Kelliher School District ISD #36 Local Literacy Plan

Reading development is one of the most important goals of Kelliher Elementary School. Every staff member at Kelliher Elementary School is committed to building and sustaining a school culture in which high quality reading instruction for all students is our most important priority. The primary reading goal of Kelliher Elementary School teachers is to implement research-based core instructional methods and curricula which is supplemented by scientifically-proven Multi-tiered Systems of Support (MTSS) to help every child read at grade level or above by third grade.

OBJECTIVES OF KELLIHER SCHOOL'S COMPREHENSIVE ASSESSMENT PLAN

Kelliher School's comprehensive assessment plan for the early elementary grades has four main objectives:

1. To **identify** students at the beginning of the year who are "at risk" for reading difficulties and who may need extra instruction or intensive interventions if they are to progress toward grade-level standards in reading by the end of the year.

2. To **monitor** students' progress during the year to determine whether "at risk" students are making adequate progress in critical reading skills and to identify any students who may be falling behind.

3. To **collect** information about students that will be helpful in planning instruction to meet their most critical learning needs.

4. To **assess** whether the instruction provided by classroom teachers and intervention specialists is sufficiently powerful to help all students achieve grade-level reading standards by the end of each year from kindergarten through third grade.

THE FIVE DIMENSIONS OF READING SKILL KELLIHER SCHOOL WILL ASSESS:

The Report of the National Reading Panel has identified five critical components of reading skill that children must master as they progress from non-readers in kindergarten to proficient readers at the end of third grade. They **are phonemic awareness**, **phonics**, **fluency**, **vocabulary**, and **reading comprehension**. Kelliher School's comprehensive reading assessment plan will monitor the development of each component in a manner deemed appropriate to each grade level as follows:

Kindergarten

Kindergarten students require sensitive assessments of their growth in phonemic awareness, phonics skills (knowledge of letters and beginning phonemic decoding ability), and vocabulary. Their reading skills are rarely sufficiently developed to usefully assess text reading fluency and reading comprehension. When necessary, listening comprehension will be assessed in place of reading

comprehension in order to identify students whose language processing skills place them at risk for difficulties comprehending text once they can read words fluently and accurately.

Grade 1

Kelliher School teachers will continue to monitor students' development of phonemic awareness in first grade in order to address the needs of struggling students who continue to have difficulty in this area. The development of accurate and fluent phonemic decoding skills will also be monitored in first grade, since these foundational skills for reading accuracy undergo major development in this period. As students begin to read connected text with reasonable accuracy, their development of oral reading fluency will be monitored. Oral measures of young children's reading fluency are much more reliable than measures of silent reading fluency. Oral reading fluency's importance as an index of reading growth extends from first through third grades. Continued growth in vocabulary will also be assessed, and it is our goal that reading comprehension will be assessed reliably in most students by the end of first grade.

The classroom teacher uses Rigby assessments for regular benchmarking on a quarterly basis and uses local classroom assessments to measure high frequency words.

Grade 2

Some second graders may need continued monitoring of their phonemic decoding ability, especially for multi-syllable words, particularly in Kelliher School which has a high percentage of poor and minority students, who have traditionally been at risk for difficulties with the early mastery of these skills. Continued monitoring of reading fluency will be critical through second grade, since students must make strong growth in this skill to maintain grade-level reading proficiency. Kelliher School's comprehensive assessment plan will also measure second graders' vocabulary and reading comprehension. The classroom teacher uses local classroom assessments to measure high frequency words.

Grade 3

The primary dimensions of reading growth that will be monitored in Kelliher School third grade will be reading fluency, vocabulary, and reading comprehension.

TYPES OF ASSESSMENTS IN KELLIHER SCHOOL'S COMPREHENSIVE PLAN

Screening Tests

Briefly administered, Kelliher School's screening tests will provide an initial indication of which students are entering the school year "at risk" for reading difficulties because they are lagging in the development of critical reading skills. Many students who enroll at Kelliher School and enter as a Kindergarten student or who open enroll to Kelliher School are below the 10th percentile in reading skills. Valid and reliable screening tests will help Kelliher School teachers differentiate their instruction based on what students already know and can do.

Progress Monitoring Tests

Also brief, progress monitoring tests will be given periodically to determine whether students are making adequate progress. There are two types of progress monitoring tests that Kelliher School teachers will use; both are important to Kelliher School's comprehensive assessment plan. The "curriculum-embedded" test, in common use for many years at Kelliher School, assesses the extent to which students have learned the material taught in the current unit of the core reading curriculum. This type of test helps Kelliher School teachers identify which students have mastered the material and whether the class is ready to move on to the next unit. These tests are included in Kelliher School's core reading program materials.

The second type of progress monitoring test has a shorter history of use in Kelliher School. Such "general" or "external" progress monitoring tests measure critical reading skills such as phonemic awareness, phonics, fluency, vocabulary, or comprehension, but are not tied to any specific reading curriculum at Kelliher School. Such tests establish performance targets, or "benchmarks" for different points in the school-year (i.e., beginning, middle, and end) that predict success in meeting grade-level reading standards by the end of the year. When administered at the end of the school year, these tests will also identify Kelliher students who will likely have trouble meeting grade-level standards at the end of the next school year unless they receive extra help.

Kelliher School's general progress monitoring tests will provide performance targets that Kelliher School teachers can aim for in order to ensure that their students are on track for meeting grade-level reading standards by the end of the school year. The general progress monitoring tests utilized at Kelliher School are the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Scholastic System 44 SRI tests, MAP tests, AIMS Web tests, and STAR assessments.

Diagnostic Tests

Kelliher School utilizes the relatively lengthy, diagnostic tests which provide an in-depth, reliable assessment of important component skills in reading. Their major purpose in the early elementary grades is to provide information for planning more effective instruction by Kelliher Students. Diagnostic tests will be given when there is a clear expectation that they will offer new, or more reliable, information about a Kelliher School student's reading difficulties that can be used to help plan more powerful instruction.

Diagnostic Tests and Diagnostic Information

Kelliher School teachers are aware of the difference between diagnostic tests and diagnostic information. Diagnostic information is any knowledge about a child's skills and abilities that is useful in planning instruction. Such information can come from student work, teacher observations, or other tests, as well as diagnostic tests. For example, if a Kelliher Studnet performs poorly on a test of reading comprehension at the end of second grade, it would be useful to know if he or she is impaired in reading fluency or accuracy, knowledge of word meanings, general background knowledge, or use of efficient comprehension strategies. Any information gathered about the child's knowledge and skill in

the components of reading comprehension is diagnostic information that could be used by Kelliher School teachers to direct instructional interventions.

For example, if a Kelliher School student were struggling to acquire fluent and efficient phonemic decoding skills (phonics), it would be useful for his or her teacher to have reliable information about his or her level of phonemic awareness and letter-sound knowledge, since both are required to understand and use the alphabetic principle in reading. If the child were relatively strong in phonemic awareness, but had a poorly developed knowledge of letter-sound relationships, this information could be used to focus intervention work.

Kelliher School's diagnostic tests are one important way that teachers will obtain diagnostic information that can help guide interventions for students who are experiencing difficulty in learning to read.

Reading Outcome Tests

Given at the end of the year at Kelliher School, reading outcome tests will assess important reading outcomes such as reading comprehension. These tests are important because they will give Kelliher School administrators and teachers valuable feedback about the overall effectiveness of our reading program.

As part of Kelliher School's comprehensive plan, reading outcome tests will be administered at the end of every year from kindergarten through third grade, although kindergarten tests will differ greatly from those administered at the end of 1st, 2nd, and 3rd grades, since the older children will have begun to acquire skills in reading comprehension. Longitudinal studies of reading have shown that students are much more likely to meet grade-level standards in reading at the end of third grade if they have met those standards in each preceding year (grades K-2). Thus, outcome tests at the end of grades K-2 will be useful to Kelliher School staff to ensure that instruction in each grade is sufficiently powerful to keep most students on track for successful performance when they take important reading accountability measures at the end of third grade.

Reading outcome tests that are used by Kelliher School teachers include MAP assessments, STAR tests, and Scholastic SRI assessments.

Literacy Plan Components:

I. _Statement of goals or objectives defining how reading proficiency will be ensured for all students at each grade level from Kindergarten through grade 3._

A. Kelliher School staff will disaggregate student achievement results and growth data for all students in pre-K through grade 3, utilizing, when possible, trend data from the previous 2 or 3 years utilizing the following assessment tools:

- NWEA Measures of Academic Progress (MAP) Assessments
- STAR Testing (Enterprise Edition)
- Scholastic Reading Inventory
- Scholastic Phonics Inventory

B. Sufficient time for reading instruction is necessary for children to read at grade level. All children in K-3 will receive 90 minutes of reading instruction each day. Reading instruction will begin during the first week of school and will continue through the last week of school. Children not reading at grade level will receive more than 90 minutes of reading instruction each day.

Schools and teachers require high quality instructional programs and materials to provide high quality reading instruction to all children. A common core reading program will be used in K-3 with children reading at or above grade level. For children reading below grade level, some combination of the core reading program with additional highly specific supplemental reading materials and intervention programs will be used for reading instruction. The combination of materials used will be based on the learning needs of students. All programs and materials used at Kelliher Elementary School will be constructed according to principles of scientifically-based reading research and, to the greatest degree possible, these programs and materials will be demonstrated to be effective in rigorous scientific studies.

Effective reading instruction for all children is achieved through differentiated instruction. Our commitment is to identify children who are reading below grade level, or who are otherwise at risk for reading problems, and provide these students with instruction that is differentiated for them based on need. Differentiated instruction will help children make the progress necessary to reach grade level reading performance.

Kelliher School staff and administration will analyze current practices including the effectiveness of core literacy instruction for all students, but especially student groups and subgroups that have not been making adequate growth to meet grade-level objectives with the following results:

- Based upon analyses of core instructional curricula, Kelliher School will replace literacy curricula that are deemed to be ineffective and will replace such curricula with curricula that is proven through research to be effective in successfully teaching literacy.
- Based upon analyses of core instructional practices (scheduling, pedagogy, exercises), Kelliher School will replace such practices with research-based and proven practices.

C. Based upon analyses of practices and supports that have demonstrated success, and based upon data supporting success in other schools, Kelliher School will apply research-proven best practices to support literacy.

Examples include:

○ Scholastic reading initiatives such as System 44 and READ 180;

- Read Naturally
- Reading Plus
- Other

D. Teachers will be provided with training and professional development to help them make successful decisions regarding core literacy instruction and Multi-Tiered Systems of Support (MTSS).

Early Childhood School Readiness Goals:

In order to help prepare Kelliher School children be successful when they enter school, its ECFE programs implement core strategies including:

- An integrated curriculum that addresses the essential domains of school readiness in the Head Start Child Development and Early Learning Framework which provides for aggregating and analyzing of child-level assessment data at least three times per year and which uses that data in combination with other program data to determine progress toward meeting goals, to inform parents, and the community of results, and to direct continuous improvement related to curriculum, instruction, professional development, program design and other program decisions;
- A learning community among staff to promote innovation, continuous improvement, and integrated services across education, family services, and health.
- Alignment of curriculum and teaching with the following domains:
  - Adoption and alignment of established OHS goals from the revised Framework;
  - Creation and implementation a plan of action for achieving the goals;
  - Assessment of child progress on an ongoing basis and aggregation and analyzation of data three times per year;
  - Examination of data for patterns of progress for groups of children in order to develop and implementation a plan for program improvement.
- Language and Literacy Goals including:
  - Children will use and comprehend increasingly complex and varied vocabulary for conversation and communication;
  - Children will begin to identify and discriminate letter/sounds in words and print as a form of communication.

II. Statements of processes to assess students' levels of reading proficiency including assessments used, when administered, how proficiency is determined, and when and how results are communicated with parents of students in Kindergarten through grade 3.

Assessments: Reading assessments are necessary to 1.) determine if children are reading at grade level, 2.) monitor reading progress, 3.) inform instruction, and 4.) plan instruction. All K-3 students

will be assessed at the beginning, middle, and end of the year to determine if they are reading at grade level. Children not reading at grade level will be assessed regularly to monitor their reading progress. Assessments to monitor reading progress will be brief and take little time away from reading instruction. These assessments will be used to inform and plan the instruction necessary to improve student reading progress. Near the end of the year, all K-3 students will be assessed on a standardized reading test to determine if they are reading at grade level. Assessment and benchmarking vehicles used will selected using research-based evidence documenting their reliability and validity as diagnostic assessments.

- Assessments currently being used include:
- Kindergarten: Classroom assessments
- Grade 1: STAR Enterprise Assessments, MAP Assessments, AIMS Web
- Grade 2: Star Enterprise Assessments, MAP Assessments, AIMS Web
- Grade 3: Star Enterprise Assessments, MAP Assessments, MCA-II Tests

Kelliher School's Pathway to Proficiency: Linking the STAR Reading Scales with Performance Levels on the Minnesota Comprehensive Assessments (MCA-II's)

STAR Reading Assessments will be used for screening and progress-monitoring assessment and is a reliable, valid, and efficient computer-adaptive assessment of general reading achievement and comprehension for grades 1–12. STAR Reading provides nationally norm-referenced reading scores and criterion-referenced scores.

Indicating which students are on track to meet later expectations is one of the potential capabilities of a category of educational assessments called "interim" (Perie, Marian, Gong, & Wurtzel, 2007). They are one of three broad categories of assessment:

Summative – typically annual tests that evaluate the extent to which students have met a set of standards. Most common are state-mandated tests such as the Minnesota Comprehensive Assessments (MCAs).

Formative – short and frequent processes embedded in the instructional program that support learning by providing feedback on student performance and identifying specific things students know and can do as well as gaps in their knowledge.

Interim – assessments that fall in between formative and summative in terms of their duration and frequency. Some interim tests can serve one or more purposes, including informing instruction, evaluating curriculum and student responsiveness to intervention, and forecasting likely performance on a high-stakes summative test later in the year.

An outcome of this study is that Minnesota educators, such as Kelliher School staff, using the STAR Reading Enterprise assessments can access **STAR Performance Reports** focusing on the **Pathway to Proficiency** that indicate whether individual students or groups of students (by class, grade, or demographic characteristics) are on track to meet the Minnesota reading standards of proficiency as

measured by the MCAs. These reports allow Kelliher School instructors to evaluate student progress toward proficiency and make instructional decisions based on data—well in advance of Minnesota's annual state tests. Additional reports automatically generated by the STAR tests help Kelliher School staff **screen** for later difficulties and **progress monitor** students' responsiveness to interventions.

 Results and Reporting

Results will be incorporated into Kelliher School STAR Performance Reports focusing on Kelliher School's Pathway to Proficiency that can be used to help Kelliher School educators determine early and periodically which students are on track to reach *Meets the Standards* (proficient) status or higher and to make instructional decisions accordingly.

Communication of results: Results of diagnostic assessments, benchmarking vehicles, and standardized tests will be shared with parents after each and every administration. Data and results will be shared with parents and teachers will assist parents in understanding and interpreting the results of each assessment. Teachers will then seek to collaborate with parents toward the goal of improvement the reading ability of all students. At the end of each year, the district will notify parents if their children are not reading at grade level.

Research shows that children do better in school when parents and teachers communicate and when parents become involved in the school. There are number of ways that parents and teachers can communicate with each other, rather than relying on the scheduled parent-teacher conferences. Close communications between parents and teachers can help the student. Research by Joyce Epstein shows that when families feel positive about school due to improved communication channels, students become more successful. According to Epstein, family participation in education is twice as predictive of student academic success as family's socio-economic status. By being more involved, parents and students will feel more ownership for education, which will improve student attendance and achievement.

The district utilizes the Honeywell Instant Alert System to notify, remind, and invite parents to open houses, conferences, concerts, and all other activities and meetings in order to improve parent participation. Numerous breakout sessions will be available to parents to learn about district reading initiatives, online parent portal access, Perspectives for Families, and other programs. The Honeywell Instant Alert System will also be used to notify, remind, and invite parents about school meetings and functions.

III. ***Plan to notify and involve parents in accelerating literacy development in grades Kindergarten through grade 3.***

A. Core literacy instruction and interventions supports are aligned with grade-level content standards as follows:

B. The district maintains a communication plan, with specific timelines, for collaborating with parents on understanding data and existing supports as follows:

- K-2 classroom teachers will maintain frequent communication with parents through phone calls, emails, and letters to the home;
- P-T conferences will occur twice a year (fall and winter) during which teachers will communicate and collaborate with parents;
- Open house parent nights will be held a minimum of once a year allowing for two-way communication between teachers and parents in order to facilitate collaboration with parents regarding the understanding of data and supports;
- The school will send out mass telephone communications through Honeywell Instant Alert notifying parents of opportunities for communication and collaboration.

C. Entrance and exit criteria for students needing instructional interventions are as follows:

Estimated STAR Reading cut scores for MCA-II performance levels:

Grade	Does Not Meet Standards	Partially Meets Standards		Meets Standards		Exceeds Standards	
	Cut score	Cut score	Percentile	Cut Score	Percentile	Cut score	Percentile
3	<217	217	7	383	35	584	89
4	<239	239	3	438	24	640	77
5	<327	327	4	531	26	830	81
6	<387	387	4	577	22	902	75
7	<499	499	8	718	35	1186	90
8	<534	534	6	786	29	1237	87

D. Resources and tools for parents, caregivers, and /or community members to support literacy practices at home:

Kelliher School Staff will utilize Perspectives for Educators and will provide parents and families with programs such as Perspectives for Parents to help families support literacy practices at home to help students develop and improve Reading skills in areas where they are identified as needing improvement.

In addition, Kelliher School will offer summer reading programs in conjunction with the Kelliher Library and Information Center (KLIC). The school will also maintain its Accelerated

Reading program over the summer and will provide students with incentives for reading over the summer.

IV. Kelliher *School will provide interventions and instructional supports for students who are not reading at or above grade level in K – grade 3. Such interventions will be based on learner data, and services will be provided, as informed by such data, with the collaboration of parents and caregivers.*

A. The continuum of core instruction and intervention practices will be aligned to grade level standards and benchmarks as follows:

- 90 – 120 minutes of literacy and language instruction provided as core instruction;
- Core instruction will be aligned to grade level standards and benchmarks as follows:
  - Kindergarten
  - Grade 1
  - Grade 2
- Bi-weekly benchmarking and diagnostic assessments will inform teachers about student learning and growth, or the lack thereof for every student;
- As student data is acquired through diagnostic assessments, various supports will be put into place for students according to needs identified;

B. Kelliher Elementary School teachers will seek feedback from stakeholders (parents, caretakers, and guardians) regarding accessibility of information, usefulness of data and documents, and the support needed to implement strategies that are required elements of the school's literacy plan.

V. **Professional Development:** The effective use of reading assessments and instructional programs and materials requires high quality professional development for teachers and other staff members, including the principal, specialists, and paraprofessionals. Prior to using reading assessments or instructional programs and materials in the classroom, staff members will receive thorough training in their appropriate use. Staff members who require additional professional development to use assessments and instructional programs and materials appropriately will receive it. The building principal will be responsible for making sure all staff members have the training they need to use reading assessments and instructional materials appropriately.

Effective communication and collaboration in reading performance and planning is essential for the success of Kelliher Elementary School's K-3 Literacy Plan. At Kelliher Elementary School, every two weeks throughout the year, all K-3 staff will meet to discuss, monitor, and plan reading instruction and achievement. The principal, and/or other designated building leaders will support and, when possible,

attend these meetings. At these meetings, staff will analyze data from student assessments to inform and prioritize the selection of further professional development needs and strategies.

Kelliher School has applied for a grant in order to participate in a cadre of schools that will utilize Authentic Intellectual Work (AIW) programming and AIW frameworks to help Kelliher School teachers improve teaching in Reading. Authentic Intellectual Work is a research-based and proven program that support professional development which allows teachers to reflect upon their classroom teaching, their pedagogy, and their lesson plans, and which allows teachers to support each other in development improved lesson plans. A description of Authentic Intellectual Work follows below.

Authentic Intellectual Work Professional Development

Authentic Intellectual Work Definition and Indicators

AIW is defined by three criteria: *construction of knowledge* through *disciplined inquiry* to produce discourse, products, and performance that have *value beyond school*. The AIW framework establishes criteria for teaching that

• Maximize expectations of intellectual challenge and rigor for all students,

• Increase student interest in academic work,

• Support teachers in teaching for in-depth understanding rather than superficial coverage of material, and

• Provide a common conception of student intellectual work that promotes professional community among teachers of different grade levels and subjects.

 These criteria and standards were derived from research conducted by Fred M. Newmann and colleagues at the University of Wisconsin-Madison and elsewhere from 1990 to 2003. Through a number of studies, researchers found that the achievement of students who experienced high levels of authentic instruction and assessment exceeded the achievement of their peers who received lower levels (the studies are summarized in Newmann, King and Carmichael, 2007). The findings were consistent in grades 3 through 12; in language arts, mathematics, science, and social studies; in schools from urban, suburban, and rural settings; and with diverse groups of students.

Using this research as a foundation, Newmann, Dana Carmichael, and Bruce King assisted the DE in designing a professional development project that focused on improving teachers' ability to design instruction and assessments to increase student authentic intellectual work. Schools apply voluntarily to the project and teams of teachers and administrators participate in:

• beginning-of-the-year kick-off institutes to introduce teachers and administrators to AIW critera and standards,

• regular on-site team meetings to critique and improve teachers' assignments, assessments, and lessons,

• periodic on-site coaching by external coaches trained in AIW, and

• mid-year institutes where teams from different schools continue their professional development through subject area and grade alike workshops.

An important aspect of the project is designed to build internal capacity to support and sustain AIW professional development in schools.

Impact on Teachers' Practice

Focus groups and case studies describe the changing nature of instruction from the teacher-as-deliverer of facts to teacher-as-facilitator of student thinking, in-depth understanding, and skill development that is meaningful and valuable. The quality of classroom discussions has been at a much deeper and more thoughtful level. Expectations for students have been increased and curriculum is now more closely connected to students' lives, making lessons more challenging and, simultaneously, more meaningful. Because students are more engaged, they are more persistent in problem solving. The review of teachers' tasks show that high school teachers who participate in AIW professional development are able to implement assessment tasks that scored significantly higher in the standards for authenticity. Effect sizes ranged from medium in science and social studies to large in mathematics.

Change in Professional Culture and Leadership

Administrators referred to the level of collaboration among teachers as "unprecedented." Using common protocols and criteria, teams of teachers within and across disciplines meet to improve their practice. Teachers examine their practice through the lens of the AIW framework, individually and collectively asking questions such as, "Will this lesson provoke students' higher order thinking and substantive conversation?" or "Does this unit lead students to apply and understand knowledge in contexts beyond school?" or "Will this assessment task require students to show an in-depth 5 understanding of an important concept?" AIW teachers value the opportunities AIW professional development provides to make their instruction better. AIW schools also experience more sustained focus for their PD. AIW has improved the collaborative spirit between administrators and teachers, according to those interviewed in focus groups and case studies. Because administrators are part of the learning team, they find themselves giving teachers more relevant feedback. Also, AIW provides teachers with more leadership opportunities.

Student Achievement

Students in AIW schools across grade levels and subjects (reading, mathematics, science, social studies) usually scored higher on the ITBS/ITED than students in non-AIW schools and had higher percentages of students scoring proficient (i.e. the 41st percentile and above). For grades 4, 8, and 11 – the grades for which Iowa schools must report annually, AIW students scored significantly higher in 8 of the twelve comparisons (3 grades x 4 subjects) and AIW had higher percentages proficient in all 12 comparisons. The percentile advantage to AIW students was 5 points or higher in 8 of the 12 comparisons. The results across all grades 3-11 were similar. Of the four subjects, AIW students posted the most consistently higher scores in mathematics and showed consistently smaller differences in social studies.

While this evaluation offers initial positive indicators of the program's success, we hope that in the future, it will be possible to gather more comprehensive quantitative data that will show the extent to which professional

development affects individual teachers' instruction and assessments which in turn then affects their students' achievement, but since all teachers in each AIW school participated in the AIW program, it is possible that the AIW program motivated AIW teachers to work much harder than non-AIW teachers to boost their students' achievement. This explanation for the results, while consistent with the case study reports herein, cannot be confirmed because the evaluation did not collect systematic data on the differences in motivation or effort to teach between AIW and non-AIW teachers.

Finally, it is possible that teachers in those schools that volunteered to participate in the AIW program were more highly motivated to devote serious effort to their students' achievement than teachers in non-AIW schools, before they had any experience with AIW professional development. This selection bias could explain higher achievement in AIW schools, independent of participation in the AIW program. This explanation could be tested by examining achievement trends in AIW and matched non-AIW schools prior to the AIW schools' participation in the AIW program.

While none of the explanations can be confirmed through this evaluation, the consistently favorable results for students in AIW schools suggests that the AIW program should be continued and that future evaluations should be designed to assess the relationship between the extent of individual teachers' participation in AIW professional development activities, their actual classroom practice, and their student's achievement, preferably disaggregated by socioeconomic status, race/ethnicity, gender, and other demographic characteristics known to affect school achievement. To explore the possibility of selection bias into the AIW program, future evaluations should also examine achievement trends in AIW schools prior to entry into the AIW program.

Summary and Implications of Achievement Data

Students in AIW schools across grade levels and subjects usually scored higher than students in Non-AIW schools. For the three grade levels reported, AIW students scored significantly higher in 8 of the twelve comparisons (3 grades x 4 subjects) and AIW had higher percentages proficient in all 12 comparisons. The percentile advantage to AIW students was 5 points or higher in 8 of the 12 comparisons. The data across all 9 grades (3-11) in Appendix C shows similar results. That is, of thirty six comparisons (9 grades x 4 subjects), AIW students scored significantly higher in 26 comparisons and AIW had higher percentages proficient in 32 comparisons. The percentile advantages to AIW students was 5 points or higher in 26 of the 36 comparisons. Of the four subjects, AIW students posted the most consistently higher scores in mathematics and showed consistently smaller differences in social studies.

The data here offers no information to suggest explanations for achievement differences between grade levels and subjects, but the consistently positive achievement results for AIW vs non-AIW students across grades and subjects can be explained in at least three ways.

Prior research shows that students of teachers who practice authentic pedagogy at high levels score higher on both standardized and more authentic assessments than students of teachers whose practice reflects lower levels of authentic pedagogy (for a summary of this research, see Newmann, King and Carmichael, 2007). If teachers in these AIW schools practiced higher levels of authentic pedagogy than those in non-AIW schools, we would expect such results.

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