (RTPI)
General Reading Strand

Competencies	Pts	Description
GRS1. Understanding the nature of the reading process as complex, interactive, and constructive.	0	Student knowledge of the reading process is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the reading process through assigned readings and/or lectures.
	2	Student comprehension of the reading process is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of the reading process through interactions with school children.
GRS2. Knowing how language development and cognition relate to literacy development	0	Student knowledge of language development and cognition as related to literacy is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the relationship between language development, cognition, and literacy. Information is disseminated through assigned readings and/or lectures.
	2	Student comprehension of the relationship between language development, cognition, and literacy is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of the relationship between language development, cognition, and literacy through interactions with school children.
GRS3. Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure	0	Student ability to select a variety of quality, developmentally appropriate, texts is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the principles for selecting a variety of quality, appropriate, motivational, texts. Information is disseminated through assigned readings and/or lectures.
	2	Student ability to select a variety of quality, developmentally appropriate, texts is assessed through testing, assignments, or college classroom activities.
	3	Students must select a variety of quality, developmentally appropriate texts and use them in interactions with school children.
GRS4. Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum	0	Student ability to develop extended authentic reading and writing experiences is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the principles for developing frequent opportunities for extended authentic reading and writing experiences. Information is disseminated through assigned readings and/or lectures.
	2	Student ability to develop extended authentic reading and writing experiences is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate ability to develop and provide extended authentic reading and writing experiences with school children.
GRS5. Recognizing and addressing the multiple causes of reading difficulties	0	Student understanding of multiple causes of reading difficulties is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the multiple causes of reading difficulties through assigned readings and/or lectures..
	2	Student recognition of the multiple causes of reading difficulties and strategies for addressing them is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate recognition of the multiple causes of reading difficulties and strategies for addressing them through interactions with school children.

Reading Teacher Preparation Inventory (RTPI)
General Reading Strand (cont'd.)

Competencies	Pts	Description
GRS6. Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process	0	Student understanding of the different cueing strategies (context, phonics, structural analysis, and syntax) is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the roles of different cueing strategies (context, phonics, structural analysis, and syntax) through assigned readings and/or lectures.
	2	Student understanding of the roles of different cueing strategies (context, phonics, structural analysis, and syntax) is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of the roles of different cueing strategies through interactions with school children.
GRS7. Helping readers apply different comprehension strategies for different purposes	0	Application of comprehension strategies for different purposes is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with different comprehension strategies for different purposes through assigned readings and/or lectures.
	2	Student understanding of different comprehension strategies for different purposes is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate ability to help school children apply different comprehension strategies for different purposes..
GRS8. Using multiple assessment indicators to monitor reading progress and to inform instruction	0	Student understanding of multiple assessment indicators of reading progress is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with multiple assessment indicators of reading progress through assigned readings and/or lectures.
	2	Student understanding of multiple assessment indicators to monitor reading progress is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate ability to use multiple assessment indicators to monitor reading progress and to inform instruction in the elementary school setting.
GRS9. Communicating pertinent information about reading with parents and support personnel	0	Student understanding of the importance of communicating pertinent information about reading with parents and support personnel is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the importance of communicating pertinent information about reading with parents and support personnel. This information is disseminated through assigned readings and/or lectures.
	2	Student understanding of strategies for communicating pertinent information about reading with parents and support personnel is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate ability to communicate pertinent information about reading to school children's parents and support personnel in the school setting.
GRS10. Understanding and applying research on reading	0	Student understanding of research on reading is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with research on reading through assigned readings and/or lectures.
	2	Students understanding of research on reading is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of research on reading through interactions with school children.

Reading Teacher Preparation Inventory (RTPI)
Phonics Strand

Competencies	Pts	Description
PS1. Knowing essential phonics rules, spelling patterns, and concepts	0	Student knowledge of essential phonics rules, spelling patterns, and concepts is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with essential phonics rules, spelling patterns, and concepts through assigned readings and/or lectures.
	2	Student knowledge of essential phonics rules, spelling patterns, and concepts is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate knowledge of essential phonics rules, spelling patterns, and concepts through interactions with school children.
PS2. Recognizing the importance of phonemic and phonological awareness in emergent literacy	0	Student understanding of the importance of phonemic and phonological awareness in emergent literacy is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the importance of phonemic and phonological awareness in emergent literacy through assigned readings and/or lectures.
	2	Student understanding of phonemic and phonological awareness in emergent literacy is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of phonemic and phonological awareness through interactions with emergent readers/writers.
PS3. Understanding the scope and sequence of effective phonics instruction	0	Student understanding of the scope and sequence of effective phonics instruction is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the scope and sequence of effective phonics instruction through assigned readings and/or lectures.
	2	Student understanding of the scope and sequence of effective phonics instruction is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate understanding of the scope and sequence of effective phonics instruction through interactions with school children.
PS4. Recognizing the role of metacognition in phonics instruction	0	Student recognition of the role of metacognition in phonics instruction is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the role of metacognition in phonics instruction through assigned readings and/or lectures.
	2	Student recognition of the role of metacognition in phonics instruction is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate the ability to help school children become metacognitively aware of the phonics strategies they use to read and write.
PS5. Understanding the importance of phonics automaticity in reading comprehension and writing fluency	0	Student understanding of phonics automaticity in reading comprehension and writing is not specified in course descriptions, course syllabi, or course materials.
	1	Students are expected to be acquainted with the importance of automaticity in reading comprehension and writing through assigned readings and/or lectures.
	2	Student understanding of phonics automaticity in reading comprehension and writing is assessed through testing, assignments, or college classroom activities.
	3	Students must demonstrate the ability to help school children gain phonics automaticity to facilitate reading comprehension and writing.

Reading Teacher Preparation Inventory (RTPD)
Academic/Experiential Strand

One undergraduate semester hour = 15 instructional hours

One undergraduate quarter hour = 10 instructional hours

Requirement	Pts	Description
AES1. Basic reading/language arts instruction	0	A requirement for courses in basic reading/language arts instruction is not specified in course descriptions, course syllabi, or course materials..
	1	Students are required to have less than 135 instructional hours of basic reading/language arts instruction
	2	Students are required to have 135-179 instructional hours of basic reading/language arts instruction.
	3	Students are required to have 180 or more instructional hours of basic reading/language arts instruction.
AES2. Professional experiences with a wide variety of learners	0	A requirement for professional experiences with a wide variety of learners is not specified in course descriptions, course syllabi, or course materials..
	1	Students are required to have less than 200 instructional hours of professional experiences with a wide variety of learners.
	2	Students are required to have 200-299 clock instructional of professional experiences with a wide variety of learners.
	3	Students are required to have 300 or more instructional hours of professional experiences with a wide variety of learners.
AES3. Supervised practice in teaching reading/language arts	0	Student requirement for supervised practice teaching reading is not specified in course descriptions, course syllabi, or course materials.
	1	Students are required to have less than 60 instructional hours of supervised practice teaching reading/language arts.
	2	Students are required to have 60-89 instructional hours of supervised practice teaching reading/language arts.
	3	Students are required to have 90 or more instructional hours of supervised practice teaching reading/language arts.
AES4. Supervised practice in teaching phonics	0	A requirement for professional experience in teaching phonics is not specified in course descriptions, course syllabi, or course materials..
	1	Students are required to have less than 60 instructional hours of professional experience in teaching phonics.
	2	Students are required to have 60-89 instructional hours of professional experience in teaching phonics.
	3	Students are required to have 90 or more instructional hours of professional experience in teaching phonics.

Appendix D--Letter to Institutions Requesting Administration of RTPI Tests

Dear _____ [Teacher Education Department Chair or PDP Contact],

The Ohio Department of Education (ODE) is conducting an evaluation of phonics instruction in Ohio's schools. Part of that evaluation includes an assessment of prospective teachers' knowledge of phonics instruction and overall reading instruction. Your college or department of education has been contacted about participating in a testing of teacher education students in your program, those who have completed the reading and language arts sequence of the program. These students may be juniors or seniors.

You have been identified as the contact person to administer the test at your institution. The test is the Reading Teacher Preparation Inventory (RTPI) and requires one hour for administration. Enclosed is information about the test, the test booklets and answer sheets, and specific instruction for their administration. The test administration will require you to assemble the students for testing, administering the test, and returning the completed tests in the enclosed envelope(s) to Wright State University for scoring.

We truly appreciate your participation in this evaluation. For your participation, you will receive a \$300 honorarium. If you have any questions, please contact _____ [PDP Evaluator] at _____ [telephone number] or _____ [email address].

Sincerely yours,

Phonics Demonstration Project Evaluator

There are a couple of options for the test administration arrangement:

Option 1: Assemble all eligible students for administration at a common place and time. This is the preferred option. Of course, this requires notifying the students. It is important to impress upon the students the importance of their attendance; this is not a testing for volunteers, but should be presented as a required activity. The students should understand that the testing will take at least one hour.

Option 2: Administer the test in one or two, but a limited number of classes, in which the eligible students are enrolled. If a full hour is not available, the two subscales could be administered in two, 30-minute segments. If the test is split into two testings, it is important that all students complete both subscales. The option requires additional test security. Under no circumstances are copies of the test to be circulated or content discussed with students who have the test. It is in the best interest of the evaluation that we receive the most accurate measure of the students' performance.

Appendix D--Letter to Institutions Requesting Administration of RTPI Tests (continued)

Reading Teacher Preparation Inventory

The Reading Teacher Preparation Inventory (RTPI) is a test for teachers of prospective teachers that measures knowledge of phonics instruction and overall reading instruction. It is a closed-book test. The RTPI provides two subscale scores: 1) a knowledge of phonics instruction, and 2) a knowledge of overall reading instruction. The addition of the two subscale scores provides a total test score. Each subscale test consists of 50 true-false items and requires 30 minutes for administration. Thus, the entire testing time is one hour.

The test is to be administered near the close of the 200-2001 academic year, most likely late April or May if your college or university is on the semester system, or possible as late as early June if you are on the quarter system. The actual date is not important but it is important to complete the testing before any students leave the campus. If students are completing the reading and language arts sequence in the sprint semester or quarter, they should be included in testing. Please let us know the specific date or dates of your testing.

Assembling the Teacher Education Students for Testing

The test is to be administered to all students who have completed the reading and language arts sequence of the program. This population of students may include both juniors and seniors and it may include both those in the "Old Reading Program" and the "New Reading Program." The Old Program was for K-6 licensure; the new program for Early Childhood and Middle Grades Licensure. The test is to be administered to all eligible students and the only ones excused are those due to illness.

Ohio Phonics Demonstration Project 2001 Evaluation

Directions for Administering Reading Teacher Preparation Inventory (RTPI) Phonics and General Reading Tests

Prior to administering the tests:

1. Locate your **Institution ID#** (IRN) on the attached Institution Identification Numbers list.
2. Assign each student taking the tests a unique **Test Taker ID#** within the range of numbers indicated on the Institution Identification Numbers list.
3. Note the **Program ID#**:
 - a. 1=Students enrolled in the Old Program or Certification
 - b. 2=Students enrolled in the New Program or Licensure
4. Obtain a supply of Number 2 pencils for students to use during the tests.
5. Arrange test-taking area to maximize privacy for test takers.

Administering the tests:

1. Explain to teacher education students that they will complete two tests. One test focuses on General Reading. The other test focuses on Phonics. Each test consists of 50 true/false questions. Time allotment will be 30 minutes per test. Explain that students may not confer with the instructor or with other students during the administration of these tests.
2. NOTE TO TEST ADMINISTRATORS: IF UNABLE TO SCHEDULE A 1-HOUR BLOCK OF TIME, EACH 30-MINUTE TEST MAY BE ADMINISTERED AT A SEPARATE TIME.
3. Distribute Number 2 pencils, if students do not have them.
4. Direct students to clear their work area of all materials except for their pencil.
5. Distribute answer sheets for the RTPI General Reading Test and RTPI Phonics Test.
6. Direct Students to complete the following information on both answer sheets:
 - a. **Institution ID#**
 - b. **Program ID#**
 - c. **Test Taker ID#**
7. Distribute RTPI General Reading Test Booklets.
8. Direct Students to write the RTPI General Reading **Test Code** (GR1, GR2, GR3, or GR4) in the appropriate box on one of their answer sheets.
9. Direct students to complete the following information on their test booklet:
 - a. **Institution ID#**
 - b. **Program ID#**
 - c. **Test Taker ID#**

10. NOTE TO TEST ADMINISTRATORS: EACH TEST HAS FOUR FORMS. THE **TEST CODE** IS PRINTED ON THE FIRST PAGE OF EACH TEST. TEST CODES FOR GENERAL READING ARE LABELED GR1, GR2, GR3, AND GR4. TEST CODES FOR PHONICS ARE LABELED P1, P2, P3, AND P4. PLEASE DISTRIBUTE TEST BOOKLETS IN THE ORDER THAT THEY ARRIVED. DO NOT RE-SORT THE ORDER OF TEST BOOKLETS.
11. Students may begin work on their test as soon as the identifying information on answer sheets and test booklet have been completed.
12. Students who complete the RTPI General Reading Test before the 30-minute time allotment, may return both the test booklet and the answer sheet to the test administrator when finished.
13. Collect all test booklets and answer sheets 30 minutes after test-taking has begun.
14. Administrators should examine test booklets and answer sheets to verify that the identifying information on the test booklet matches identifying information on the answer sheet. IT IS ESPECIALLY IMPORTANT THAT THE **TEST CODE** ON EACH STUDENT ANSWER SHEET MATCHES THE TEST CODE ON HIS/HER TEST BOOKLET.
15. Distribute the RTPI Phonics Test booklets.
16. Direct Students to complete the following information on their test booklets:
 - a. **Institution ID#**
 - b. **Program ID#**
 - c. **Test Taker ID#**
17. Direct Students to write the RTPI Phonics **Test Code** (P1, P2, P3, or P4) in the appropriate box on their remaining answer sheet.
18. Students may begin work on their test as soon as the identifying information has been completed.
19. Students who finish the RTPI Phonics Test before the 30-minute time allotment may return both the test booklet and the answer sheet to the test administrator when finished.
20. Collect all test booklets and answer sheets 30 minutes after test-taking has begun.
21. Administrators should check RTPI Phonics Test booklets and answer sheets to verify that the identifying information on each student's test booklet matches the identifying information on his/her answer sheet. Again, the **Test Code** on each student answer sheet should match the **Test Code** on his/her test booklet.

After administering the tests:

1. Return all completed answer sheets and test booklets to Dr. Glenn Graham at Wright State University. An envelope has been provided to you for this purpose.
2. Please record the number of students taking the tests and the date/s the tests were administered on the RTPI Test Record Form.
3. If you would like a copy of your students' test results, please include a memo with your returned tests requesting this information.

On behalf of the Ohio Department of Education, thank you for your administration and supervision of the RTPI Tests.

Ohio Phonics Demonstration Project Evaluation Team

Institution IRN Identification Numbers and Test Taker Identification Numbers

Institution	Institution ID#	Test Taker ID#
Akron, The University of	062869	01000-01999
Antioch College	063560	02000-02999
Ashland University	063396	03000-03999
Baldwin-Wallace College	063586	04000-04999
Bluffton College	063062	05000-05999
Bowling Green State University	062893	06000-06999
Capital University	063610	07000-07999
Case Western Reserve University	063628	08000-08999
Cedarville College	063636	09000-09999
Central State University	068254	10000-10999
Cincinnati, University of	062927	11000-11999
Cleveland State University	062950	12000-12999
Dayton, The University of	063941	13000-13999
Defiance College	063701	14000-14999
Denison University	063719	15000-15999
Findlay, The University of	0063743	16000-16999
Franciscan University of Steubenville	063685	17000-17999
Heidelberg College	063750	18000-18999
Hiram College	063768	19000-19999
John Carroll University	063776	20000-20999
Kent State University	062976	21000-21999
Lake Erie College	063792	22000-22999
Lourdes College	111476	23000-23999
Malone College	063800	24000-24999
Marietta College	063818	25000-25999
Miami University	062984	26000-26999
Mount St. Joseph, College of	063651	27000-27999
Mount Union College	063834	28000-28999
Mt. Vernon Nazarene College	068247	29000-29999
Muskingum College	063842	30000-30999
Notre Dame College	063859	31000-31999
Oberlin College	063867	32000-32999
Ohio Dominican College	063677	33000-33999
Ohio Northern University	063875	34000-34999
Ohio State University, The	063214	35000-35999
Ohio University	063024	36000-36999
Ohio Wesleyan University	063883	37000-37999
Otterbein College	063891	38000-38999
Rio Grande, University of	070607	39000-39999
Shawnee State University	063321	40000-40999
Toledo, The University of	063099	40000-40999
Urbana University	063958	41000-41999
Ursuline College	063966	42000-42999
Walsh University	063974	43000-43999
Wilmington College	064014	44000-44999
Wittenberg University	064022	45000-45999
Wooster, The College of	063693	46000-46999
Wright State University	063123	47000-47999
Xavier University	064030	48000-48999
Youngstown State University	063156	49000-49999

RTPI Test Record
Please return this form with your completed tests.

Institution ID#:

Number of students enrolled in Teacher Education program:

Number of students taking RTPI General Reading Test:

Date/s RTPI General Reading Test was administered:

Number of students taking RTPI Phonics Test:

Date/s RTPI Phonics Test was administered:

Tests were administered by:

Test Administrator mailing address:

Test Administrator telephone:

Test Administrator fax:

Test Administrator email address:

(Optional): Please send student test results to:

Appendix F--PDP Case Study Schools: Demographic Matching

FY97 Cohort	FY99 Cohort
<p>School C Logical Phonics 97% White, 1% Hispanic 4th Rdg Prof FY97-FY99: 45/54/54 43% F/R Lunch</p>	<p>School N Touch Phonics 95% White 4th Rdg Prof FY97-FY99: 38/51/62 25% F/R Lunch</p>
<p>School K Char-L Phonics 98% White 4th Rdg Prof FY97-FY99: 78/74/75 18% F/R Lunch</p>	<p>School J Logical Phonics 91% White 4th Rdg Prof FY97-FY99: 69/69/70 6% F/R Lunch</p>
<p>School M Workshop Way 70% White, 30% Black and Other 4th Rdg Prof FY97-FY99: 24/23/23 66% F/R Lunch</p>	<p>School I Process Phonics 45% White, 55% Black and Other 4th Rdg Prof FY97-FY99: 34/38/49 57% F/R Lunch</p>
<p>School F Logical Phonics 92% White, SES diverse 4th Rdg Prof FY97-FY99: 51/27/49 65% F/R Lunch</p>	<p>School G ELLI 99% White 4th Rdg Prof FY97-FY99: 43/31/51 50% F/R Lunch</p>
<p>School A Logical Phonics 24% White, 75% Black; 4th Rdg Prof FY97-FY99: 22/18/44 95% F/R Lunch</p>	<p>School L Sadlier Phonics 38% White; 62% Black or Biracial 4th Rdg Prof FY97-FY99: 38/29/40 97% F/R Lunch</p>
<p>School D Modern Curriculum Press 37% White, 62% Black 4th Rdg Prof: 24/40/46 69% F/R Lunch</p>	<p>School H Logical Phonics 31% White, 68% Black 4th Rdg Prof: 46/35/58 35% F/R Lunch</p>

Appendix G--Telephone Interview Script for FY1997 Case Study Schools

This is _____. I am working for the Ohio Department of Education on the follow-up evaluation of the Phonics Demonstration Project. I need to speak with the contact person for the project in your building. According to my records, the contact person in 1997 was XXX. Is this still the case? *(If not, ask to speak to the new contact person. If that person is unavailable, ask for his/her email address.)*

In order to develop an appropriate and useful plan for evaluating the PDP, we need to get more information from schools that participated in the project. Do you have about ten minutes now to answer my questions? *(If not, could you respond to the questions within the next week if I email them to you?)*

1. Is your school still participating in the PDP?
2. For how many years did you receive funding for the project, and for what amounts?
3. Have you been the contact person for the project the entire time? If not, who else has had this responsibility?
4. Have you used the same phonics program throughout the project? What is the name of the program you have used? *(publisher?)*
5. What reading program do you use?
6. What reading achievement tests do you use at the end of the year?
7. In which grades do you administer this reading test?
8. How many years have you used this reading test?
9. Do you routinely administer any other tests? If so which tests, and in which grades?
10. PDP schools have varied in terms of the stability of their faculty and student body. As a result the phonics instruction students received varies considerably.
11. How would you characterize the stability of the student body in your school? Do you think we could identify 15 students in second, third, and fourth grades who have been in your building since kindergarten?
12. How about the stability of your staff? Are the teachers who began the PDP in 1996-97 still teaching at your school? Are they still teaching the same grades?
13. Have you hired new primary grade teachers?
14. Are they implementing the phonics program?
15. What kind of in-service training did they receive?
16. How does this compare with the training that teachers received when the phonics program began?
17. How would you characterize the evolution of the phonics program in your building?
18. If phonics instruction has changed during the period, how?
19. How much time is devoted to intensive phonics instruction?
20. How does this compare with when the program began in 96-97?
21. How enthusiastic were the teachers about the phonics program when it began?
22. Are the teachers more or less enthusiastic about the program now? Why do you think this is so?
23. Do you think that the phonics program has had a positive effect on reading achievement in your students? Why do you think so?
24. Have you instituted other initiatives in your building that might have contributed to the changes in achievement that you've mentioned? (e.g., grants, new reading series, new teachers, etc.)

Appendix H--Letters to Case Study Contacts

Dear _____,

On _____, a representative from the Ohio Department of Education Phonics Demonstration Project [PDP] will be visiting your school. The representative assigned to your school is _____ . In the event of a school closure, we request that you notify her as soon as possible at _____. The alternate date will be _____.

When the PDP representative visits your building, she will need to observe in three classrooms: one kindergarten, one first grade, and one second grade. Please select teachers for these observations who have been using your chosen phonics program and who have gone through the training associated with that program. Whenever possible, we would like to observe in the classrooms of trained teachers who have used the phonics program since the program was initially funded in your building.

The Ohio Department of Education wants to identify exemplary instructional practices in both phonics and overall reading programs. The PDP representative plans to spend approximately one hour in each classroom, observing both phonics and general reading instruction. Please emphasize to your teachers that they should not do anything out of the ordinary during these observations. Lessons observed should be typical of those taught routinely throughout the school year.

The PDP representative will conduct 20-minute interviews with each of the three observed teachers and 10-minute with eight individual students, four each from grades one and two. The students should include one boy and girl from each grade identified by their teacher as strong readers and one boy and girl from each grade identified as weak readers. Note: We must have written permission to interview children. A master copy of the permission letter is attached to this email. Permission letters should be signed and returned to you in time to give them to the PDP representative when she arrives. The PDP representative may want to confer with the principal or other staff members who are familiar with the PDP program.

What we propose to accomplish in a single day will require careful scheduling. A list of required sessions and scheduling form are outlined below. We request that you and your staff complete this schedule and email it to me via email [email address].

The PDP representative will need to borrow a set of teachers' manuals for your K-2 phonics program for a brief period following the site visit. These will be returned to you within two weeks.

We are looking forward to visiting your building and learning more about your efforts to educate Ohio's children.

List of Sessions to be Scheduled for Site Visit

- 3 classroom observations (1 hour each, 5-10 minutes between each)
- 3 teacher interviews (20 minutes each, 5 minutes between each)
- 8 student interviews (10 minutes each, 3 minutes between each)
- Any additional interviews considered helpful (e.g., principal and/or literacy coordinator)

Note: The teacher interviews should take place after the observations. The activities outlined above will take at least 6 1/2 hours. Insofar as possible, it would be helpful if they were scheduled between 8:00 a.m. and 3:00 p.m. or during regular school hours.

(Sent to participating FY97 schools)

Dear (Name of Principal or Contact Person):

For several years, The Ohio Department of Education (ODE) has funded new initiatives in phonics instruction through the *Phonics Demonstration Projects* (PDP). Your school received initial PDP funding during the 1996-1997 school year. In the spring of that year, your school/district also participated in a formative evaluation of the PDP.

The ODE has recently funded a more extensive evaluation of the PDP, to be conducted during the 2000-2001 school year. Six schools involved in the 1997 evaluation, including yours, have been selected for participation. This follow-up evaluation will be conducted to a large extent through a case study approach. Case studies require both cooperation and logistical support from the participants. Your roles and responsibilities in this evaluation are described below.

Classroom Observations and Activities. Before evaluation team members visit your school, first and second grade teachers will need to identify 12 children, six at each grade level, who are among the most and least skilled readers in their classes. Between February 1 and March 31, 2001, one or more members of the evaluation team will visit your building for one or two days. During this site visit, members of your staff will complete self-reports and be interviewed about your reading program. Site visitors will also observe reading instruction in first and second grade classrooms and conduct individual interviews with students identified by teachers prior to the site visit.

Achievement Data Collection. The evaluation will also include an assessment of student achievement in reading. The data to be collected include (a) scores on the reading portion of the fourth grade proficiency test administered in Spring 2000, and (b) the reading scores from any off-year proficiency tests administered in first, second, and third grades during the same period. You, or a staff member identified by you, will need to provide us with the reading scores of 25 students at each grade level (1-4) at which tests were administered (a maximum of 100 students). An important criterion for selecting these students is that they must have been in your school for their entire K-4 school experience up to the Spring 2000 testing (or grades 1-4 if your district houses all kindergarten classes in a separate facility). Most schools will have more than 25 students per grade who meet this criterion. For this reason, we have attached specific instructions about how to select students. Forms and instructions for recording your scores are attached as well.

If we are to improve reading achievement in Ohio, we must understand how reading is typically taught and identify effective instructional practices. These are goals of the current evaluation. We appreciate your collaboration in this effort. As a token of our gratitude for the additional effort it will necessitate, we would like to provide a \$200 honorarium. If you have questions about any aspects of the project described above, please contact Dr. _____ via email at _____ or by telephone at (419) 531-4224.

Sincerely yours,

(Sent to participating FY99 schools)

Dear (Name of Principal or Contact Person):

For several years, The Ohio Department of Education (ODE) has funded new initiatives in phonics instruction through the *Phonics Demonstration Projects* (PDP). According to ODE records, your school received PDP funding during the 1999-2000 school year. The ODE has funded an evaluation of the PDP (as required by legislation), and your school has been selected to participate in that evaluation as a case study. Case studies require both cooperation and logistical support from the participants. Your roles and responsibilities in this evaluation are described below.

Classroom Observations and Activities. Before evaluation team members visit your school, first and second grade teachers will need to identify six students from each grade who are among the most and least skilled readers in their classes. Between February 1 and March 31, 2001, one or more members of the evaluation team will visit your building for one or two days. During this site visit, members of your staff will complete self-reports and be interviewed about your reading program. Site visitors will also observe reading instruction in first and second grade classrooms and conduct individual interviews with students identified by teachers prior to the site visit.

Achievement Data Collection. The evaluation will also include an assessment of student achievement in reading. The data to be collected include (a) scores on the reading portion of the fourth grade proficiency test administered in Spring 2000, and (b) the reading scores from any off-year proficiency tests administered in first, second, and third grades during the same period. You, or a staff member identified by you, will need to provide us with the reading scores of 25 students at each grade level (1-4) at which tests were administered (a maximum of 100 students). An important criterion for selecting these students is that they must have been in your school for their entire K-4 school experience up to the Spring 2000 testing (or grades 1-4 if your district houses all kindergarten classes in a separate facility). Most schools will have more than 25 students per grade who meet this criterion. For this reason, we have attached specific instructions about how to select students. Forms and instructions for recording your scores are attached as well.

If we are to improve reading achievement in Ohio, we must understand how reading is typically taught and identify effective instructional practices. These are goals of the current evaluation. We appreciate your collaboration in this effort. As a token of our gratitude for the additional effort it will necessitate, we would like to provide a \$200 honorarium. If you have questions about any aspects of the project described above, please contact Dr. _____ via email at _____ or by telephone at _____.

Sincerely yours,

Appendix I--Instructions to PDP Schools for Recording Student Achievement Data

PHONICS DEMONSTRATION PROJECT EVALUATION

INSTRUCTIONS FOR RECORDING STUDENT ACHIEVEMENT DATA

As indicated in other correspondence, the phonics evaluation will include student achievement data. A variety of achievement measures are currently being used in Ohio schools. We have chosen to focus initially on the fourth grade reading proficiency test and the corresponding off year proficiency tests developed for first through third grades. This decision was a pragmatic one dictated by the widespread and increasing use of off-year proficiency tests. Some schools participating in this evaluation are using other reading assessments in place of, or in addition to, the off-year proficiencies. We will work with staff members in those buildings on a case by case basis to ensure that these assessment procedures and outcomes are also clearly described. The present instructions, however, pertain exclusively to data collected from the Spring 2000 administration of the Ohio fourth grade proficiency test and any off-year proficiency tests administered in grades 1-3.

- a. Data will be collected on 25 students per grade in grades 1-4.
- b. Students for whom data are collected must have been in your school for their entire school experience up to the Spring 2000 testing (or grades 1-4 in districts that house kindergarten classes in a separate facility).

Selection of Students

One grade level at a time, identify all students that meet criterion b above. List the students in alphabetical order by last name. On the forms provided, record achievement data for the first 25 students on the list. In the event that you do not have 25 students that meet criterion b, record the data for all students who do meet that criterion.

We do not want student names. Students should be identified by a 3-digit number. First graders will be identified by numbers 101 through 125; second graders by 201 through 225; third graders by 301 through 325; and fourth graders by 401 through 425. Thus, the first digit indicates the grade, the next two digits the student number in the alphabetical list prepared for each grade level.

Student Data to be Recorded

Riverside Publishing and CTB McGraw-Hill publish tests for grades 1-3 which are designed to be used as parallel tests to the Fourth Grade Proficiency Tests required by the Ohio Department of Education. These tests for grades 1-3 are known as the off-year proficiency tests. The tests for all grades (1-4) provide a total reading score and the following four subscale or "strand" scores:

- Fiction - Constructs Meaning (FCM)
- Fiction - Extends Meaning (FEM)
- Non-fiction - Constructs Meaning (NCM)
- Non-fiction - Extends Meaning (NEM)

Examine the forms on which the proficiency scores of individual students in your building are reported. They should resemble the sample Student Roster entry on the next page. The column (box) on the left contains the name of a student, identifying information, and that student's total scaled scores for Writing, Reading, Mathematics, Citizenship, and Science. The proficiency level is indicated by a mark immediately after the score. (An asterisk (*) after a READING SS score means that the student attained proficiency; a check (✓) after a READING SS score means that the student attained advanced proficiency.)

Scores for the subscales of all five proficiency tests are reported in the columns (boxes) to the right of the box containing the student's name and total scores. Columns titled Subscale, - #Poss list the subscales of the various tests and the number of items on each subscale. For example, if you look at the sample form on the next page, you will see that for Reading, the Fiction Constructs Meaning subscale has 10 items, while the Non-fiction Constructs Meaning subscale has 4 items. The three narrower columns to the right of each Subscale - #Poss column are titled W, Band, and S, respectively. The band represents the scores typical of students who pass the standard. If the student's personal score is at the high end of the band or above the band, it will be recorded in the S (Strength) column. If the student's personal score is below or at the minimum band score, it will be recorded in the W (Weakness) column. Again looking at the example on the next page, you will see that Johnny Doe answered 10/10 correctly on Fiction Constructs Meaning and 18/20 correctly on Non-fiction Extends Meaning. Both of these scores are reported in the S column because they exceed the scores typical of students who meet the standard.

You have been provided with four recording forms, one for each grade level. For fourth grade and for all grades between 1 and 3 for which you have off-year proficiency data, record the reading scores of the first 25 students on the alphabetical lists you prepared earlier. The way in which Johnny Doe's scores would be reported on the recording forms you have been given is illustrated at the bottom of the next page.

After you have recorded the scores, make copies of the recording forms before mailing the originals in the enclosed, preaddressed envelope. Please retain the copy just in case the original is lost in the mail.

Ohio Fourth-grade
Proficiency Tests

STUDENT ROSTER

DISTRICT: XXXXXX

DATE TESTING: March 2000

SCHOOL: XXXXXX

RUN DATE: 06/26/2000

	Subscale - # Poss	W	Band	S	Subscale - # Poss	W	Band	S
DOE JOHNNY DOB: 04/10/1990 ID #: XXXXXXXXXX	WRITING							
WRITING TOTAL SCORE: 6.0	READING		(9-10)	10				
* READING SS 235 *	F: CONSTRUCT MEANING - 10		(3-4)	04	F: EXTENDS MEANING - 14		(12-13)	13
MATHEMATICS SS 257 □	NF: CONST MEANING - 4				NF: EXTENDS MEANING - 20		(15-16)	18
CITIZENSHIP SS 246 *	CITIZENSHIP		(9-10)	12		04	(6-7)	08
SCIENCE SS 225 *	AMERICAN HERITAGE - 12		(6-7)	08	RESOURCES - 8		(4-5)	08
	PEOPLE IN SOCIETIES - 8		(7-7)	07	DEMOCRACY - 7			
	WORLD INTERACTIONS - 7				RIGHTS & RESPONSIBILITIES - 10		(8-9)	09

Note. The actual reporting form includes additional columns to the right where mathematics and science scores are reported.

Recording Johnny Doe's Data on the Spring 2000 Proficiency Data Form for 4th Grade

I.Student Number	II.Fiction CM	III.Fiction EM	IV.Non-fiction CM	V.Non-fiction EM	VI.Total Reading
409	10	13	04	18	235

Appendix J--Reading Teacher Inventory (RTI)

The Reading Teacher Inventory (RTI) is designed to assess reading teacher effectiveness. Items on the RTI are aligned with research-supported principles for the effective teaching of reading, including those supported by the International Reading Association (IRA, 1998a, 1998b, 1999, 2000a, 2000b, 2000c) the National Association for the Education of Young Children (NAEYC, 1994, 1996, 2000), the National Reading Panel (2000), the Educational Testing Service Praxis II Series (ETS, 2000a, 2000b, 2000c, 2000d, 2000e, 2000f), the Center for the Improvement of Early Reading Achievement (CIERA, 1998), and widely-used pedagogical literature. The RTI can be used most effectively when applied to reading teachers in Early Childhood Education.

Scoring the Rubric: The RTI rubric generates scores which reflect depth of coverage for each of the reading teacher competencies. Point scores for each competency range from zero to 3. A point score of zero on any competency indicates that no evidence of that criterion was apparent to the scorer. A point score of 3 on any competency indicates that the scorer has found evidence of deep coverage for that criterion. Point scores are assigned by the evaluator based on evidence gathered through classroom observation, teacher interview, or a classroom environment checklist. Teachers will also complete the classroom environment checklist, noting their particular strengths and marking items they wish to incorporate in the future. Items on the checklist can be identified by either observer, classroom teacher, or both. Evaluators will use the Reading Teacher Assessment Database¹ to record supporting evidence for each score on the RTI and to note the source of that evidence--observation, teacher interview, or classroom environment checklist.

RTI Strands

The RTI targets two strands of teacher preparation in the area of reading: General Reading, Phonics, and Academic/Experiential Preparation. Each item on the inventory represents a cluster of skills and concepts identified as crucial to the effective teaching of reading. Because inventory items are necessarily broad in scope, it is recommended that the RTPI be supplemented with tests of content knowledge to provide further insight into the depth of student learning.

General Reading Strand

Items on the RTPI General Reading Strand (designated GRS) focus on knowledge about the reading process, literacy development, instructional materials, and teaching strategies. In addition, this strand targets reading teachers' ability to recognize and adjust for individual differences, to assess and remediate reading difficulties, to employ research-based practices, and to communicate effectively with literacy stakeholders.

Competency GRS1: Understanding the nature of the reading process as complex, interactive, and constructive.

If the act of reading involved merely identifying words in print, then learning to read would indeed be a simple matter. Word identification, however, is just the beginning of the process of reading. Once written words have been identified, the reader must call upon his/her past experience and concept knowledge about the world, about language, and about literature to test

for understanding of the meaning behind the words. Beginning readers must do all this while marshalling their energies to identify the words, switching mental gears between decoding the words and comprehending their meaning. Unless reading teachers understand the complexity of this process, they may not realize the importance of building background for understanding as well as building skills for decoding words.

Competency GRS2: Understanding how language development and cognition relate to literacy development. The ability to read and write develops over time in a manner similar to that of oral language development. Children build upon their knowledge of spoken language sounds, structure, and meaning to develop knowledge of written language. The rate of development for both language acquisition and cognitive competence varies significantly among learners. Teachers of reading must learn to recognize students' stages of language and cognitive development in order to present them with developmentally appropriate literacy instruction. Teachers also need to be aware of the need to integrate instruction in reading, writing, listening, and speaking.

Competency GRS3: Selecting a variety of quality, developmentally appropriate, texts and instructional methods to motivate reading for information and pleasure. Effective reading teachers help students to become lifelong readers who love and seek out books to enrich and inform their lives. Teachers have a unique opportunity to acquaint readers with a variety of quality literature which can motivate them to put forth the effort it takes to become proficient readers. To do this, teachers need a broad knowledge of different genres of literature developmentally appropriate text forms as well as an appreciation for the diversity of cultural, ethnic, and social identities of their students. Excellent reading teachers use multiple methods to build positive connections between beginning readers with literature and reading. Reading teachers need to be acquainted with criteria for evaluation and selection of literature and instructional methods that match learners' interests, levels of development, and needs.

Competency GRS4: Providing frequent opportunities for extended authentic reading and writing experiences throughout the curriculum. Reading is a skill that, like any other skill, requires regular practice in order to develop and flourish. Basal reading series are helpful to beginning teachers in that they provide regular reading practice through a structured scope and sequence of skills. Effective reading teachers have learned to use basal readers intelligently, as a resource rather than as the total reading curriculum. To help readers practice word attack and comprehension skills, effective teachers consistently relate these skills to a context of real literature, rather than working on skills in isolation. Reading teachers need to know how to provide reading and writing opportunities beyond the limited selections of basal readers and worksheets. Reading instruction should permeate the entire curriculum, rather than being relegated to a specific time slot of the school day. Effective teachers regularly provide their students with opportunities for extended engagement in purposeful independent reading and writing.

Competency GRS5: Recognizing and addressing the multiple causes of reading difficulties. Effective teachers do not use a one-size-fits-all strategy for teaching reading because they recognize the role that individual differences play in reading success. The causes of reading difficulties, as well as the ability to respond to any particular instructional strategy reflect a host

of individual factors including learners' cultural/ethnic/socioeconomic background, learning modality preferences, academic and experiential history, emotional and behavioral considerations, cognitive and perceptual abilities, language development, family and environment, interest and motivation. Effective reading teachers recognize and address learners' reading using their acquired knowledge and experience to determine an appropriate course of action for individual students.

Competency GRS6: Understanding how readers use multiple cueing strategies (phonics, context, syntax, and structural analysis) in the reading process. When readers encounter unknown words, they access one or more cueing strategies that have worked for them in the past. By applying their knowledge of phonics, context, syntax, or structural analysis, readers garner "clues" about unknown words. Fluent readers differ from struggling readers in the number and type of cueing strategies they are likely to use to identify words. Reading teachers need to understand how each of these cueing strategies function, how to identify and assess cueing strategies used by readers, and when readers need help in accessing cueing strategies. This information is crucial in informing instruction to maximize reading fluency.

Competency GRS7: Helping readers apply different comprehension strategies for different purposes. Comprehension is at the heart of the reading process. It is, in fact, the ultimate purpose for reading. However, the type of comprehension required of readers is dependent upon the genre of the reading material and the reader's purpose in reading that material. Through guided reading, modeling, and other instructional strategies, effective reading teachers instruct readers in the use of comprehension strategies that match the type of information they wish to gain from reading. Reading teachers also need to know how to help readers in ways that enhance reading comprehension.

Competency GRS8: Using multiple assessment indicators to monitor reading progress and to inform instruction. Effective reading teachers use both formal and informal assessments to monitor and document reading progress and to help them plan instruction to match the needs of their students. Information gained from standardized and criterion-referenced formal measures are supplemented with informal assessments that include observation, anecdotal records, informal reading inventories, reading miscue inventories, activity response to literature, teacher-designed instruments, and portfolio assessment. Reading teachers need to know how to administer and interpret both formal and informal measures of reading progress. In addition, reading teachers need to know how to adjust instructional strategies based on consideration of information gained from varied assessment instruments.

Competency GRS9: Communicating pertinent information with parents and support personnel. Parents, other teachers, administrators, and members of the professional community can all potentially contribute to the effectiveness of reading teachers. The ability to benefit from these resources is, however, dependent upon communication between teacher and literacy supporter. Effective reading teachers set up and maintain clear and regular channels for gathering information as well as dispensing it, acknowledging and valuing the contributions of concerned parties in the literacy process.

Competency GRS10: Understanding and applying research on reading. The learning process never ends for effective reading teachers because they never stop trying to improve their teaching. They become members of the professional community by participating in literacy organizations, reading literacy publications, and engaging in professional literacy activities. Reading teachers need to know how to access and apply professional research in the classroom, sharing their findings with other members of the professional community; in so doing, they advance the cause of literacy for all learners.

Phonics Strand

Research consistently supports the need for a phonics component in early reading and ESL (English as a Second Language) instruction. Items on the RTI Phonics Strand (designated PS) assess depth of reading teacher competence in phonics content, phonics developmental progression, instructional strategies for teaching phonics, and the role of phonics in the total reading process.

Competency PS1: Knowing essential phonics rules, spelling patterns, and concepts. Before future reading teachers can teach phonics, they need to have a solid base of phonic knowledge. Teachers of phonics need a broader understanding of phonics concepts than do young readers who only need to know how to use phonics to help them read. The broader knowledge required of teachers is necessary to enable them to assess the phonics strengths and weaknesses of their students and to modify their instruction to meet individual needs.

Competency PS2: Recognizing the importance of phonemic and phonological awareness in emergent literacy. Phonemic awareness--the ability to distinguish, identify, and separate the sounds of speech--is an important prerequisite for children learning to apply phonics. Children use phonemic awareness to identify words that rhyme and that have similar beginning, middle, or ending sounds. As phonemic awareness develops, phonics instruction can move toward phonological awareness-- the recognition of sound/symbol relationships combined with the ability to break words down into their component sounds. Reading teachers need to know how to help children develop phonemic and phonological awareness to facilitate their ability to use phonics in reading.

Competency PS3: Understanding the scope and sequence of effective phonics instruction. The need for regular, systematic instruction in phonics is essential to the success of any beginning reading program. Although professionals may differ on the finer details of phonics scope and sequence, most recognize a limited number of basic phonic skills as essential to early reading independence. Professionals also agree on certain broad, logical principles to follow when determining the order in which phonics skills are introduced. These principles suggest that phonics concepts be introduced in an order based on levels of frequency, regularity, and complexity. Effective reading teachers provide regular, systematic instruction and practice of phonics skills and consistently imbed phonics instruction into the context of authentic reading and writing activities.

Competency PS4: Recognizing the role of metacognition in phonics instruction. As teachers help students learn to apply phonics concepts in their reading, they guide learners to become aware of

the strategies they use to decode unknown words. When students first learn to apply phonics, it is very much a conscious process. In time, word attack strategies become more and more subconscious except when readers encounter words that are difficult to decode. Through metacognition, readers learn to recognize their own strengths and weaknesses, to identify what they do and do not understand, to evaluate which strategies work best for them, and to self-correct errors in their reading. Effective reading teachers model the strategies they use to decode words in order to help students build metacognitive awareness.

Competency PS5: Understanding the importance of phonics automaticity in reading comprehension and writing fluency. Phonics is a means to an end, not an end in itself. The goal of phonics instruction is to eventually free the mind from preoccupation with word identification so that it can focus on the real purpose for reading, comprehension. The automatic application of phonics concepts whenever they are needed occurs for proficient readers at a less-than-conscious level, the level of automaticity. Readers who experience no difficulty in identifying words do not need phonics instruction in reading, even if they use phonics very infrequently. While phonics is used by beginning readers to gain independence, more proficient readers rely less and less on phonics and more and more on analogy, structural analysis, syntax, and context to identify unknown words. Reading teachers must learn how to recognize when phonics instruction becomes counterproductive to reading comprehension. In addition, effective reading teachers know how and when to shift the emphasis in applying phonics from students' reading to their writing, since difficulty in spelling can impede writing fluency for the same reasons that difficulty in decoding can impede reading comprehension.

¹ Gifford, C. A. (2001). Reading Teacher Assessment Database. Beaver Creek, OH: Action Factor, Inc.

Reading Teacher Inventory (RTI)
General Reading Strand

Competencies	Pts	Description
GRS1. Understanding of the reading process as complex, interactive and constructive.	0	Helping students to decode, comprehend, interact, or respond to reading is not apparent
	1	Teacher helps students to decode or to comprehend.
	2	Teacher helps students to decode and to comprehend.
	3	Teacher helps students to decode, to comprehend, and to build schema for interacting and responding to reading in constructive ways.
GRS2. Understanding how language and cognitive development relate to literacy	0	Accommodation for different language or cognitive levels is not apparent.
	1	Teacher makes some accommodation for different language or cognitive needs in large group instruction.
	2	Teacher makes some accommodation for different language or cognitive levels in large and small group instruction.
	3	Teacher accommodates different language and cognitive needs of all children through one-on-one interactions.
GRS3. Selecting of a variety of quality texts and instructional methods	0	A variety of quality texts in the teaching of reading is not apparent.
	1	Teacher utilizes a single text and a single method for reading instruction.
	2	Teacher utilizes quality texts and varied instructional methods in teaching reading for pleasure.
	3	Teacher selects developmentally appropriate texts and uses a variety of instructional methods in teaching reading for information and pleasure.
GRS4. Providing opportunities for extended authentic reading and writing experiences	0	Extended authentic reading and writing experiences were not apparent.
	1	Teacher provides instruction in reading and writing through basal text and ancillary worksheets, supplemented by occasional authentic reading or writing experiences.
	2	Teacher provides opportunities for authentic reading and writing experiences during daily language arts block.
	3	Teacher provides opportunities for purposeful independent reading and writing experiences throughout the school day.
GRS5. Recognizing and addressing the multiple causes of reading difficulties	0	Recognition and addressing of reading difficulties were not apparent.
	1	Teacher recognizes and addresses some reading difficulties in large group instruction.
	2	Teacher recognizes and addresses reading difficulties of some students in large and small group instruction
	3	Teacher recognizes and addresses multiple causes of reading difficulties with a variety of individualized instructional strategies

**Reading Teacher Inventory (RTI)
General Reading Strand (cont'd.)**

Competencies	Pts	Description
GRS6. Understanding how readers use multiple cueing strategies in the reading process	0	Instruction in cueing strategies is not apparent.
	1	Teacher provides instruction in one cueing strategy (phonics, context clues, syntax, or structural analysis).
	2	Teacher provides group instruction for using two or more cueing strategies.
	3	Teacher addresses individual needs of readers in accessing multiple cueing strategies.
Competencies	Pts	Description
GRS7. Applying different comprehension strategies for different purposes	0	Teaching of comprehension strategies is not apparent.
	1	Teacher provides instruction in comprehension for a single purpose.
	2	Teacher provides instruction in a single comprehension strategy for multiple purposes.
	3	Teacher provides instruction in multiple comprehension strategies for multiple reading purposes.
GRS8. Using multiple assessment indicators to monitor reading progress to inform instruction	0	Use of assessment indicators is not apparent.
	1	Teacher uses commercial/basal tests to monitor progress.
	2	Teacher uses commercial/basal tests to monitor progress and inform instruction.
	3	Teacher supplements commercial testing instruments with informal measures to monitor progress and inform instruction.
GRS9. Communicating pertinent information with parents and support personnel	0	Communication with parents and support personnel is not apparent.
	1	Teacher has limited irregular communication with parents and literacy support/providers.
	2	Teacher has regular communication with parents and limited irregular communication with literacy providers/support personnel.
	3	Teacher has extensive interactive communication with parents and literacy providers/support personnel.
GRS10. Understanding research and advancing the field of reading	0	Familiarity with reading research is not apparent.
	1	Teacher applies research-based principles in the classroom.
	2	Teacher initiates and conducts research in the classroom.
	3	Teacher applies research in the classroom and shares knowledge with other professionals.

Reading Teacher Inventory (RTI)
Phonics Strand

PS1. Knowing essential rules, patterns, and concepts of phonics	0	Familiarity with basic phonics rules, patterns, concepts of phonics is not apparent.
	1	Teacher appears knowledgeable about of basic phonics rules, concepts and spelling patterns.
	2	Teacher applies appropriate instruction of phonics to reading, spelling, and writing.
	3	Teacher is successful in conveying basic phonics rules, concepts and spelling patterns to students.
PS2. Recognizing the importance of phonemic and phonological awareness in emergent literacy	0	Teaching of phonemic awareness is not apparent.
	1	Teacher provides instruction in phonemic and phonological awareness in large group settings.
	2	Teacher provides instruction in phonemic and phonological awareness in small and large group settings.
	3	Teacher recognizes and addresses individual differences in phonemic and phonological awareness in students' performance.
PS3. Understanding the scope and sequence of effective phonics instruction	0	Following a logical scope and sequence of phonics instruction is not apparent.
	1	Teacher introduces phonics concepts in order presented in the text/basal.
	2	Teacher imbeds regular, systematic instruction and practice of phonics skills into authentic reading and writing activities.
	3	Teacher recognizes and addresses individual reading/writing problems by re-teaching underlying phonics concepts.
PS4. Recognizing the role of metacognition in phonics instruction	0	Teaching of metacognition in the application of phonics is not apparent.
	1	Teacher models metacognition in the application of phonics.
	2	Teacher encourages students to verbalize their own thought processes in the application of phonics.
	3	Teacher recognizes and addresses individual needs of students in self-monitoring and self-correction in reading.
PS5. Understanding the importance of phonics automaticity in reading comprehension and writing fluency	0	Understanding the importance of phonics automaticity in reading comprehension and writing fluency is not apparent.
	1	Teacher relates phonics instruction to teacher-directed reading and writing activities.
	2	Teacher encourages students to use phonics independently in reading and writing.
	3	Teacher encourages students to build fluency by using the least number of phonic cues necessary for comprehension.

Appendix K--Classroom Environment Checklist

Teacher/Principal _____ School _____ Grade Level _____

Colleges Attended _____ Degrees Attained (dates) _____

Teachers: In the **Present** column, mark + if items exist in your classroom and 0 if they do not exist in your classroom. In the **Major Strength** column, mark + for **five** of your major strengths. In the **Future** column, mark + if you plan to include this item at a later date.

Principals and Literacy Coordinators: In the **Present** column, mark + if items exist in more than one of your classrooms and 0 if they do not exist in more than one classroom. In the **Major Strength** column, mark + for **five** of the school's major strengths (items are present in many classrooms). In the **Future** column, mark + if you plan to encourage teachers to include this item at a later date.

Item	Present	Major Strength	Future
1. activities extended beyond the classroom			
2. big books			
3. classroom library			
4. comfortable reading area (carpet, pillows, etc.)			
5. cooperative/collaborative learning			
6. extended blocks of time for reading/writing			
7. flexible scheduling			
8. learning games			
9. grouped desks/tables			
10. independent reading			
11. independent research			
12. individualized attention to students			
13. integrating language with music/art/drama			
14. journaling			
15. language experience			
16. learning centers			
17. multicultural activities			
18. multi-modality (visual, auditory, tactile)			
19. neatness and organization			
20. open-ended writing assignments			
21. oral language activities			
22. poetry or wordplay			
23. positive climate			
24. print-rich environment			
25. reading aloud to students			
26. recognition of achievement/progress			
27. shared or choral reading			
28. small group instruction			
29. SSR (Silent Sustained Reading)			
30. student choice or student interests			
31. student self-assessment			
32. student work displayed			
33. student-led activities			
34. teacher circulates during reading/writing			
35. technology or multi-media			
36. word walls			

Appendix L—Teacher, Principal, and Literacy Coordinator Interview Scripts

The following scripts were used to interview case study school teachers, principals, and in some cases literacy coordinators. The codes in parentheses following each question reference items on the RTI rubric potentially addressed by the answers to that question.

Phonics Demonstration Project Teacher Interview Questions

1. Are there any techniques that you use in the teaching of reading that are particularly successful? Explain. What techniques have been most/least successful with struggling readers? (GRS2, GRS3, GRS5, GRS6)
2. What is personally the hardest aspect of reading to teach? Explain. (GRS1)
3. Do your students ever have difficulty with reading or phonics because of their experiential or language background? What are some things that you do to build experiential or language background for your students? (GRS2, GRS5, GRS6, GRS7)
4. Do you encourage your students to use phonics in their independent reading and writing? How do you do this? How successful are you in getting your students to apply phonics in their independent reading/writing? How do you know this? (GRS6, GRS8, PS1, PS2, PS4, PS5)
5. How do you assess reading? Do you have a means for assessing phonics? How do you assess writing? Oral language? (GRS8, PS2, PS4)
6. What types of professional development, college courses, in-service have you had in the last three years in the area of reading? What professional organizations do you belong to? What professional publications do you receive? Which, if any of these are particularly helpful to you in the teaching of reading? (GRS10)
7. What type of professional development, in-service, or other support do you feel would help you most to develop as a teacher of reading? (GRS10)
8. Do you like to read, to write? How do you rate yourself as a reader, as a writer? What do you like to read? Do students ever see you reading for pleasure?
9. How much contact do you have with the intervention specialist, Title I teacher, literacy coordinator? What is the nature of these contacts? Does this help in your teaching? How? (GRS9)
10. Do you communicate with parents about students' progress in reading and writing? Explain. Do parents ask for advice about how to help their children in reading and writing? If so, what do you tell them? (GRS9)
11. Do you try to incorporate reading and/or phonics instruction in the content areas? Explain. What do you do in the content areas for students who are below reading level? (GRS2, GRS3, GRS4, GRS5, GRS7)
12. How often do you teach phonics? What is the length of each phonics session? How do you determine the order in which to teach phonics skills? Do you ever depart from the scope and sequence of the text? Explain. How do you feel about your phonics program? (PS1, PS2, PS3)
13. What is the basis of your reading program (basal text, literature, LEA)? If using a basal text, what series are you using? Describe a typical reading/writing lesson or assignment. How do you feel about your reading program? (GRS1, GRS3, GRS4, GRS5, GRS6, GRS7, PS4, PS5)

Phonics Demonstration Project Principal or Literacy Coordinator Interview Questions

1. Are there any techniques that teachers in your school use in the teaching of reading that are particularly successful? Explain. What techniques have been most/least successful with struggling readers? (GRS2, GRS3, GRS5, GRS6)
2. What aspect of reading do you think the hardest for teachers to teach? Explain. (GRS1)
3. Do your students ever have difficulty with reading or phonics because of their experiential or language background? What are some things that teachers do to build experiential or language background for your students? (GRS2, GRS5, GRS6, GRS7)
4. Do your teachers encourage their students to use phonics in their independent reading and writing? How do they do this? How successful are they in getting your students to apply phonics in their independent reading/writing? How do you know this? (GRS6, GRS8, PS1, PS2, PS4, PS5)
5. How do you assess reading? Do you have a means for assessing phonics? How do you assess writing? Oral language? (GRS2, GRS8, PS2, PS4)
6. What types of professional development, college courses, in-service have you offered in the last three years in the area of reading? What professional organizations do you belong to? What professional publications do you receive? Which, if any, of these are particularly helpful to you in the developing a successful reading program? (GRS10)
7. What type of professional development, in-service, or other support do you feel would help your staff most to develop as teachers of reading? (GRS10)
8. Do you like to read, to write? How do you rate yourself as a reader, as a writer? What do you like to read? Do students ever see you reading for pleasure?
9. How much contact teachers have with the intervention specialist, Title I teacher, literacy coordinator? What is the nature of these contacts? Does this help in their teaching? How? (GRS9)
10. Do you communicate with parents about students' progress in reading and writing? Explain. Do parents ask for advice about how to help their children in reading and writing? If so, what do you tell them? (GRS9)
11. Do your teachers try to incorporate reading and/or phonics instruction in the content areas? Explain. What do they do in the content areas for students who are below reading level? (GRS2, GRS3, GRS4, GRS5, GRS7)
12. How often do your teachers teach phonics? What is the length of each phonics session? How do they determine the order in which to teach phonics skills? Do teachers ever depart from the scope and sequence of the text? Explain. How do you feel about your phonics program? (PS1, PS2, PS3)
13. What is the basis of your reading program (basal text, literature, LEA)? If using a basal text, what series are you using? Describe a typical reading/writing assignment. How do you feel about your reading program? (GRS1, GRS3, GRS4, GRS5, GRS6, GRS7, PS4, PS5)
14. Are there any special school-wide programs which help students in reading and writing? Explain.

Appendix M--Student Interview Questions

1. Do you like to read? What's fun for you about reading?
2. Do you have a favorite book or story that you like to read? What is it about?
3. Do you ever read anyplace besides school? Where?
4. Where do you read the books you read at home? Do you ever get books from the library?
5. Does anyone ever read to you? Who? Do you have a favorite book or story you like to hear? What is it about?
6. Are you a good reader? How do you know you're a good reader? What do you have to do to be a good reader?
7. Is reading ever hard for you? What makes reading hard for you sometimes?
8. What does your teacher do to help you learn to read?
9. When you're reading and you reach a word that you don't know, what do you do? Is there anything else you can do if you still can't figure out the word?

Appendix N--Parent Permission Letter for Student Interviews

Phonics Demonstration Project
Ohio Department of Education
Division of Early Childhood Education

January 20, 2001

Dear Parent,

In an effort to improve the education of Ohio's children, the Ohio Department of Education established the Phonics Demonstration Project, which provides elementary schools with supplemental funds to enrich their reading programs. The effectiveness of these programs is currently being evaluated. A member of the evaluation team will be visiting your child's school sometime during the next few weeks.

As part of this evaluation, researchers will interview students of various ages and ask for their input about their experiences with reading. Your child's teacher has selected your child as a possible candidate for this brief interview, and we hope that you will consider allowing your child to participate. In this small way, you will be helping to improve the quality of education for all students in our state.

If you have any questions about the evaluation process, please contact your school principal or PDP representative, Dr. _____ [phone number]. We request that you discuss the interview process with your child. If s/he is willing to participate, we will need both of you to sign the permission slip below and return it to your child's teacher at your earliest convenience. You are free, of course, to withdraw your permission at any time prior to the interview without penalty.

Thank you for your consideration and, hopefully, your support.

Yours truly,

Phonics Demonstration Project Representative

I have read the above description. My child and I do/do not (**circle one**) consent to my child's participation in a brief interview about his/her reading experiences. I understand that all interview responses will remain anonymous.

Date: _____

Name of Student: _____

Signature of Student _____

Signature of Parent/Guardian: _____

Appendix O--Classroom Environment Checklist for All Schools in the Study

Element	Number of sources ¹ reporting element as present	Number of sources reporting element as 1 of 5 top strengths	Number of classrooms in which element was observed
1. activities extended beyond the classroom	40	1	1
2. big books	42	5	26
3. classroom library	41	12	29
4. comfortable reading area	36	2	23
5. cooperative/collaborative learning	40	5	16
6. extended blocks of time for reading/writing	40	18	6
7. flexible scheduling	35	4	5
8. learning games	41	2	16
9. grouped desks/tables	39	2	28
10. independent reading	43	3	11
11. independent research	19	1	1
12. individualized attention to students	42	12	16
13. integrating language with music/art/drama	36	3	8
14. journaling	42	4	8
15. language experience	39	4	12
16. learning centers	37	5	18
17. multicultural activities	37	2	8
18. multi-modality (visual, auditory, tactile)	40	7	29
19. neatness and organization	42	7	27
20. open-ended writing assignments	40	5	11
21. oral language activities	43	1	17
22. poetry or wordplay	41	5	16
23. positive climate	42	13	30
24. print-rich environment	43	7	28
25. reading aloud to students	41	14	21
26. recognition of achievement/progress	40	4	9
27. shared or choral reading	41	7	15
28. small group instruction	42	10	15
29. SSR (silent sustained reading)	35	4	4
30. student choice or student interests	39	0	10
31. student self-assessment	21	0	5
32. student work displayed	39	0	11
33. student-led activities	22	0	2
34. teacher circulates during reading/writing	42	7	21
35. technology or multi-media	38	3	29
36. word walls	34	3	20

¹ Sources include teachers and principals

Appendix P--FY97 Cohort Classroom Environment Elements

Element	Number of sources ¹ reporting element as present	Number of sources reporting element as 1 of 5 top strengths	Number of classrooms in which element was observed
1. activities extended beyond the classroom	20	1	1
2. big books	21	2	11
3. classroom library	21	7	13
4. comfortable reading area	17	2	13
5. cooperative/collaborative learning	20	2	9
6. extended blocks of time for reading/writing	19	11	6
7. flexible scheduling	17	2	3
8. learning games	20	0	10
9. grouped desks/tables	19	1	15
10. independent reading	22	1	8
11. independent research	11	0	1
12. individualized attention to students	22	8	11
13. integrating language with music/art/drama	18	3	3
14. journaling	22	1	6
15. language experience	19	2	7
16. learning centers	21	4	9
17. multicultural activities	20	0	5
18. multi-modality (visual, auditory, tactile)	21	3	14
19. neatness and organization	22	3	13
20. open-ended writing assignments	20	3	9
21. oral language activities	22	1	8
22. poetry or wordplay	20	1	9
23. positive climate	21	6	15
24. print-rich environment	22	2	14
25. reading aloud to students	20	6	9
26. recognition of achievement/progress	19	2	3
27. shared or choral reading	20	3	6
28. small group instruction	21	8	10
29. SSR (silent sustained reading)	18	4	2
30. student choice or student interests	20	0	6
31. student self-assessment	11	0	3
32. student work displayed	22	0	6
33. student-led activities	8	0	1
34. teacher circulates during reading/writing	21	2	14
35. technology or multi-media	18	3	14
36. word walls	16	1	10

¹ Sources include teachers and principals

Appendix Q--FY99 Cohort Classroom Environment Elements

Element	Number of sources ¹ reporting element as present	Number of sources reporting element as 1 of 5 top strengths	Number of classrooms in which element was observed
1. activities extended beyond the classroom	20	0	0
2. big books	21	3	15
3. classroom library	20	5	16
4. comfortable reading area	19	0	10
5. cooperative/collaborative learning	20	3	7
6. extended blocks of time for reading/writing	21	7	0
7. flexible scheduling	18	2	2
8. learning games	21	2	6
9. grouped desks/tables	20	1	13
10. independent reading	21	2	3
11. independent research	8	1	0
12. individualized attention to students	20	4	5
13. integrating language with music/art/drama	18	0	5
14. journaling	20	3	2
15. language experience	20	2	5
16. learning centers	16	1	9
17. multicultural activities	17	2	3
18. multi-modality (visual, auditory, tactile)	19	4	15
19. neatness and organization	20	4	14
20. open-ended writing assignments	20	2	2
21. oral language activities	21	0	9
22. poetry or wordplay	21	4	7
23. positive climate	21	7	15
24. print-rich environment	21	5	14
25. reading aloud to students	21	8	12
26. recognition of achievement/progress	21	2	6
27. shared or choral reading	21	4	9
28. small group instruction	21	2	5
29. SSR (silent sustained reading)	17	0	2
30. student choice or student interests	19	0	4
31. student self-assessment	10	0	2
32. student work displayed	17	0	5
33. student-led activities	14	0	1
34. teacher circulates during reading/writing	21	5	7
35. technology or multi-media	20	0	15
36. word walls	18	2	10

¹ Sources include teachers and principals

Appendix R-- Distribution of Elements Reported as Present or Strength in High-achieving PDP Schools

Element	School A	School C	School D	School I	School J	School K	School N	Totals
classroom library	6	4	6	3	3	4	5	31
positive climate	6	3	4	3	4	5	6	31
reading aloud to students	3	4	4	4	4	6	4	29
extended blocks of time for reading/writing	6	4	6	2	1	5	4	28
multi-modality (visual, auditory, tactile)	5	4	4	3	3	2	7	28
neatness and organization	5	4	5	3	4	2	4	27
cooperative/collaborative learning	4	3	5	6	1	4	4	27
big books	3	3	6	3	5	3	4	27
teacher circulates during reading/writing	4	3	5	1	3	4	6	26
individualized attention to students	4	4	5	2	1	5	4	25
print-rich environment	4	3	4	3	2	4	4	24
small group instruction	6	4	4	0	1	4	4	23
oral language activities	4	3	4	2	2	4	4	23
grouped desks/tables	3	3	4	3	2	4	4	23
technology or multi-media	4	3	4	2	3	2	4	22
independent reading	5	3	4	1	1	3	4	21
shared or choral reading	4	3	5	0	2	2	5	21
comfortable reading area	3	3	3	2	2	4	4	21
journaling	4	3	4	0	1	3	5	20
learning centers	4	3	4	3	1	3	2	20
recognition of achievement/progress	4	3	4	1	3	1	4	20
poetry or wordplay	4	3	3	1	0	4	5	20
learning games	3	3	3	1	2	3	4	19
word walls	2	4	3	2	0	2	6	19
open-ended writing assignments	5	3	4	1	0	1	4	18
student work displayed	4	3	4	1	2	1	3	18
SSR	4	4	3	0	1	2	3	17
language experience	4	3	3	2	0	1	4	17
integrating language with music/art/drama	4	1	5	1	0	1	4	16
multicultural activities	4	3	4	1	0	0	4	16
flexible scheduling	3	2	3	0	0	4	4	16
activities extended beyond the classroom	4	3	4	0	0	0	4	15
student choice or student interests	3	3	4	0	0	0	4	14
student self-assessment	3	0	4	1	1	0	3	12
independent research	2	2	3	0	1	0	1	9
student-led activities	3	2	1	0	0	0	2	8

¹School totals for each element on the checklist were obtained by summing number of sources reporting the element as present with the number of sources reporting the element as one of top five strengths.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



CS 511 563

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: <u>Ohio's Phonics Demonstration Project: A Longitudinal Study*</u>	
Author(s): <u>Gifford, M.R., Cochran, J., Graham, G., Hudson, L.M., & Wiersma, W.</u>	
Corporate Source: <u>Ohio Department of Education</u>	Publication Date: <u>3-1-02</u>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Myrna R. Gifford

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1



Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A



Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B



Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: <u>Myrna R. Gifford</u>	Printed Name/Position/Title: <u>Dr. Myrna R. Gifford, Assistant Professor, Ret.</u>	
Organization/Address: <u>Wright State University - Dept. Teacher Education 3640 Col. Glenn Hwy. Dayton, OH 45435</u>	Telephone: <u>937-426-4364</u>	FAX: <u>937-426-4364</u>
	E-Mail Address: <u>giffordmr@actionfactor.com</u>	Date: <u>9-15-02</u>



Subtitled: Reading Instruction in Ohio's Phonics Demonstration Project Classrooms and Teacher Preparation Programs

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: <http://ericfacility.org>