Act 69 of 2014
Dyslexia Screening and Early Literacy Intervention Pilot Program

August 2019
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Overview
The Dyslexia Screening and Early Literacy Intervention Pilot Program (Pilot) was developed in response to the passage of Act 69 of 2014 (the Act). Act 69 required that the Pennsylvania Department of Education (PDE) establish an early literacy intervention and dyslexia pilot program using evidence-based screening and then evidence-based instruction and intervention for students who were found to be at risk for future reading difficulties. The Dyslexia Pilot identified students in Kindergarten who were deemed at risk for reading difficulties including dyslexia using screening tests. At-risk students received immediate supports to improve future reading achievement and to reduce the need for special education in later grades. In addition, the Pilot focused on providing enhanced core instruction in the classroom for all students.

The overarching goal of the Dyslexia Pilot was to develop a model that allowed for scaled multisensory structured language (MSL) approaches for classroom instruction and targeted intervention for at-risk students across Pennsylvania. This supplemented core instruction included an increase in focus on the five essential components of reading, specifically Phonemic Awareness, Phonics, Vocabulary, Fluency and Comprehension, and incorporation of an MSL approach to instruction and learning. An MSL approach is a systematic approach to instruction that engages students’ senses (sight, touch, movement, hearing) in order to master the code that underlies language, letters and sounds.

The PDE Bureau of Special Education (BSE) created several structures to assist with implementing the Act, including contracting with consultants with content experience and using the PA Training and Technical Assistance Network (PaTTAN) to support research through data collection and onsite fidelity checks.

An Advisory Committee was created in acknowledgement of the work of the parents and advocates in the enactment of the Act. A parent liaison and lead teacher role were established in each district. PaTTAN consultants coordinated the communication to these groups. The Committee met monthly beginning in July 2014 for the first two years and quarterly thereafter. The Committee was comprised of the following members:

- Daphne Uliana and Diane Reott, parents of children with dyslexia and advocates of the legislation;
- Pam Cook, Education Advocate;
- David Braze, Ph.D., Linguist and Researcher at Haskins Labs, Yale University;
- Eugenia Flaherty, Ph. D., Clinical Psychologist, past President of the PA Branch of the International Dyslexia Association (PBIDA);
- Marilyn Mathis, Certified Academic Language Therapist (CALT), past President of the Academic Language Therapy Association (ALTA); and
- Monica McHale-Small, Ph. D., Superintendent, School Psychologist, and past President of the PA Branch of the International Dyslexia Association (PBIDA).

The Advisory Committee participated in the design and implementation of the Pilot, including the review of field data generated and anecdotal information from the participating school districts; participation in the American Institutes of Research (AIR) monthly evaluation calls; training and
presentations with district personnel and conferences; and direct work with the designated parent liaison(s) from each of the districts.

From the beginning, the Advisory Committee recognized that the challenge was to create a program that would provide the needed intervention to identified students in a cost efficient, timely, and effective way. If the Pilot was to be successful and replicable, it had to be compatible with what was already being done in the public-school setting.

The Pilot spanned three years (2015-16 through 2017-18). Each year, a new cohort group was added to the study. Cohorts were identified when students entered Kindergarten at the start of the school year.

- Cohort 1 (2015-16 entry) followed students from Kindergarten through second grade.
- Cohort 2 (2016-17 entry) was supported and tracked from Kindergarten through first grade.
- Cohort 3 (2017-18 entry) involved students in their Kindergarten year.

Eight school districts were selected as Pilot sites. Within those districts, all elementary schools participated, resulting in a total of 21 elementary schools. The districts selected for the Pilot were located throughout the state and differed in terms of size and demographic characteristics.

**Training**

Schools included in the Pilot had not utilized an MSL-based approach to reading prior to the start of the study. During each year of the Pilot, extensive training was targeted for a specific group or grade level, to prepare teachers and/or interventionists for the shift to MSL practices.

**Teachers:** In Year 1, Kindergarten teachers and interventionists received four days of training in Language Essentials for Teachers of Reading and Spelling (LETRS), which is a program designed to provide an in-depth understanding of how reading skills develop and how effective programs aligned to the science of reading enhance literacy instruction. In order to achieve the Pilot goals for early identification of students at risk for dyslexia, PaTTAN contracted for a Dyslexia Connect component which was added to the LETRS modules for application to dyslexia. Some teachers as well as the interventionists had MSL-specific training at this time. During fall 2016, all kindergarten teachers and most interventionists received training in Reading Readiness developed by the Neuhaus Education Center and delivered by the Compass consultants.

During the first and second year, PaTTAN consultants provided speech and language support and training to each district. Speech language pathologists (SLPs) conducted onsite and remote sessions to assist in improving classroom oral language routines and diagnostic information. SLPs were provided with materials for classroom based oral language lessons.

Over the summer, 1st grade teachers were introduced to critical components of the Pilot in group trainings. During Year 2, four day-long training sessions customized to 1st grade instruction were delivered. Each focused on recommended topics noted by the National Early Literacy Panel (2008), the National Reading Panel (2000), and other evidence-based approaches.
(Foorman et al., 2016; Kosanovich & Foorman, 2016; National Research Council, 1998; Shanahan et al., 2010). Topics by day included:

- Day 1 – Overview;
- Day 2 – Phonemic Awareness and Phonics;
- Day 3 – Oral Language and Vocabulary; and
- Day 4 – Fluency and Comprehension.

Although this Year 2 training was targeted toward grade 1 teachers, Kindergarten teachers had the option to attend. Additionally, a one-day refresher training was offered, which focused on MSL-based strategies and materials tailored for Kindergarten students.

In the summer before the start of Year 3, there were four full-day trainings around the same topical areas as the Year 2, grade 1 training, with the focus tailored to critical features for grade 2 instruction. In addition, a fifth day of training was offered that explored the application of MSL Core Supplements to the 30-minute classroom lesson. District-selected supplements to the core program included:

- Fundations – Wilson Language Training
- Heggerty Phonemic Awareness – Literacy Resources in Year 3
- Reading Readiness – Neuhaus Education Center in Year 1
- Access Code Intervention – Foundations in Learning
- District-developed structured literacy supplements

**Interventionists:** A subset of individuals within each school received specialized training to provide MSL-based intervention to small groups of students deemed at risk for future reading difficulties. In addition to the Year 1 LETRS training, interventionists participated in extensive training in providing intervention using the specific MSL approach(es) adopted by the school. Districts were able to select from a list of pre-approved MSL programs.

The approaches selected by districts included:

- Orton-Gillingham (OG)
- Sonday System – Winsor Learning
- Wilson Language Training
- Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech (LiPS) – Lindamood-Bell
- DuBard Association Method – DuBard School for Language Disorders

The training requirements for each program varied considerably. Orton-Gillingham (OG) was the most time-intensive approach. The OG training provided to interventionists was part of a certification process, which required instruction and assessment beyond what was needed for the purposes of the Pilot. Other approaches required less intensive training and focused more specifically on the skills needed to provide intervention for the Pilot project.

Throughout the three years of the project, ongoing support was provided to Pilot sites. Support included materials, training, technical assistance, coaching, and data-based feedback to Pilot
sites to ensure effective implementation of both the enhanced classroom instruction and intervention for students at risk.

**Evaluation of Training**
Given the intensity and importance of the training and support provided to Pilot sites, the Pilot sought to answer the following research question:

- Do teachers and interventionists receive the training as intended?

**Teacher Training Participation and Performance**
The question regarding whether teachers received the training as intended was evaluated by examining attendance and pre- and post-test scores on tests covering training content. In examining first grade teachers, 73 percent participated in all days of training. Rates of attendance for teacher participation on individual days was higher, ranging from 80 percent to 90 percent. Overall, 95 percent participated in at least one session. The direct, immediate impact of the training was evaluated in Years 2 and 3 by comparing test scores from before the training and after the training. In all cases, teacher performance improved after the training, with gains of nearly 30 percent in some instances in Year 3. Additional data about the impact of training was derived from small group interviews that were conducted annually in all Pilot schools. In response to a question that asked teachers to identify the supports that were ultimately most helpful to them over the course of the study, the four-day training series was the most popular selection, with 75.8 percent of teams naming that training series as the most helpful support.

**Fidelity of Teacher Training**
In addition to participation and performance data, the Pilot also sought to determine how well the components of the training were implemented in intervention and classroom settings. The Pilot posed the following question:

- Do classroom teachers and interventionists implement the program as intended (e.g., do teachers use the classroom program with fidelity; do interventionists provide the MSL small group instruction for students with fidelity)?

The question regarding fidelity in classroom implementation was addressed in two ways: by direct classroom observation and by self-report.

**Classroom Observation:** All classroom teachers in targeted grades were directly observed for one reading class using a protocol that relied on whether or not components of MSL instruction were seen and how much time was dedicated to each of the key components (i.e., phonemic awareness, phonics, oral language, vocabulary, fluency and comprehension).

Although Year 1 teachers were observed, results of those observations are not reported due to concerns about consistency as well as the significant shift in the observation protocol in Year 2. Additional modifications were made between Years 2 and 3; however, the changes were small.
and results can be compared. The graphs below show the percentage of lessons in which each category was observed.

![Kindergarten Classroom Observations Graph]

![Grade 1 Classroom Observations Graph]

![Grade 2 Classroom Observations Graph]

In all cases, the category most likely to be observed was phonics, regardless of grade level. Phonological awareness was the next most common category observed. Across Cohorts, phonics, phonological awareness and oral language instruction were less commonly observed at higher grades, while instruction in vocabulary, fluency and comprehension tended to be more common at higher grades. These differences were not unexpected, as most of the students become more efficient readers over time, and the focus of instruction would be expected to shift. In examining differences across years, the percentages reported for each category tend to decline. This could indicate that there was decreased implementation of MSL activities during the last year of the study.

**Teacher Survey:** In addition to direct observations, teachers completed a survey in which they reported on their activities over the course of one week of instruction. Teachers rated how frequently they engaged in activities by selecting ratings from 'not at all' to 'a lot'. The results below indicate the percentage of teachers rating a category as ‘sometimes’ or ‘a lot’.
Data from the survey of one week’s worth of instruction showed much more balance across the different categories than the direct observation indicated. This difference could be impacted by teachers reporting on a week of instruction instead of one lesson. Over the course of a week, teachers may address the categories more consistently. It could be at least in part a function of the impact of direct observation versus teacher self-reporting on activities. In addition, discrepancies might have arisen because of differences in when the data were collected; the observations occurred earlier in the school year, and the self-report survey occurred later in the year.

**Interventionist Training Participation and Performance**

Over the course of the three years, the number of interventionists varied. There were 72 interventionists in Year 1. During Year 2, as a second Cohort was added, the number averaged 115. In Year 3, an average of 109 interventionists served Cohorts 1, 2, and 3. The differences in the requirements of the various MSL programs employed in the Pilot resulted in unique structures of training and coaching; similarly, requirements for data collection and evaluation of outcomes of training/fidelity of implementation differed. In some instances, scores were
compared from before training and after training to evaluate its effectiveness. For example, interventionists trained in the Orton-Gillingham program took a pre- and post-test based on the content of the training. In this specific case, the interventionists showed growth after training that ranged from an increase in percentage correct of 54.6 percent (Year 1) to 70.1 percent (Year 3).

**Fidelity of Interventionist Training**

**Observations:** In addition to participation and performance on pre- and post-tests, fidelity observations were conducted in some instances. In the Orton-Gillingham program, for example, interventionists were observed on 10 occasions. Interventionists received ratings ranging from 87 percent to 99 percent which indicates a high degree of consistency in implementing the program correctly.

**Intervention Logs:** One critical aspect of fidelity of the MSL intervention is the actual delivery of intervention to at-risk students over the course of the study. The target for intervention was 30 hours by end of Kindergarten, 100 hours by end of 1st grade and 170 hours by end of 2nd grade. Intervention was intended to be delivered 4-5 days per week for approximately 30 minutes per day. Group size was targeted to be no more than three although groups of four were allowed on occasion.

Intervention was monitored for each student within each intervention group. Interventionists completed a log of intervention sessions that helped to ensure that MSL was the focus of intervention, that group size was within recommended guidelines and that recommended hours per student were achieved. Although analyses indicated that MSL programs were implemented and the group size constraint was met, the majority of students fell well below the expected number of intervention hours. The graph below shows the actual average for hours of intervention received (green bars) and the goal for hours (red bar).
The average hours fell under the goal in all cases. Cohort 1 reached 75.9 percent of goal hours while Cohort 3 reached 73.3 percent. Cohort 2 fared best, reaching 80 percent of the goal hours. Based on subsequent analyses relating more hours of intervention with better reading outcomes, it is possible that failure to meet the goal for hours impacted subsequent reading performance for intervention students.

**Student Data Collection**

The Pilot project involved screening students three times per year – fall, winter and spring – on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Next assessment. DIBELS Next contains subtests which address skills necessary for a student to become a successful reader. Assessments can be given to students beginning in fall of the Kindergarten year. The specific tests change as students move to higher grades, as reading proficiency develops. DIBELS Next assessments are administered routinely in many school districts to determine if students look to be on track to become fluent, efficient and effective readers. The assessments are brief but are good predictors of future reading success (Catts, Petscher, Schatschneider, Bridges, & Mendoza, 2009). For the Pilot project, data from DIBELS were used to identify students who were at risk for future reading problems and to measure changes in reading performance over time. A variety of other data were collected over the course of the project, including demographic information, diagnostic test data, special education referrals, qualification for special education services, attendance and information about preschool. Some of these data were used to explain why students might differ from one another. Other data were used to determine how students might respond to the instruction and intervention.
Qualifying for Intervention
A subset of students deemed at risk for future reading problems were identified using scores from DIBELS’ Letter Naming Fluency (LNF) subtest in Kindergarten at the winter testing. A cut point was selected that identified approximately 35 percent of the students as at-risk across all Pilot schools. If the student scored at or below the cut point, he/she qualified to participate in intervention. Students scoring above the cut point did not qualify for intervention.

Outcomes for Intervention
The Pilot project focused on key questions about student outcomes. Specifically, the Pilot asked:

- Does the MSL small group intervention improve student outcomes (e.g., increased reading assessment scores, reduced number of students referred to special education services)?

To estimate the effect that the intervention component had, students who qualified for intervention had to be compared to students who did not qualify within each school. Across all students, however, the differences in LNF scores and other DIBELS scores were large. Within the intervention group, students’ scores on LNF could be as low as zero or could be at the cut score of 39, for example. Students who did not qualify for intervention could range from just above the cut score (40) up to 110. To draw a fair comparison, intervention and non-intervention students who were more similar to one another were compared. Students who were within five points of the cut score (39), both above and below, were targeted for comparison. These students were separated into students who qualified for intervention and those who did not qualify for intervention. These two groups were compared in order to determine if the students who qualified for intervention plus the enhanced classroom instruction performed better than the students who received the enhanced classroom instruction only.

When the averages for the groups were compared, there were not significant differences; the performance of the intervention group and the non-intervention group was statistically the same.

Student Outcomes
An additional research question focused on the impact of the classroom program. Specifically, the question asked:

- Does the classroom program improve student outcomes (e.g., increased reading assessment scores, reduced number of students identified as being at-risk in reading, reduced number of students referred to special education services)?

Enhanced Classroom Instruction: The impact of classroom instruction was evaluated by comparing the Pilot schools’ performance on DIBELS to a comparison group of students from other schools who were not taking part in the Pilot program. The project selected a challenging comparison group by using schools that had participated in Keystones to Opportunity (KTO), which was a grant provided to PDE as part of the U.S. Department of Education’s (USDE) Striving Readers Comprehensive Literacy Program. The grant had provided funding to support
screening and intervention for students who were reading below grade level, so reading instruction and intervention for struggling learners was likely to be better in these schools than what would be expected typically. Each comparison school was selected to ensure that it looked very similar to the Pilot school in terms of demographics and reading performance. This close matching increased the ability to look at differences between Pilot and comparison groups and feel more confident that discrepancies resulted from the intervention plus classroom instruction and not from other unrelated factors.

**Kindergarten:** Below are the results for Kindergarten across each of the Cohorts for each DIBELS subtest, which in Kindergarten include LNF, Nonsense Word Fluency – Correct Letter Sounds (NWF-CLS) and Phonemic Segmentation Fluency (PSF). Means were computed for the Pilot sites (blue bars) and the comparison sites (pink checked bars) and were compared to see if there were statistically significant differences. The means from Kindergarten for each Cohort appear below.

Although the means look different from one another, only some have differences that are statistically significant. Many characteristics (e.g., number of students, the size of the difference, etc.) can impact whether something is statistically significant.

In Cohort 1, none of the differences in the means were statistically significant. In Cohort 2, however, students in the Pilot sites performed significantly better than students in the comparison schools for both LNF and NWF-CLS. Cohort 3 continued the trend in LNF, with significantly better scores for Pilot schools versus comparison schools.
Grade 1: Differences in means for the Pilot schools and comparison schools could also be evaluated in grade 1 for Cohorts 1 and 2. At the end of grade 1, LNF and PSF are no longer tested; however Oral Reading Fluency Words Correct (ORF-WC) and Oral Reading Fluency Accuracy (ORF-Acc) are added. The means appear below.

Grade 1 trends in Cohort 1 and Cohort 2 were similar. Students in Pilot sites scored significantly higher on NWF-CLS and NWF-WWR than comparison sites. There were no significant differences in ORF Words Correct or ORF Accuracy in grade 1.
**Grade 2:** Grade 2 results were only available for Cohort 1. By grade 2, only Oral Reading Fluency is assessed. In addition to Words Correct and Accuracy, Oral Reading Fluency Retell (ORF-Retell) and Oral Reading Fluency Retell Quality (ORF-Retell Quality) are added to measure reading comprehension. There were no significant differences in the means for Pilot sites and comparison sites at the end of grade 2. The means appear below.

![Grade 2 Cohort 1](image)

**Small Group Intervention:** The results from the analysis of the non-intervention group versus the intervention group within Pilot schools showed no statistically significant effects for any DIBELS subtest. Instead, all students within five points of the cut score performed similarly.

### Additional Analyses

In summary, the small group intervention analysis for students within five points of the cut score were not statistically significant. However, the enhanced core classroom instruction plus intervention for qualifying students produced some statistically significant benefits when comparing Pilot schools to comparison schools. Further analyses were completed to explore potential mitigating factors and to investigate other groupings within the data.

**Intervention versus Non-intervention:** One set of analyses involved taking the Pilot sites versus the comparison sites and separating students into groups who fell at or below the cut score and those who fell above the cut score on winter Kindergarten LNF. Essentially, this created an ‘intervention’ group and a ‘non-intervention’ group in the Pilot and comparison schools.

**Kindergarten:** Mean performance on Kindergarten DIBELS for these groups for each Cohort appear below for Pilot sites (blue bar) and comparison sites (pink checked bar).
The means were tested for statistical significance. In Cohort 1, there were significant effects between the Pilot and comparison sites for intervention students on LNF, but LNF was not significantly different for the non-intervention groups. Although the Pilot sites did not differ significantly on NWF-CLS in Kindergarten for either group, the students in the intervention group compared more favorably to the comparison group than the non-intervention students. Cohort 2 showed significant effects in both the intervention and the non-intervention Pilot groups. Both Pilot groups outperformed the comparison sites on LNF and on NWF-CLS. Effects were less pronounced for Cohort 3. For this Cohort, only LNF for intervention students was significantly better in Pilot versus comparison sites.
**Grade 1:** Comparisons were tested for the 2 Cohorts with grade 1 data. The means for the intervention and the non-intervention groups for the Pilot sites and for the comparison sites appear below.

For grade 1 in Cohort 1, intervention students performed significantly better than comparison site students on NWF-CLS and on NWF-WWR. The only other statistically significant result was in favor of the non-intervention group in the comparison sites for ORF-Words Correct. The size of the differences between the Pilot and comparison sites for non-intervention and intervention groups was also tested. Pilot students in the intervention group fared significantly better versus the comparison group than non-intervention students on all 4 measures.

Grade 1 in Cohort 2 showed some positive results for both students in intervention and those not in intervention. Pilot students in intervention continued to do significantly better on NWF-CLS and NWF-WWR versus comparison sites, but non-intervention students in Pilot sites were also significantly better on the NWF subtests. Unlike Cohort 1, there were no significant differences on ORF measures for intervention students or for non-intervention students.
Grade 2: Grade 2 results are presented for Cohort 1 only. Across all measures, differences in grade 2 performance were not statistically significant between Pilot and comparison sites for the intervention group or the non-intervention group. The comparison of means appears below.

In general, the analyses for Cohort 1 indicate that intervention provided benefits to students, particularly those who were well below the cut score, on pre-literacy skills in Kindergarten and Grade 1 in the Pilot sites. The effects are not evident, however, on measures of Oral Reading Fluency. In Cohort 2, the classroom component appears to have exerted a larger influence on pre-literacy skills. Again, neither the classroom nor the intervention produced differences on measures of Oral Reading Fluency. Although trends in Cohort 3 resembled those in Kindergarten in Cohort 1, the only significant difference was for intervention students on LNF.

Hours of Intervention and Student Performance: A second analysis was conducted to determine if the number of hours of intervention predicted reading performance on DIBELS subtests. The results indicated that as the number of hours of intervention went up, reading performance went up, particularly in Kindergarten. Although specifics varied for Cohorts, a greater number of hours produced significant increases in performance on LNF, NWF-CLS and PSF in one or more Cohorts. The extra time in intervention exerted less of a difference on grade 1 scores, with small but significant positive effects for NWF-WWR for Cohort 1 and ORF accuracy for Cohort 2. By 2nd grade, the increased hours were not associated with higher scores.

Special Education Referrals: Special education referrals were another area that were hypothesized to be affected by the Pilot study. Specifically, it was anticipated that early screening and intervention would reduce the number of students referred for special education at a future point. Given constraints of the special education data available and the idea that referrals for reading disabilities tend to occur in later grades, this question has not been fully addressed thus far. Data indicated, however, that there were fewer referrals in Year 3 compared to Year 2 for both Kindergarten and 1st grade. In addition, there was a decrease in the percentage of referrals resulting in an IEP in first grade.

Parent Survey: To supplement the information collected from school personnel and students through tests, surveys and observations, parents completed a survey reflecting on the impact
that MSL intervention had on their children. Prior to the Dyslexia Pilot, only 62 percent of parents were aware that their child needed assistance in reading. Responses from parents to the survey were overwhelmingly positive, with most parents indicating that they had seen changes in their child’s reading and spelling following intervention and that their child seemed more confident in reading and was reading more at home. Additionally, parents indicated that their child felt that he/she was doing better in reading.

**Conclusion**

Many lessons have been learned through the pilot program regarding what is possible in public schools to achieve improved teacher practices for student results.

The Pilot project’s use of small group intervention and enhanced core reading instruction resulted in positive findings for early literacy skills. Better reading outcomes on these measures were noted in Kindergarten and 1st grade when comparing Pilot and comparison sites. The trends were not evident in measures of Oral Reading Fluency. The finding of no differences in some of the DIBELS subtests does not necessarily have a negative connotation. The comparison sites were also implementing a different kind of early reading intervention.

When performance was not significantly different, the implication is that both Pilot and comparison sites were doing equally well, which is noteworthy since KTO was substantially funded and operated for five years. The positive changes for all students are supported by examining the number of students within Pilot and comparison sites that scored above the benchmark on DIBELS (i.e., were on-track to meet subsequent reading goals). As students began school in Kindergarten, 55-65 percent of students were above the benchmark. Over the course of Kindergarten, 1st, and 2nd grade, the percentage of Pilot students above benchmark ranged from 74 percent to 86 percent. Students in comparison schools ranged from 66-85 percent.

Administrative leadership at the school, district, and state level was crucial to the continued teacher empowerment for improved practices for improved student results. Administrators had to support teachers in their implementation role, address reallocation of resources, remove barriers in the schedule, and remove activities that do not provide value to keep the focus on student results.

Some of the most notable results from this Pilot cannot be measured – the confidence and empowerment achieved by both the teachers and students. These are teachers who work hard to teach children and the students who, through no fault of their own, struggle to read.

Participating teachers said they now have the missing tools to help children read; tools they were not provided in their college-level teacher preparation programs. Many of the reading specialists said that while they were empowered by the newfound knowledge and practices, they were disappointed that they weren’t able to help more children sooner. One of the Pilot’s reading specialists/lead teachers quoted Maya Angelou’s wise advice that has become the Pilot mantra: “Do the best you can until you know better. Then when you know better, do better.”
The next step is ensuring all children have the opportunity to learn to read by teachers with the expertise provided in their preparation programs and administrators focusing on what works and removing barriers to implementation.

The commitment of the currently participating administrators, teachers, and parents to this pilot is unwavering. They are continuing the work started and have no interest in deviating from these approaches. The Pilot sites are now examples for other schools interested in improving teacher practices and student results. The lessons learned and replication options are available to share with all who are interested. The costs and staffing associated with the research will not be necessary. Specific recommendations for implementation of the professional development, identification process, and diagnostics and administrative leadership are all part of the scale-up process.