A Look Back on Seven Years of PALS and Virginia’s EIRI

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Virginia’s Early Intervention Reading Initiative (EIRI) was enacted by the General Assembly seven years ago, with the goal of reducing the number of students reading below grade level by identifying students who were struggling with early literacy acquisition and providing them with additional reading instruction. The Phonological Awareness Literacy Screening (PALS; Invernizzi, Meier & Juel, 2000; Invernizzi, Meier, Swank & Juel, 1997) was developed specifically to serve the screening purpose of the EIRI. Given this history of statewide literacy assessment throughout the Commonwealth, and the renewed focus on early literacy that has been brought about by Virginia’s Reading First grant, a brief look back at the evolution and growth of the EIRI and PALS may be instructive as Virginia moves forward in efforts to promote literacy.

History of the EIRI

In response to research suggesting that struggling readers can be reliably identified at an early age, and more importantly that early instruction in areas of weakness can ameliorate early difficulties with reading (e.g., Juel, 1998; Lyon, 1998; Scarborough, 1998; Stanovich, 1986), the 1997 Virginia Acts of Assembly established Virginia’s Early Intervention Reading Initiative (EIRI; Chapter 924, Item 140). The EIRI is designed to help participating school divisions identify children in need of additional literacy instruction and then to allocate funding to provide early intervention services to
those students. Initially, the EIRI was designed to serve students in kindergarten and first grade; the initiative was expanded in 2000 to include students in grades K - 3.

Since its inception, the EIRI has been a voluntary initiative. That is, school districts choose whether they will participate by screening all of their students in the designated grades during the screening windows determined by the Virginia Department of Education. In the earlier years of the EIRI, students were screened in the fall and only students receiving intervention were screened as a follow-up in the spring. Currently, in kindergarten, all students are screened in both fall and spring. In first through third grades, the spring screening window is mandatory, while only students who are new to Virginia schools or those who received EIRI intervention over the summer must be screened in the fall. This change allows schools to identify students in need of additional reading instruction in the spring, and thus begin their interventions for these students from the first days of school each school year.

Since 1997, the number of participating divisions has grown from 117, representing 89% of school divisions in Virginia, during the initial year of the EIRI to 131, or 99% of school divisions in Virginia in the 2003-2004 school year. Accordingly, in Fall 2003 1,163 schools, 15,457 teachers, and over 200,000 students were participating in the EIRI in grades K-3. By electing to participate, these school divisions screen kindergarten through third grade students annually, report scores online via the PALS website, and provide intervention services to identified students that is in addition to their regular classroom instruction.

The PALS website has also expanded significantly over the years. Whereas paper and pencil data collection and reporting was used initially, the PALS website was
developed in 1998 and has been improved and expanded in several ways since then. The PALS website not only allows individual teachers to enter their scores directly online, but also provides instant feedback in a variety of ways. Detailed reports are available to teachers, principals, reading specialists, and district-level administrators. At present, teachers receive a number of class and student level reports. For example, the Class Report groups all students in the class by reading levels and spelling/phonics knowledge. The Student Score History Report details a student’s performance on PALS tasks across all previous screenings beginning in 2000. Principals and reading specialists receive numerous school level reports, whereas the PALS district representative receives district summary and school summary reports. An example of a report available to administrators is the Summary of Identified Students, which lists students who should receive additional reading support, both from the current screening window and past screening windows. This report includes students’ scores as well as their teacher’s name to help administrators working on the logistics of planning intervention programs.

Three PALS Instruments

The Phonological Awareness Literacy Screening (PALS) is the state-provided screening tool for the EIRI. Since the fall of 2000, PALS consists of PALS-K for kindergarten students and PALS 1-3 for students in grades 1-3. Though not part of the EIRI, the PALS-PreK instrument has been developed for four year olds. These instruments assess young children’s knowledge of important literacy fundamentals, including phonological awareness, alphabet knowledge, knowledge of letter sounds, spelling, concept of word, word recognition in isolation, oral reading in context, fluency and reading comprehension. The major purpose of PALS is to identify those students
who are below grade-level expectations in these areas and are in need of additional reading instruction beyond that provided to typically developing readers. PALS also aims to provide teachers with explicit information about what their students know, in order to help guide their teaching.

Based on analysis of several years of statewide data (including recent cohorts that approach the total sample of students in Virginia), as well as ongoing pilot analyses of technical soundness, three equivalent forms of PALS-K and PALS 1-3 have been developed. Each of the forms has good evidence of reliability, as well as construct, concurrent, and predictive validity. The forms are rotated in use for the fall, mid-year, and spring screening windows.

**Assessing Success**

In order to assess the overall impact of the EIRI, the PALS office was asked by the Virginia Department of Education to examine PALS data over time in order to identify schools that appear to be relatively ‘successful’-- that is, schools that initially identified a large percentage of the students as needing additional reading instruction, but were able to reduce that number in subsequent screenings. To identify some of these schools, a simple change score was first computed, comparing schools’ rates of identification in fall and spring screenings. To control for potential random variation, the PALS office also ‘corrected’ these change scores by using a formula that takes into account the correlation between schools’ fall and spring scores.

After computing these corrected change scores, the PALS office then contacted several schools that (a) identified a relatively large percentage of their students as needing additional reading instruction in the fall, and (b) produced significant gains in the
percentage of their students identified by PALS. Because the Virginia Department of Education was particularly interested in high poverty schools, schools with free and reduced lunch counts exceeding 40% were looked at more closely. In informal interviews with school principals and reading specialists at these schools, a number of consistencies were observed in the way that the PALS instruments were used and reading instruction was planned and implemented.

Among the consistent findings at these schools experiencing relative ‘success,’ classroom teachers (as opposed to reading specialists or other school personnel) screened their own students and entered their scores on the PALS website. This is consistent with the recommendation of the PALS office, and is based on the assumption that teachers will learn far more about their own students literacy skills if they are directly involved in the screening process, rather then merely reading scores and reports based on an assessment conducted by another person.

A second consistent theme involved the use of PALS data. In schools experiencing positive change in the number of identified students, teachers, reading specialists, and administrators regularly accessed, discussed, and used the various reports of PALS data to plan, implement, and adjust their instruction.

Finally, in these relatively successful schools, intervention was provided in a flexible way. In other words, students with the greatest literacy needs were given the greatest and most intense level of intervention. Moreover, students could be moved from one level to another level of intervention throughout the year based on their progress; intervention for struggling students could be ratcheted up, while successful students could be moved to lower intensity of frequency of intervention.
Positive Feedback

The refinement of the PALS instruments continues as a result of feedback from Virginia educators. Each year the PALS office conducts an online survey for teachers, principals, and district representatives. Daily communication between the PALS office and Virginia’s teachers occurs with the PALS telephone hotline, email, and the comment section of the PALS website. In addition, the PALS office conducted an extensive standard setting procedure in 2002 where experts in the field of reading throughout the Commonwealth evaluated the grade-level expectations of the PALS instruments, and also provided feedback on the tasks. While the three forms of the PALS instruments are now well-established and appear psychometrically sound, this feedback from the field continues to provide an invaluable data source for the purposes of social validation, or the assessment of instructional utility and user-friendliness. Indeed, feedback from the field has often been incorporated into the PALS instruments, data collection procedures, and website reporting system.

Given that teacher-friendliness and instructional utility have always been a focus in the development of the PALS instruments, positive feedback along these lines has been particularly encouraging. One teacher recently said, “Upon looking at the results of the test, I discovered that I had three distinct reading groups. One group was able to read on the primer level. They needed work on long vowel sounds. One group was on the preprimer level. They knew consonant sounds but needed work on short vowel sounds. One group did not meet the PALS benchmarks. Further testing indicated that they knew the letters and individual sounds but could not blend sounds to read new words. They needed to work on some phonemic awareness activities. During parent conferences, I
shared some of the phonemic awareness activities with the parents” (Partridge, Invernizzi, Meier, Sullivan, 2003).

A district representative responded, “Some of the instructional changes that have occurred in kindergarten after studying the data have included an increase in small group instructional time, explicit teaching of letters and sounds, attention to phonemic awareness, and the use of word study activities. Overall, participation in PALS has forced us to look at our initial instruction in reading and to make changes that support at-risk students” (Partridge et al., 2003).

The popularity and growth of the EIRI and the use of PALS in Virginia, and the recently awarded Reading First grant, have established Virginia as a leader in statewide literacy assessment and even drawn the attention of other states as they implement similar literacy initiatives. Many states are adopting a model similar to Virginia’s, and indeed many localities have chosen to use PALS for assessing early literacy skills. In fact, some states have adopted PALS for use in all schools receiving Reading First grants. Currently, PALS is in use at some level in twenty-nine states and six countries.

For further information on PALS and the EIRI, please visit the PALS website at http://pals.virginia.edu. You may also contact the PALS office at pals@virginia.edu or 888-UVA-PALS.
References


