University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Research and Evaluation in Literacy and Technology

Education and Human Sciences, College of (CEHS)

10-16-2006

Annual Progress Report: Nebraska Reading First two year implementation

Guy Trainin
University of Nebraska-Lincoln, gtrainin2@unl.edu

Oren Yagil
University of Nebraska-Lincoln, oyagil@yahoo.com

Malinda M. Murphy
University of Nebraska-Lincoln, malinda.murphy@yahoo.com

Follow this and additional works at: https://digitalcommons.unl.edu/cehsgpirw

Part of the Education Commons

GREAT PLAINS INSTITUTE
OF READING AND WRITING

COLLEGE OF EDUCATION AND HUMAN SCIENCES

UNIVERSITY OF NEBRASKA LINCOLN

ANNUAL PROGRESS REPORT

YEAR TWO OF IMPLEMENTATION
NEBRASKA READING FIRST

Report prepared by
Guy Trainin Ph.D.
Oren Yagil M.Ed.
Malinda Murphy M.Ed.

Nebraska UNIVERSITY 1 OF
Lincoln

The Great Plains Institute
of Reading & Writing
University of Nebraska-Lincoln

OVERVIEW

The Annual Progress Report offers an overview of the way Reading First schools adjusted teacher practice and improved student achievement. The report examines the impact of the implementation of reading programs selected by Reading First schools on all students including different ethnic groups, English language learners, and special education students. In this report student performance is shown and compared to previous results of students in Reading First schools. Student achievement comparisons start with this year's cohort compared to last year (e.g. first grade 2005-6 to first grade in 2004-2005). This comparison shows the growth in grade level achievement. This analysis is followed by a longitudinal look at students' levels of proficiency across the two years of implementation showing the sustainability of last year's gains. Finally the report examines the impact on fourth grade reading and writing achievement as reflected in statewide assessment results. Fourth grade results indicate the change in school culture (change in teacher practice beyond K-3) and student readiness (reading ability when they enter 4th grade).

In addition to the focus on student achievement the report describes teacher practice in Reading First schools and analyzes the assessment systems utilized. The report examines the change in teacher practice in terms of instructional emphasis, use of assessments, and time allocation based on surveys, teacher logs, and school visits.

2004-5 SUMMARY AND RECOMMENDATION

We include in this report the recommendations from last year's report. These are presented here to serve as a backdrop for examining the progress made this year.

- Teachers and schools have made a genuine effort to change
- Student performance in the earlier grades has shown great promise for the following years
- Growth in fluency and comprehension in grades 2 and 3 were not as impressive and require additional attention
- Overall, students make at least a year's progress in most schools and most demographic groups
- Schools can make much better use of the data they were collecting and need further direction in this area

- The assessment results were triangulated by observations in the classrooms, interviews, and teacher responses to professional development- teachers know how to teach PA and the alphabetic principle but were still struggling with:
    o finding time and effective strategies for fluency training
    o teaching comprehension strategies
    o teaching self monitoring
- Growing gaps for SPED, Ethnic minorities, and ELL students suggest an emphasis on the secondary and tertiary levels of intervention in the schools

FIGURES AND TABLES INDEX

TABLES

FIGURES

STUDENT POPULATION

STUDENT POPULATION

Student characteristics in 2005-6 are very similar to the previous year (see table 1). There was no significant change in student body demographics from academic year 2004-2005 to 2005-2006. Reading First schools had a high proportion of minority students and students who receive free and reduced lunch. These proportions show that the Reading First program supports students who are usually considered at-risk for academic difficulties. While the percent of participating students receiving free and reduced price lunch is somewhat higher than the national average (41% NCES, 2006), the proportion of minority students is lower than the national average by 3% (NCES, 2006).

Table 1: students' demographics by category in RF schools in Nebraska*.

	2004-2005**	2005-2006	State***
English Learners	3.4%	3.5%	5.8%
Special Education	5.6%	7.2%	
Free/Reduced Lunch	33.1%	43.0%	34.8%
African American	21.7%	20.8%	7.4%
Hispanic	12.8%	14.1%	10.8%
Native American	2.3%	2.1%	1.6%
White	62.1%	62.0%	78.5%

* Numbers may not add to 100% because of rounding and overlapping categories
** In Ethnicity only the three main categories were included
*** State percentages were taken from the 2004-5 report which is the latest available data.

Mobility. In Nebraska's Reading First initiative students are considered mobile if they missed either spring assessment (drop out) or both fall and winter assessments (drop in). Student mobility was similar across the two years and not substantially different from the statewide mobility numbers reported by the Nebraska Department of Education for 2004-5 (table 2).

Table 2: Student mobility.

	Percent Mobility in Reading First Schools	
	Mobile*	Stable
State		
2004-2005	13.8%	86.2%
Reading First		
2004-2005 (N=4181)	13.6%	86.4%
2005-2006 (N=4187)	11.9%	88.1%

* A student is considered stable if he/she was tested in at least one of the two testing periods (fall and winter) and was tested in the spring

The information in figure 1 shows that student mobility was not equal across school districts. Two of the three school systems experiencing the lowest student stability were expected; Sunrise Elementary in the Lakeview school district has a high proportion of mobile students as do participating schools from Omaha Public Schools. High mobility rates limit the impact of any instructional program and may cause teachers to become demoralized as time goes on and student turnover prevents some students from reaping the benefits of Reading First and other school wide efforts.
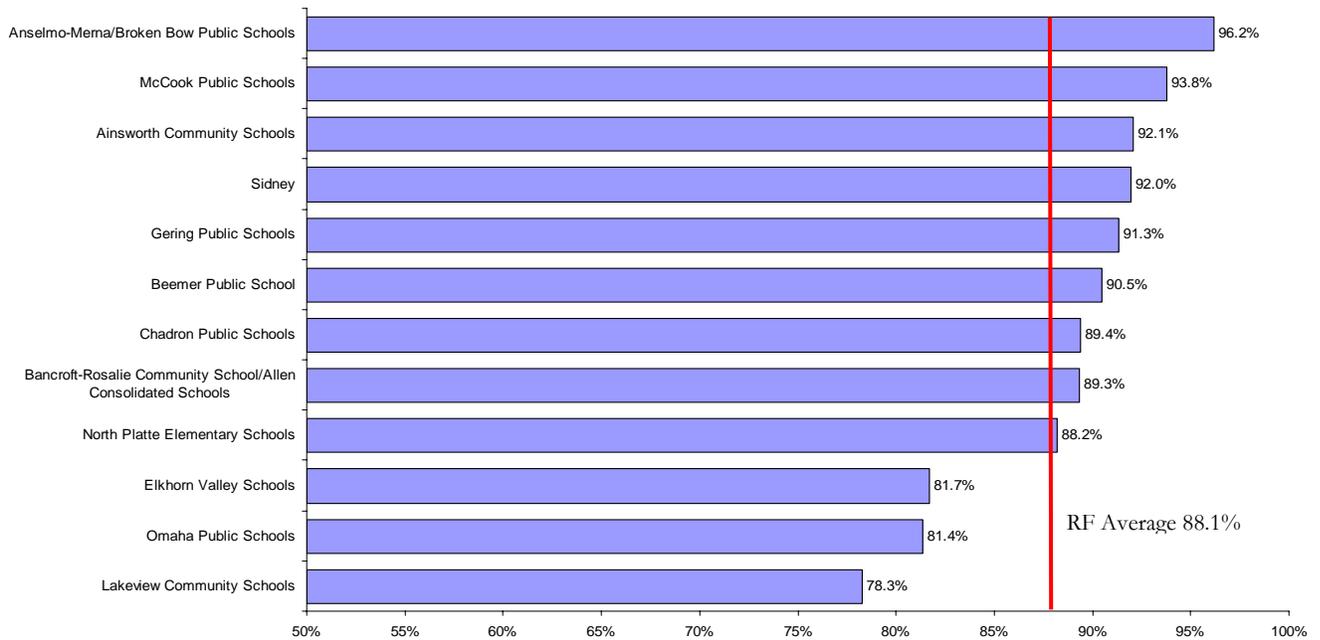
Figure 1: Student stability in Reading First districts.

To examine the possible impact of student mobility on the interpretation of results we examined the difference between mobile and stable students in baseline reading achievement scores (fall 2005). The comparison of fall scores of mobile and stable students is presented in figure 2. Mobile students in second and third grades had significantly lower achievement than stable students. This result is inline with trends uncovered in the National Assessment of Educational Progress (NAEP, 2005). The trend reveals that mobile students, who have relocated more than once, have on average lower social economic status, and lower parental levels of education. As a result they are at much higher risk for educational failure. Schools cannot prevent student mobility. Schools can,

3

however, make sure that any mobile student coming in is assessed and gets as much help as possible soon after arriving as the risk exists for students **dropping in** as much as for those dropping out.
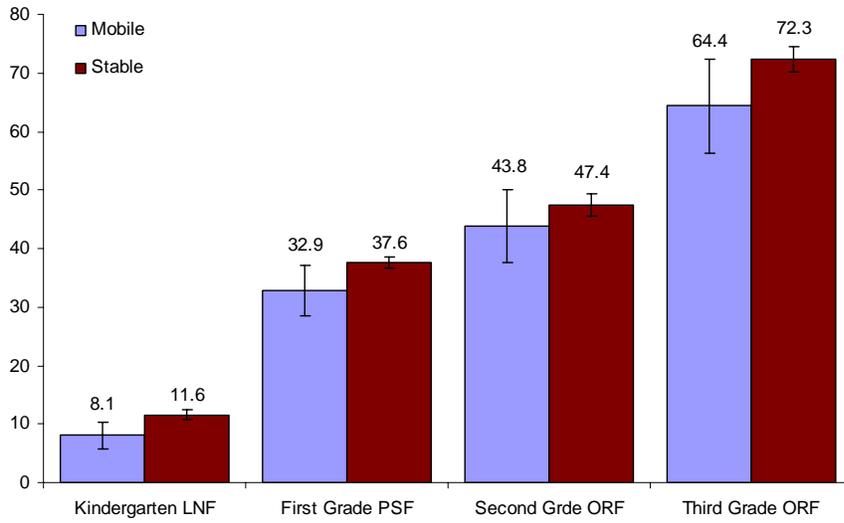
Figure 2: Baseline achievement comparison between stable and mobile students in fall 2005-2006.

OVERALL ACHIEVEMENT

STUDENT ACHIEVEMENT

Kindergarten Achievement:

Student assessment in kindergarten shows the growth in reading related skills throughout the first year in school (figure 3). Students are continuously gaining fluency in letter recognition, phonemic awareness and decoding. Attaining these skills will provide students with the base needed for reading success in first grade.
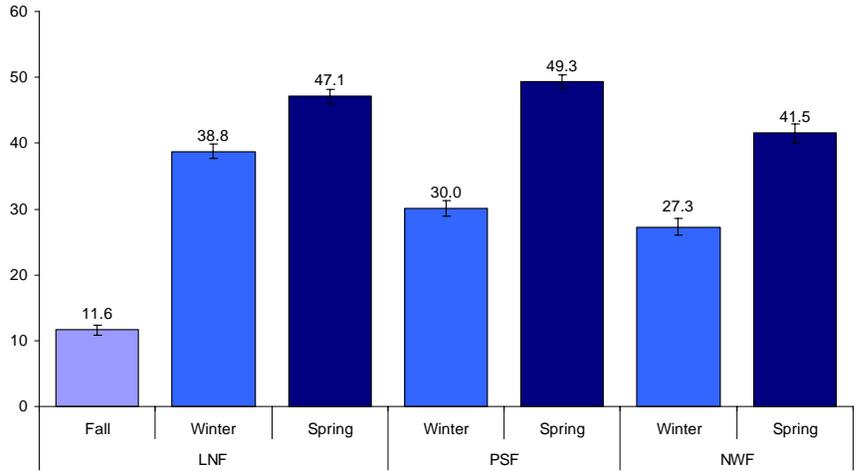
Figure 3: Kindergarten progress in 2005-2006 in literacy skills, phonemic awareness, and phonological decoding.

In comparison to last year's results (figure 4) kindergarten students in 2005-2006 had significantly higher assessment results than kindergarteners last year. We hypothesize that the reasons for these gains are twofold. First, kindergarten students started the year more prepared (not a direct impact of Reading First). Second, teachers are more familiar with curriculum and intervention techniques to help all kindergarteners achieve (see teacher practice chapter for more details).
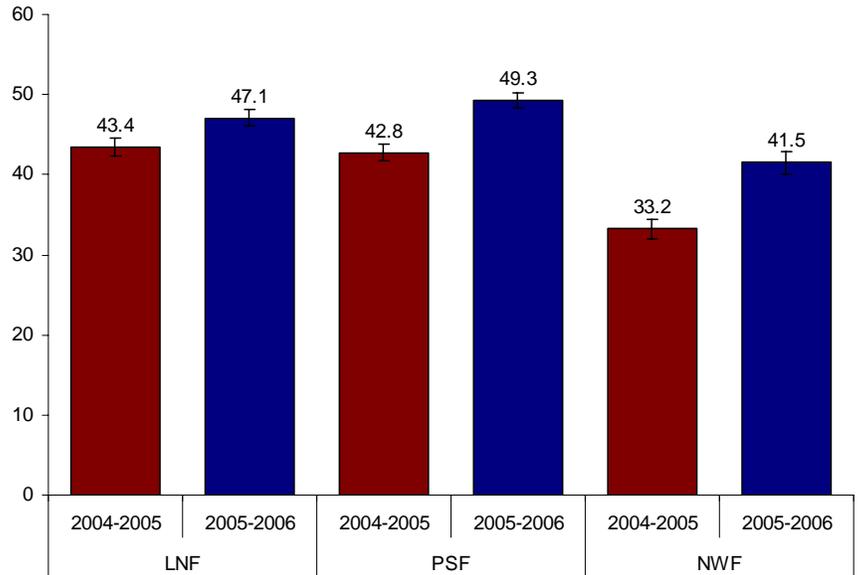
Figure 4: Kindergarten scores in spring 2004-2005 compared with spring 2005-2006.

Figure 5 summarizes kindergarten performance as related to level of risk. Very few students (6.3%) are at-risk at the end kindergarten and overall most students have the literacy prerequisite *skills* to be successful in first grade. This rate is 20% above the average national rate and represents excellent results. It is important to remember that the DIBELS assessments used in kindergarten measure phonemic and phonological skills only. Other skills such as comprehension and vocabulary knowledge should be assessed using classroom based assessments.
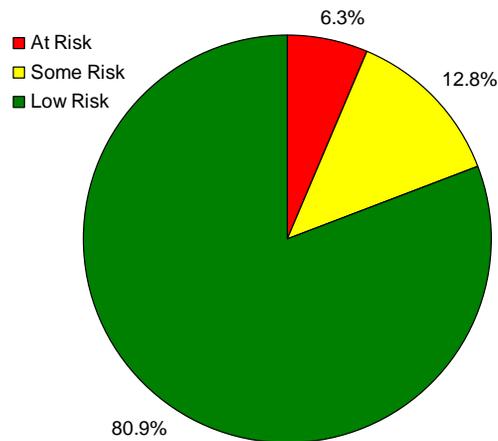
Figure 5: Kindergarten student level of risk in phonological decoding, spring 2005-2006.

First Grade Achievement.

Students in Reading First schools showed considerable growth throughout the year (figure 6). Initial growth in phonemic awareness (PSF) and decoding (NWF) is replaced by growth in reading fluency. Students are clearly transitioning from a focus on single word decoding to connected text.
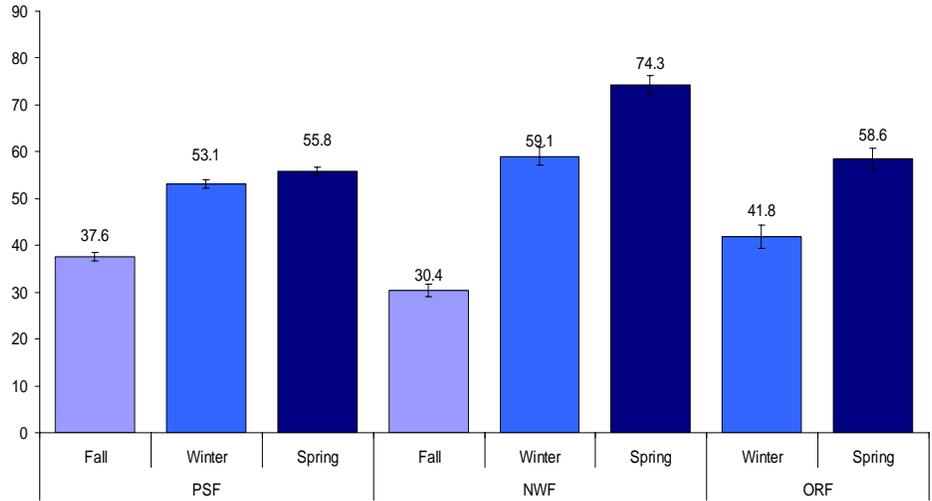
Figure 6: First grade progress in 2005-2006 school year in Phonemic awareness, phonological decoding, reading fluency, and four GORT tests-Rate, Accuracy, Fluency and Comprehension.

Figure 7 shows that students at the end of the 2005-6 school year performed significantly better than the 2004-5 cohort. This improvement is visible in all literacy tasks but is most pronounced in decoding and reading fluency. This positive trend is a result of three main factors, increased fluency instruction, implementation of beneficial interventions, and the cumulative impact of two years in Reading First schools for the majority of students.

Analysis of the Gray Oral Reading Test
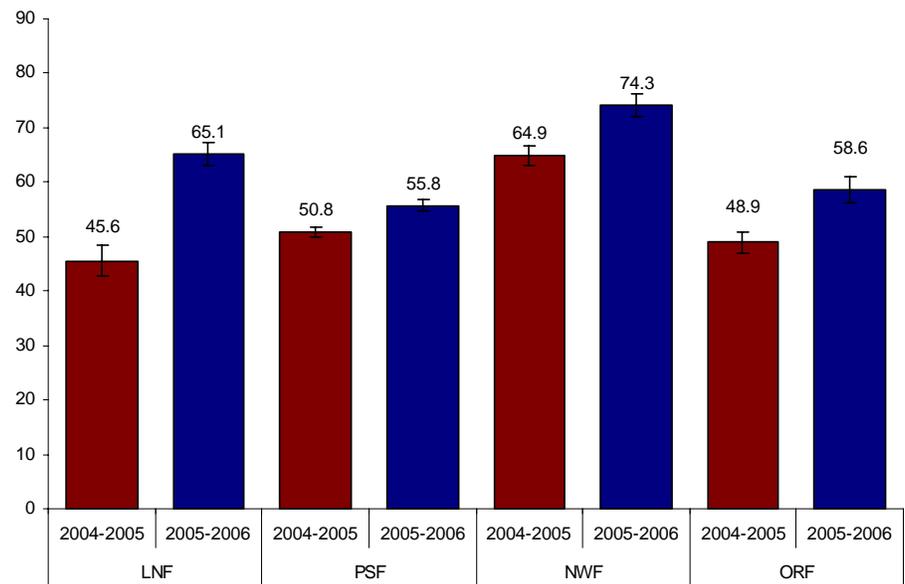
Figure 7: First grade student level of risk in phonological decoding, spring 2005-2006.

results on a sub sample of first grade students (n=387) reveal that 66% (true score confidence interval 62-70%) of students are at or above grade level in comprehension. These numbers indicate that using decoding and fluency measures to determine student performance can be somewhat misleading. Students possessing the basic phonological processing skills may be missing other components (vocabulary, comprehension skills) that will allow them to be successful in later grades.

First grade results presented in figure 8 show that only a fraction of students (2.7%) are at-risk for decoding difficulties at the end of first grade paving the way for a focus on reading fluency and comprehension in second and third grade. As with kindergarten students in Nebraska's Reading First students in first grade are 20% ahead of the national average.
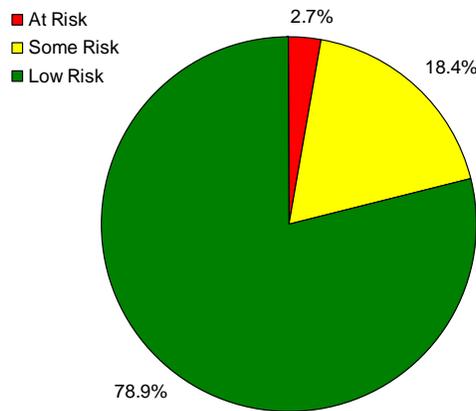
Figure 8: First grade student level of risk in Phonological decoding, spring 2005-2006.

Second Grade Achievement.

Oral reading fluency is one of the main goals in second grade. This important achievement marker has shown consistent growth over time. It is evident that the second half of the year marks a change in the growth trajectory as oral reading fluency rates begin to taper off (figure 9).

A comparison between the 2004-5 second grade cohort and the current

Figure 9: Second grade progress in 2005-2006 in reading fluency.

cohort (2005-6) presented in figure 10 shows a significant gain in oral reading fluency. The Gates MacGinitie comprehension assessment showed a small gain in comprehension that was not statistically significant. Vocabulary scores have actually dropped somewhat although the change is not significant either.

These indicators show that second grade classrooms are not always able to build on gains from last year's first grade cohort. The challenges in comprehension and vocabulary need to be considered and addressed on
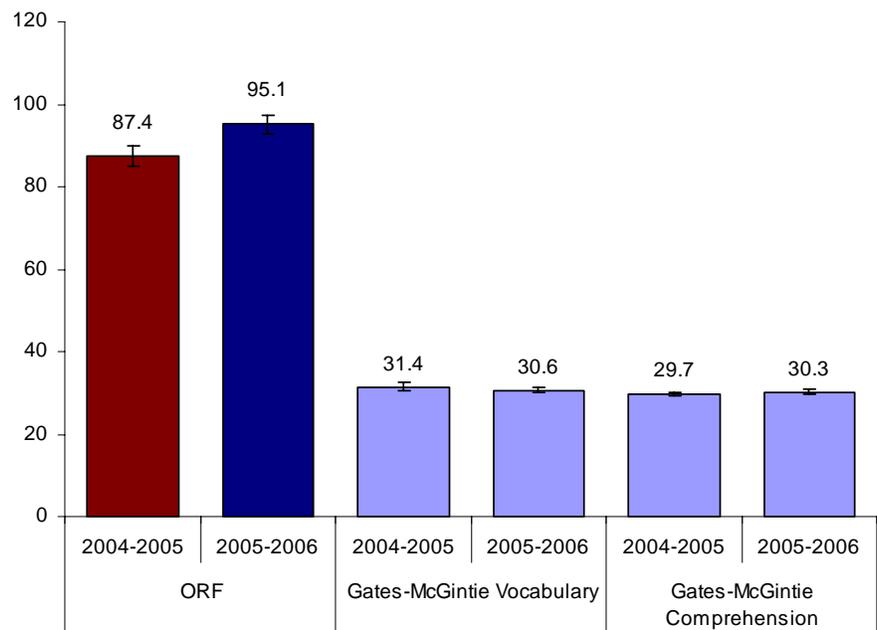
Figure 10: Second grade scores in fall and spring 2004-2005 compared with spring 2005-2006.

a local level throughout the grade levels to make certain students are able to meet the criteria vital to a successful academic career.

An examination of the overall achievement in second grade (figure 11) shows that second grade Reading First students are performing at the national average in oral reading fluency. Since the participating schools had low baseline achievement this is an important achievement. Historically Nebraska has had very high literacy levels and we believe that schools can and should do better as Reading First develops in their schools.
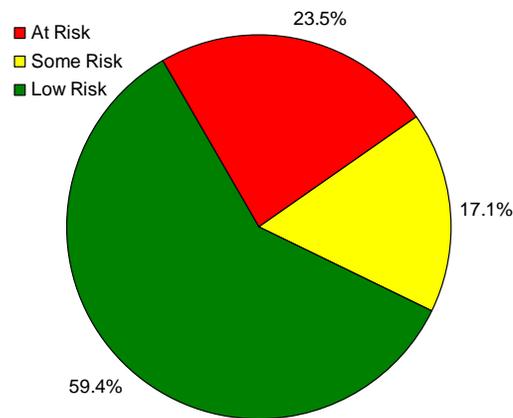
Figure 11: Second grade student level of risk in reading fluency, spring 2005-2006.

Third Grade Achievement.

Third grade results in oral reading fluency reflect normative and constant growth of about 20 CWPM (correct words per minute) every five months (figure 12). The average reading fluency growth trajectory is steeper than the average US rate, showing that third grade students are closing the gap.
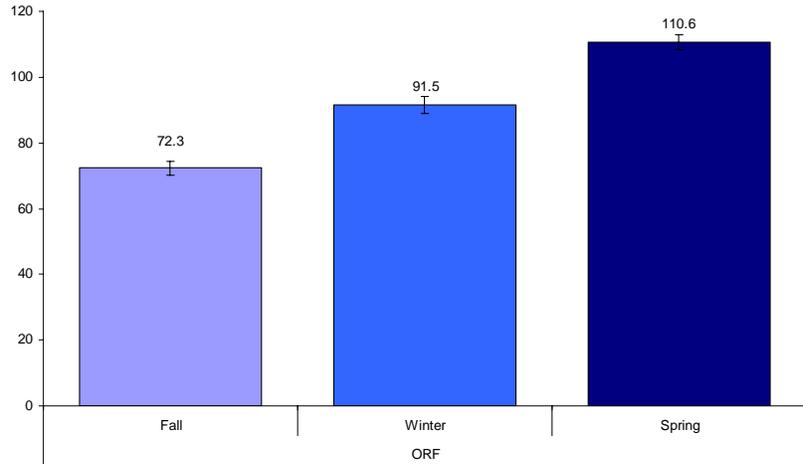
Figure 12: Third grade progress in 2005-2006 in reading fluency.

While the progress is encouraging, third grade students are still lagging behind the national average in reading fluency.

A look across cohorts shows (figure 13) that the 2005-6 cohort outperformed the previous year's cohort across all measures. The only statistically significant gain was in oral reading fluency, showing that consistent efforts in this area at this grade level are proving effective. The small gains in vocabulary and comprehension show the challenges that we still face.
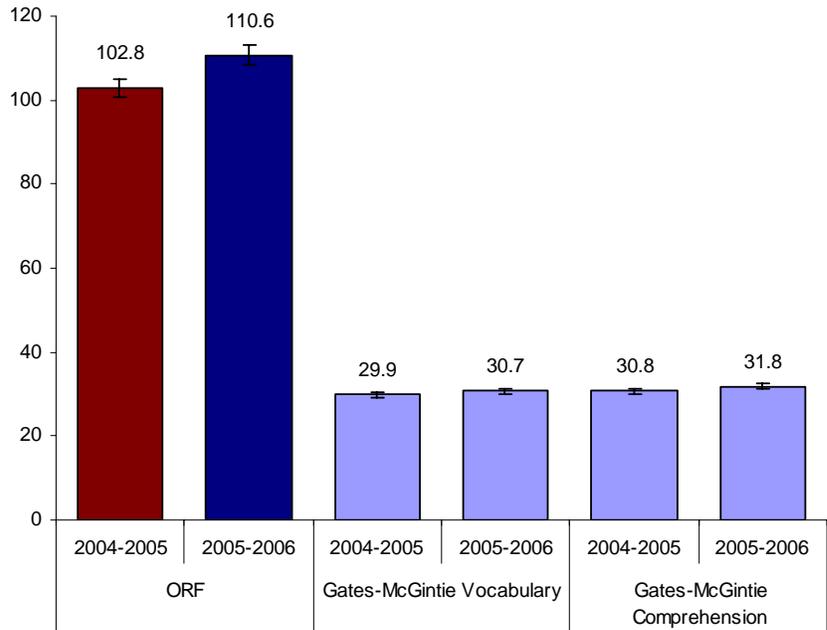
Figure 13: Third grade scores in fall and spring 2004-2005 compared with spring 2005-2006.

Figure 14 shows that a significant portion of third grade students in Nebraska's Reading First fail to transfer the gains they have made to reading comprehension. A third of the students are at-risk and slightly less than 50% are meeting grade level

expectations. This result indicates that third grade students are lagging behind the national average by 10%. Additional attention must be given to this grade level in comprehension and vocabulary instruction.
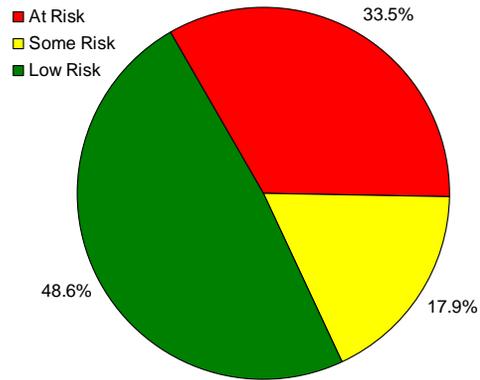
Figure 14: Third grade student level of risk in comprehension (Gates-MacGinitie), spring 2005-2006.

Fourth Grade Achievement- Generalizing Results

Fourth grade assessment results were impacted by Reading First in two ways. First, Reading First initiated school wide change that impacted fourth grade teachers through professional development, improved communication in the school, and the change in teachers' collective self efficacy (for more details see pages 20-36). Second, third grade students from the first year of implementation were in fourth grade in 2005-6. The impact on fourth grade achievement should be considered carefully with a few caveats:

- At the time of this report only writing assessment scores were reported for 2005-6 school year.

- Schools use varied assessment measures (under the STARS assessment system) and therefore cross district comparisons are to be interpreted with caution.

- Before 2004-5 school year schools did not report scores consistently.

The following analyses include only schools that reported scores for all relevant years. Scores are reported in percent of students meeting standards for reading and percent of proficient (or above) students in writing.

The growth in student reading scores between 2002-3 and 2004-5 is somewhat higher for Reading First schools. While growth in the reported state scores was 6.2%, the growth in Reading First schools was 7.5% (figure 15). This small advantage may represent the added benefit of professional development on fourth grade teachers. The small difference is not surprising since this was the first year of implementation.
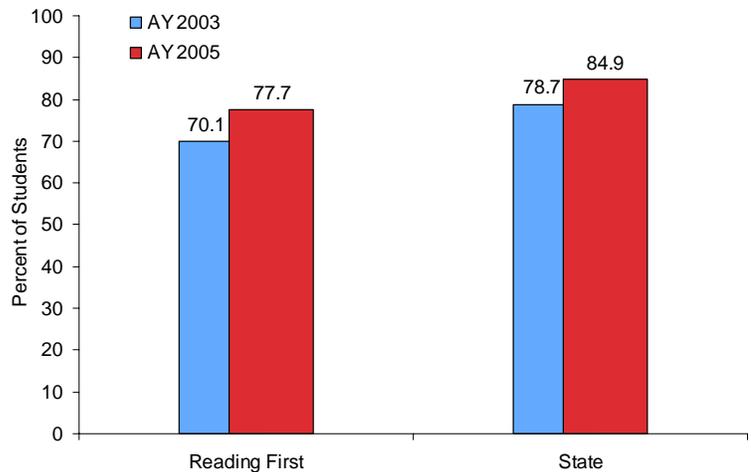
Figure 15: comparison of growth in reading scores between Reading First Schools and the state across two years.

The writing achievement scores across the last three years show a positive pattern as well (figure 16). While overall achievement in Nebraska climbed from 2004 to 2005 and then dipped slightly in 2006, students in Reading First schools have shown consistent growth closing some of the

gap with the overall state average score. Thus the difference in writing proficient students shrunk from 4.8% to 2.6%. This relatively small change is nonetheless a positive change moderated by the fact that Reading First does not address writing directly and the fact that the impacted students were part of Reading First for one year only.
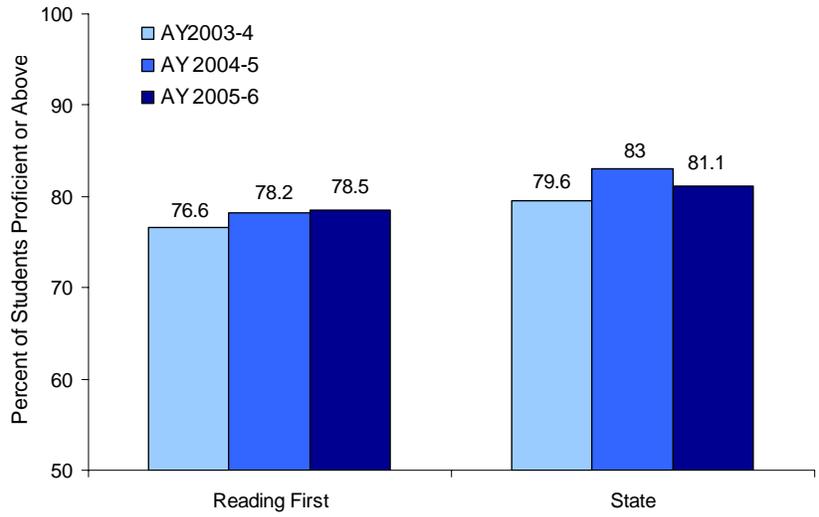
Figure 16: Comparison of writing achievement scores in the last three years between Reading First schools and the state.

THE ACHIEVEMENT GAP

ACHIEVEMENT GAPS

ETHNICITY

The reading achievement of minority students made a sharp increase from last year in kindergarten, first, and second grades. The achievement gap between minority students and white non-Hispanic students has shrunk considerably in all grades except third. The overall trend observed in 2004-5 of increasing gaps in later grades is still apparent (figure 17).
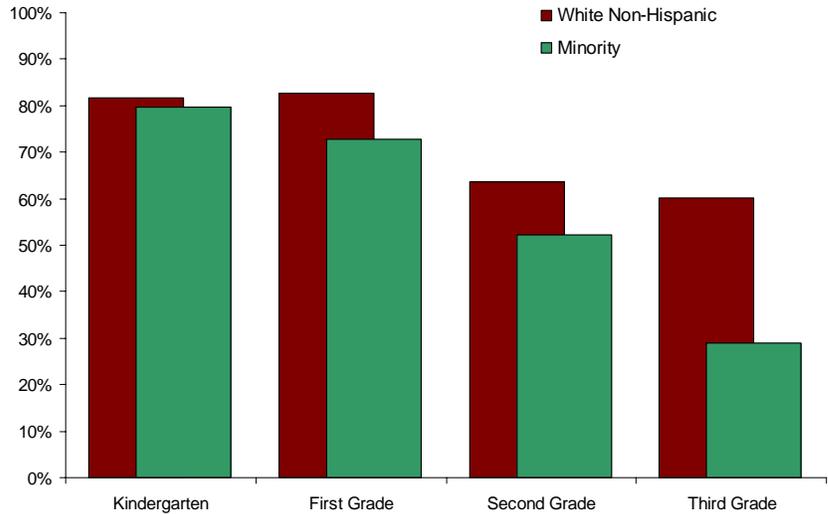
Figure 17: Reading Achievement by ethnicity.

The achievement gap grows significantly in third grade when comprehension becomes the emphasis. The results indicate that efforts in kindergarten and first grade are successful in helping all students gain basic skills regardless of ethnic background. The reading tasks in third grade increase in difficulty and involve more comprehension and vocabulary. As a result the differences between the groups reemerge.

Individual ethnic group differences show a similar pattern as seen in table 3.

Table 3: Students at Grade level achievement by ethnicity.

	African American	Hispanic	Native American	Other	White
Kindergarten	79.3%	84.6%	52.4%	66.7%	81.6%
First Grade	77.1%	66.7%	71.4%	84.6%	82.6%
Second Grade	50.3%	56.3%	52.9%	37.5%	63.6%
Third Grade	22.6%	38.8%	16.7%	70.0%	60.2%

Free/Reduced Lunch

Students who received free and reduced lunch services achieved higher scores in reading than the 2004-5 cohorts. The average increase in students at grade level is 10%; however, no progress was achieved in third grade. The gaps between economically disadvantaged

Figure 18: Reading Achievement by Participation in the Free/Reduced Lunch program.

and their peers were somewhat reduced in kindergarten and first grade with a growing gap in third grade (figure 18). The overall trend is similar to other at-risk demographic categories as well as 2004-5 results, namely the achievement gap grows significantly in the second and third grade. Indicators of the gap from first grade comprehension assessment indicate that the differences are manifested in more complex skills earlier on.

The results indicate that efforts in kindergarten and first grade are successful in helping all students achieve basic skills regardless of economic background. The reading tasks in second and third grade increase in difficulty and involve more comprehension and vocabulary. As a result the differences between the two groups reemerge.

English Language Learners

The achievement gap between English language learners and English only students has not changed significantly from the previous year (figure 19). The general trend of increasing gaps in subsequent grades is
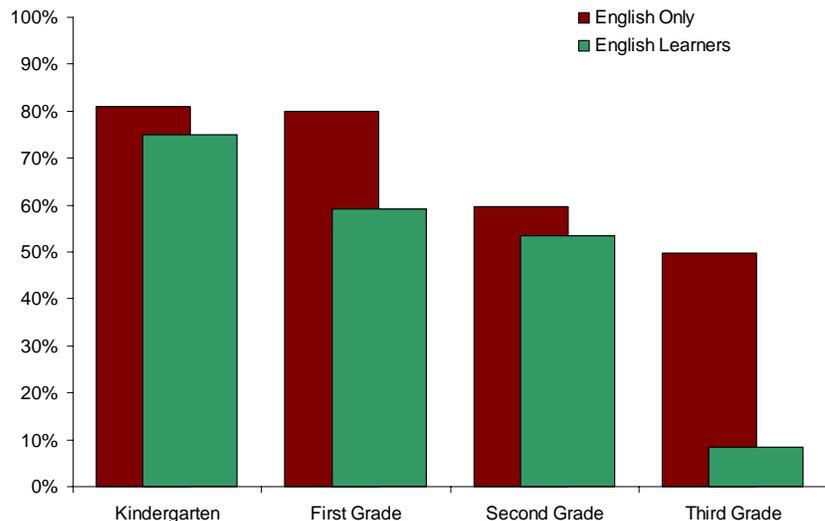
Figure 19: Reading Achievement comparison between English language learners and English speakers.

18

somewhat distorted by an exceptional group of students in second grade (the same phenomena was evident last year in first grade). In second grade, the achievement gap has been reduced, however, less than one in ten English language learners is at grade level at the end of third grade. Results of ELL students should be interpreted carefully since the group sizes in each grade level are very small and as a result highly variable. There is also very little carry over in impact from previous year of Reading First because of a relatively high mobility rate for this group (18.5%).

Special Education

Performance for special education students has increased since last year with the exception special education students in third grade. The gap between these students and general education students is actually growing (figure 20). This shows that the methods used in the classroom work well for all but appears to have a lower effect for students receiving special education services.
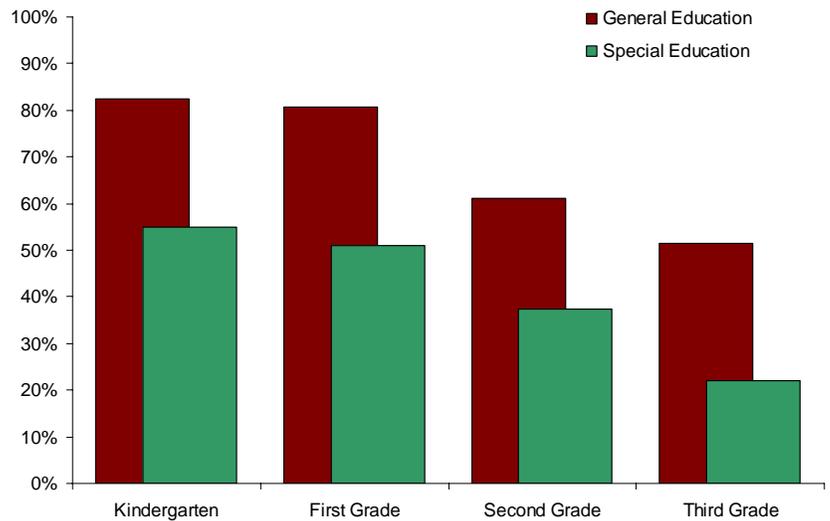
Figure 20: Reading Achievement comparison between Special education and General education.

The results indicate that targeted interventions are still unable to reduce the gaps. As observed last year the gaps between general education and special education students grow as students get older and assessment demands are more complex. This group presents a challenge that must be addressed by directing efforts and resources.

TEACHER AND SCHOOL CHANGE

(Interviews, Surveys and Logs)

TEACHER AND SCHOOL CHANGE

Interviews, observations, and surveys were used to examine the change in teacher beliefs and practices, and transformation of schools environment. The information is organized across several themes of change: Efficacy, progress, communication, and the impact of sustained professional development.

Efficacy

Teachers were asked how positive they were about their ability and the schools' ability to successfully teach all children. The interviews indicated teachers were very positive when asked about instruction in the school as a whole. Teachers consistently responded that, together with their peers, they can impact student reading achievement. Teachers' responses ranged from "very much", "to a great extent', "I think we're doing a much better job than before", "with this program, a lot more than I thought we could", "a lot", and "we can make a difference". The perceived extent of the impact varied for different reasons. In some cases teachers highlighted the pivotal role of the parents, in others they focused on student innate ability. Some teachers brought up cases of extreme special needs student that may not be impacted. However, the majority of teachers felt that the school community can greatly impact student reading achievement. This overall positive view, based on teacher surveys, is reflected in table 4. Further analysis has shown that:

a. Collective self-efficacy is high across all participating schools
b. Collective self efficacy varies between schools but NOT districts- i.e., it is a unique feature of buildings
c. Schools with higher collective self efficacy have a significantly higher achievement.

Teachers also believe that they can bring the majority of their students to grade level. When asked if teachers can bring all of their students to grade level teachers many were hesitant and some responded "no" to this question, explaining it is impossible to bring ALL students to grade level because, "there's going to be a few students that struggle more than others, I believe with time and practice you can but there's always going to be these few students that the achievement is not going to be there". Some teachers said that their students are already on grade level or that with the

current program being used they will be on grade level soon. Most of the teachers who indicated that they can bring all students to grade level were kindergarten teachers.

Table 4: Teachers' collective efficacy as found in the Teacher Survey, spring 2006.

	Strongly disagree	Disagree	Agree	Strongly agree
As teachers of this school, we are able to teach reading even to the most difficult students because we are all committed to the same educational goals	5.1%	4.0%	32.2%	58.8%
As teachers, we can learn from out mistakes and setbacks in the classroom as long as we trust our shared competence	2.3%	1.1%	52.0%	44.1%
I am confident that we as teachers can develop and carry out reading instruction improvement in a cooperative manner even when difficulties arise	1.1%	2.8%	55.9%	40.1%
I am certain that we, as teachers, can achieve our reading instruction goals because we stick together and do not get demoralized by the day-to-day hassles of this profession	1.1%	11.3%	55.4%	31.6%
We are definitely able to accomplish our reading goals at school since we are a competent team of teachers that grows every time we are challenged	1.7%	1.7%	49.2%	46.9%

Teachers felt most students could be brought to grade level but not all because of different learning styles: "I think kids learn differently. I can't say that every child learns the way we're teaching. I don't think it has to do with teachers. I think it has to do with a lot of different things with the child". While a minority voice, some teachers commented that the curriculum/program is so strict that it interferes with teachers' ability to try and meet individual student's needs.

Teachers repeatedly indicated that the new tools Reading First provided- pedagogical content knowledge and a support system allow them to bring more students to grade level expectations than ever before. Specifically teachers mentioned coaches, involved principals, accountability, new materials, and student assessment. Table 5 shows that teachers believe they can

accomplish the same goals even when resources will shrink. The responses show that while teachers appreciate the role of resources in establishing instructional change they believe many of the changes will be sustainable with less resources, as long as professional development and instructional practices stay in place.

Table 5: Teachers' perception of collective efficacy and use of research-based resources for reading instruction, as found in the Teacher Survey, spring 2006.

	Strongly disagree	Disagree	Agree	Strongly agree
I believe in the potential of our school's faculty to establish scientifically based approaches to reading instruction even when faced with setbacks	5.1%	2.3%	40.7%	52.0%
I am convinced that we, as teachers, can guarantee high instructional quality even when resources are limited or become scarce	4.0%	9.6%	50.3%	36.2%
I frequently referred to the contents of assessments	2.3%	10.7%	54.2%	32.8%

Change

Teachers were asked about their previous year's experience and the change they experienced implementing the new reading curriculum for a second year. Several teachers expressed feeling concern and admitted that they were worried:

> "It was in direct opposition to many of the things that I was trained to believe that were good for kids in terms of movement, transitions, breaking things up, opportunities for instruction, and multiple kinds of opportunities to read and visit the training skill as opposed to that sustained period of time, and quite frankly, I still have trouble with that".

Despite instructional methodologies conflicts, most teachers felt results spoke loudest, as one teacher explained: "…it was very successful, it was fun. The students did very well, according to

the DIBELS assessment, and right now I think our students this year are even doing better than students from last year…"

As expected, many teachers discussed the fact that the difficulties were simply implementing a new approach: "it was difficult, this is a lot better this year. Just learning the new program and everything"; another teacher expressed it differently: "good, it went very well. It was hard last year, just hard. Because you take it all in, it was just an adjustment, any time you have a change, it's an adjustment, but overall I was very pleased with the program. And I like it, and I think the kids are learning a lot more". Other responses included comments on implementing Reading First the first year included: "learning experience", "new", "interesting", "went ok", "went great", "this year is better", and "hard". A few teachers expressed the concern that their responsibilities seem to change from time to time or as another teacher explained "they're somewhat clear. Sometimes it's kind of hard to know what they expect". However, overall teachers did feel that this program is different in the information it offers and how it is communicated consistently.

Table 6: Teachers' perceptions of expectations by the administration: Teacher Survey, spring 2006.

	Strongly disagree	Disagree	Agree	Strongly agree
Expectations about how I should teach reading are often contradictory	17.5%	58.2%	18.6%	5.1%
The steps for improving reading instruction are carefully staged and sequenced	0.6%	9.0%	47.5%	42.9%
Overall, the instructional policies I am supposed to follow in my classroom seem consistent	1.1%	9.6%	60.5%	28.8%
Instructional goals for students are clearly defined	0.0%	3.4%	52.0%	44.6%
I have detailed knowledge of the content covered and instructional methods used by other teachers at this school	2.3%	29.4%	52.0%	15.3%
There is a detailed plan for improving reading instruction in our school	0.6%	2.8%	43.5%	52.5%

An important part of a successful change process is knowledge of new content and understanding of the change process itself. To that effect, teachers in Nebraska Reading First schools feel that their responsibilities in Reading First are clear. As reiterated by many teachers the responsibilities are: "very clear. There is a list of things that you can do and if its no on the list, don't do it. That's pretty clear."; "In the beginning of the year, I was kind of scratching my head and saying 'ok, reading first, what is this, and how do I do this?' I would love, even in the beginning of the year, to go in and observe another teacher teaching this, but I didn't have that opportunity. But now, I feel pretty confident about what I'm doing"; "I think they're pretty crystal clear. They're communicated well to us and in a way that's professional, I mean they don't come in and criticize." These comments are supported by the information from the surveys as conveyed in table 6. Most teachers did not find directions contradictory (75%) and most found the most important aspect-classroom practices to be clear and consistent (88.5%).

Table 7: Teachers' perception of the change required of them by the Reading First program, as found in the Teacher Survey, spring 2006.

	Strongly disagree	Disagree	Agree	Strongly agree
The staff of Reading First provided me with many useful ideas and resources for changing my classroom practices	0.6%	7.9%	45.8%	44.6%
The kinds of changes called for by the district Reading First plan helped my students reach higher levels of achievement	0.0%	3.4%	44.6%	51.4%
The district Reading First plan requires me to make a major change in my classroom practice	3.4%	47.5%	31.1%	16.9%
I strongly value the kinds of changes called for by the district Reading First plan	0.6%	7.3%	57.1%	33.9%

Change was also discussed in terms of student achievement. The majority of teachers replied that through Reading First, their students have gained more. As one teacher expressed "test scores

have proven that the program is working". Other responses are enthusiastic with comments such as "absolutely, definitely".

Most teachers agreed that with Reading First their students have gained more than in the past. A few teachers in specific schools were more hesitant because they explained their students were successful prior to Reading First and so the gains made that can be attributed specifically to Reading First are not clear. "We were doing fine before and our students were making benchmarks before Reading First and so we didn't really need it".

Communication

A critical aspect of successful education reform is communication throughout the change process. All teachers stated that they communicate much more than they did prior to Reading First: "I would say daily I am in contact with my peers because we're good at sharing what works, what didn't work, we're even talking about what we're going to do for next year". Some explained that the increased communication is due to the clear overlap in their efforts and content, as one teacher responded: "…so our day doesn't go by without making sure we're on the same page". Others reflected that communication improved as a result of the reading coach coordination. Regular joint planning time, on a weekly or monthly basis, was another way to increase communication. In addition to Reading First meetings, communication carried over to other grade level and school-wide meetings showing the impact of the program beyond the K-3 grade range.

Communication with other teachers at the same grade level and across grade levels was extensive and went beyond official meetings and time spent in school. Most teachers acknowledged that communication with other teachers has increased a good deal since Reading First started. Communication took place before classes began, during recess, occasionally after school for planning, and even in the evenings.

Most teachers are satisfied with the increased amount of communication and happy with the changes that Reading First brought in this sphere. A few teachers commented that a little more communication with other teachers would be better but that because of time limits it is probably impossible. The survey data in table 8 confirms the results of the interviews. The responses indicate that communication is clear and that it revolves around actual instructional practices, this indicates not just better communication but also a sense of purpose and focus to help student achievement.

Table 8: Teacher communication as practiced with Reading First, as found in the Teacher Survey, spring 2006.

	Strongly disagree	Disagree	Agree	Strongly agree
It's easy for other teachers in this school to know what students learned in my class	0.0%	10.7%	72.3%	15.8%
I frequently plan and coordinate instruction with my students' other teachers	2.3%	24.3%	49.2%	16.4%
In this school, teachers who work with students at the same reading level use similar methods and cover the same content	1.7%	6.8%	59.9%	28.8%

Overall, teachers did feel that the increased communication was helpful to them on all levels- professional, social and personal. Teachers expressed that the communication, which at times did not exist before Reading First, has improved the social atmosphere in the school, which in turn, made them feel better, personally, about their place of work. Professionally, teachers expressed that being able to share, ask, and plan with peer teachers has improved their instructional abilities.

Professional development and support

Teachers in all Reading First schools reflected that lectures and presentations of instructional methods were beneficial. One of the most prevalent comments made was "I love the part when they are actually teaching you the strategies, and like it's hands on, you practice it, you go back and you do it. I think sometimes when they just have you look it's not as effective, it's something that needs to be hands on." All teachers thought the speakers were outstanding, though some did express, as quoted above, that the professional development sessions that included examples or hands on experiences were more easily carried over to the classroom.

While some of the sessions were repetitive in content, teachers agreed that these sessions did offer a good review of known material,

> "some of it was redundant, I must admit, and yet when you don't use things for a
> long time, you need reminders. You choose what to do with it after that when you
> run something like this you have to hit it for everybody, and I need to pick the parts
> that I'll use. I didn't get as much as I would have liked to, I think that maybe at these

smaller things you can get more there. At this workshop in the district, it's more isolated, it's a smaller group, and we could ask more specific questions. We'd been doing it for a while and we knew what to ask."

The sessions were a great place to interact with peer teachers from other schools and districts "it's always more helpful to discuss it with your peers. You know, we sat down with a bunch of other kindergarten teachers and we had a give and take session with a modeler, you know, someone… and that was helpful because we got to air our frustrations and our successes." A few teachers mentioned the binders that were given to them during these sessions, saying that they were very helpful "they gave us the binders full of resources and organizers and things that we may need, and I did pull from that book a lot."

Professional development was not limited to state sponsored events. School Reading First meetings were a way to continue professional discussions and reflect on classroom practice. Meeting discussions revolved around new ideas the coaches have learnt from their state-wide meetings, pouring over assessment results and conferring about at-risk students. In addition, research touching on the instructional methods was also a topic in most meetings- "a lot of research, what the research is saying. Kind of we drew books and books about research and how we can plug that into our methods in or classroom". As one teacher described "the majority of time is spent coming up with strategies to help reinforce what we're doing in the program". Another example of discussion during meetings is "say, kids aren't getting this skill, how to do the reading portion, where do you go back." Another teacher replied "like one thing we do is discuss practice where kids would have 6 minutes to practice, little ideas for kids to do, so I mean it's just great ideas to share with everybody just to make sure that everybody is doing it. So in the meetings there are different things that are brought up."

Beyond official meetings teachers have found that Reading First vitalized the casual teacher network. Unofficial meetings, usually took place in the hallway, during lunch hour, before and after school, the same topics were discussed among the teachers, though with a more hands-on approach- "the kids didn't meet the lesson goal, what do we do? Do we go back, do you start again or not. I think because of the learning program, because of reading first, it's a lot about the data". Another teacher explained that unofficial meetings took place "just if we have concerns about the kid. If I see that Joe needs to move up, and I'll ask what they think too as a classroom teacher. Or if there's

something that we planned and we wrote down and I didn't understand if maybe, than we go back and talk through that. Just briefly, just catch up if we have any questions. Sometimes questions come up…"

TEACHER LOGS

The following figure shows how teachers in the different grades used their time to address different aspects of reading instruction (figure 21). As expected teachers in the higher grades focus less on decoding and phonemic awareness and spend a lot more time on reading fluency and comprehension.
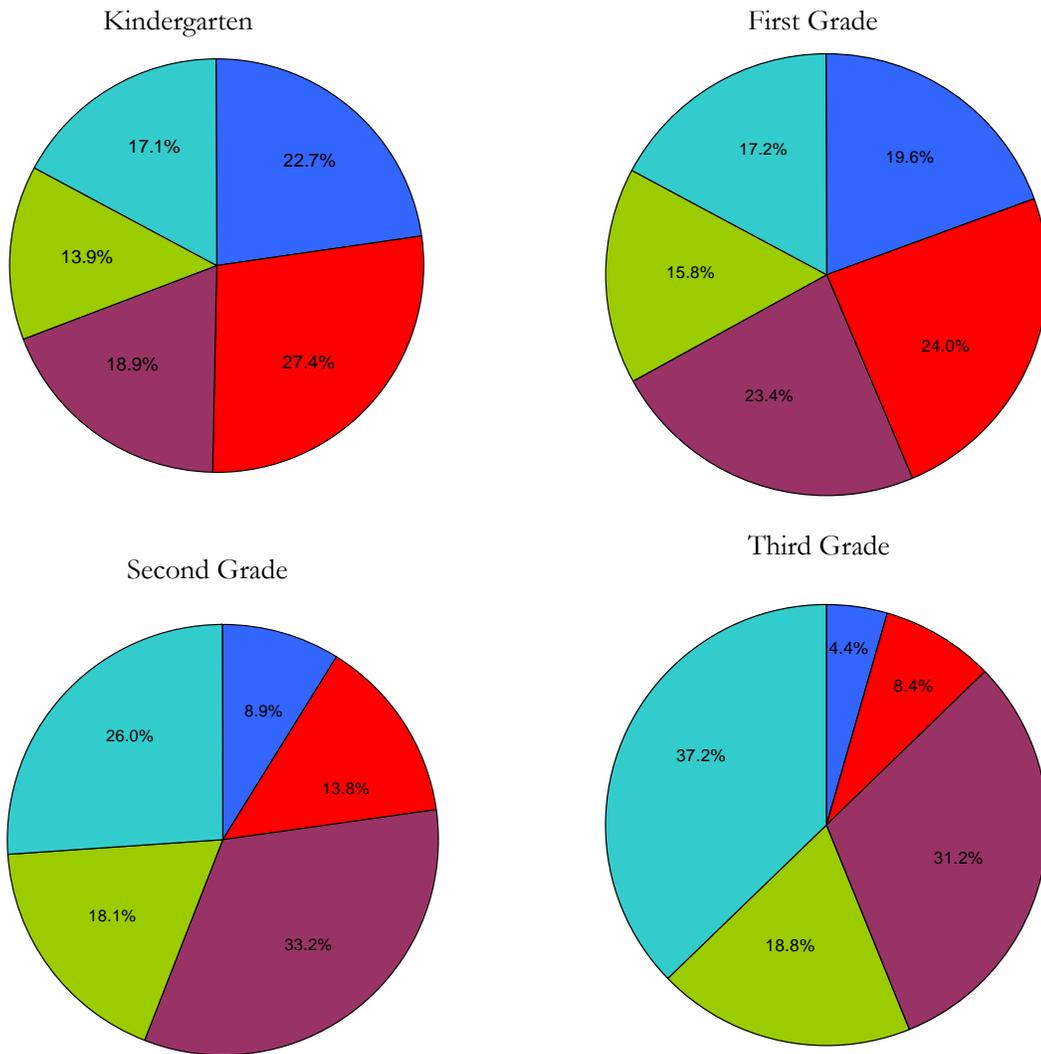

Figure 21: Use of reading instruction time by grade.

Teachers in Nebraska Reading First schools completed teacher logs which reports major and minor focus of specific areas of literacy instruction. The logs asked teachers to indicate the level of focus that their instruction gave to phonemic awareness, phonics instruction, fluency, vocabulary, and comprehension. These logs provide valuable insight into actual daily classroom practices by teachers in these schools in addition to our observations.

Phonemic awareness

Teachers in Nebraska Reading First schools focused on a variety of domains in phonemic awareness (See figure 22). Kindergarten teachers reported an appropriate mix of identifying letters, generating rhymes, saying consonant and short vowel sounds, as well as segmenting and blending real words. First grade teachers reported a low emphasis on identifying letters and a fairly high emphasis on segmenting and blending real words as would be expected at this point in first grade. It would have been expected that identifying and generating rhymes may have been a little higher in first grade. Like first grade, second and third grade teachers (nearly
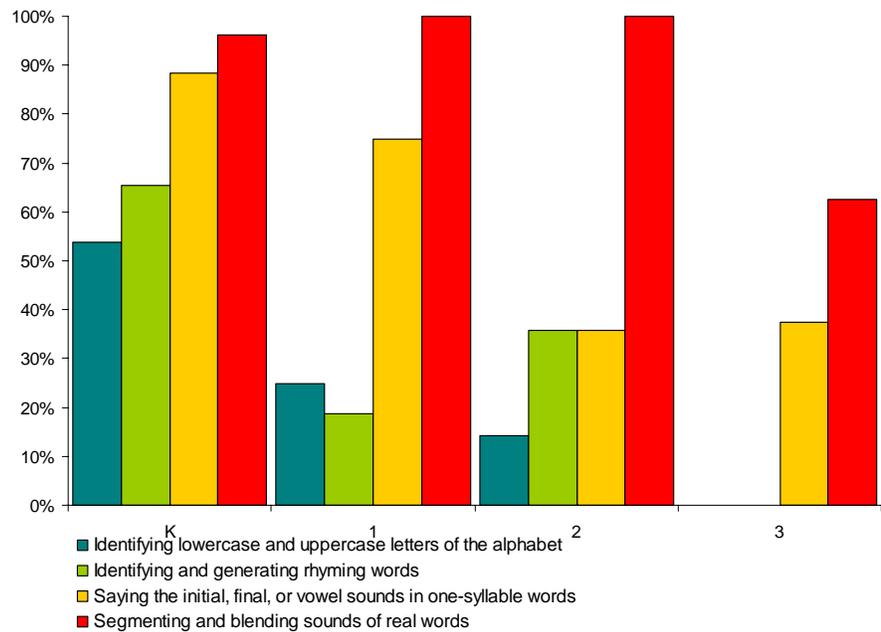
Figure 22: Teacher Logs—Phonemic Awareness Instruction.

100%) focused on segmenting and blending real words. This seems somewhat high especially for the spring semester in second and third grades. Also, nearly 40% of second and third grade teachers reported having students demonstrate phonemic awareness by saying initial, final, or vowel sound in one-syllable words. Again, this would appear to be an overemphasis in this area given that these students would need to be working on polysyllabic as opposed to monosyllabic words.

31

Word Level Work/Phonics

The teachers reported using a variety of word level work/phonics instruction. As would be expected levels of word level word level work increased in first grade and then diminished in second and third grade (figure 23). Kindergarten teachers' instruction in word level work/phonics included adequate levels of segmenting and blending, instruction in sight words and examining word families, but surprisingly, none of these teachers reported working with isolated words using letter sound correspondence.
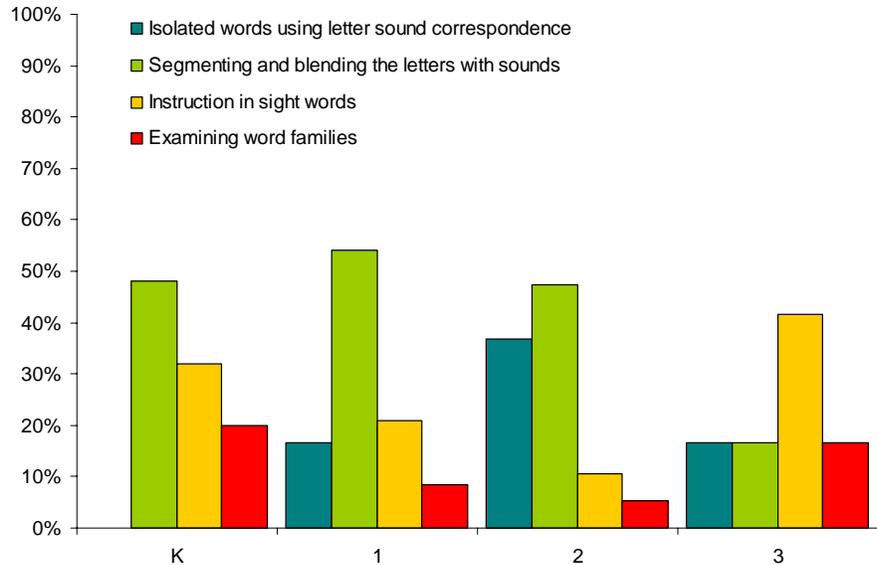
Figure 23: Teacher Logs—Word Level Work (Phonics).

Nearly one-half of first grade teachers reported focusing on segmenting and blending letters with sounds while only 30% included direct instruction in sight words and even fewer allocated instructional time to examining word families. This developmental shift from word families (phonograms) to the more efficient letter sound correspondence indicates teachers are using appropriate instructional approaches. The second grade reports indicated that second grade teachers were employing word level work as a problem solving technique for new words and were providing their students continuity in approach and instructional language from first grade. Less than 10% of second grade teachers reported instruction in sight words while 30% or more reported a focus on isolating words using letter sound correspondence and focusing on segmenting and blending letters with sounds. Third grade teachers indicated using word families more often, a strategy for teaching related multisyllabic words as well as affixes.

Fluency

Teacher logs indicate that fluency instruction seems to be conducted across grade levels. As shown in figure 24, the strategies employed by teachers in Nebraska Reading First schools appear to be focused, consistent and balanced. With the exception of third grade, teachers rely primarily on repeated readings to improve fluency. Repeated readings have been found to be highly effective in improving fluency rates. The second highest fluency instruction practice reported was independent reading
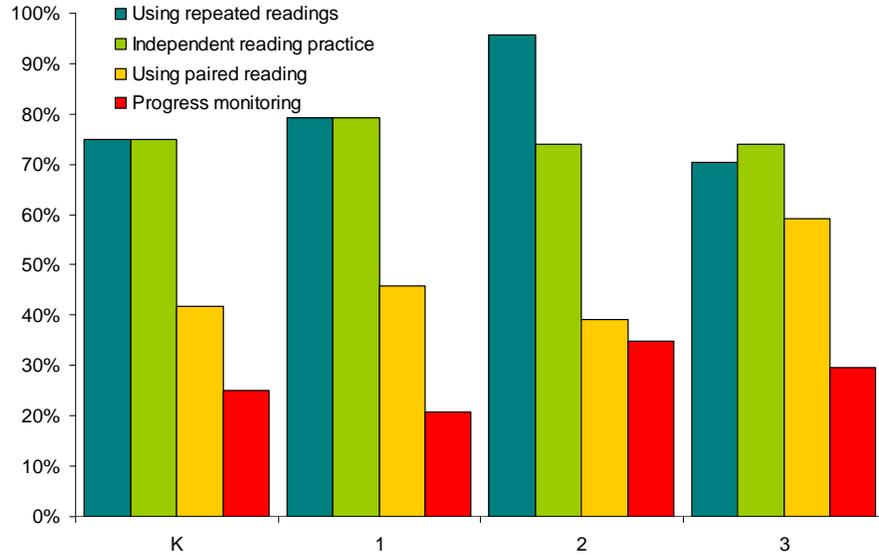
Figure 24: Teacher Logs—Fluency.

practice. Although the percentages of teachers who reported using independent reading practice to improve fluency were 70% or higher, it is ideal if independent reading practice occurs daily in all classrooms. Second and third grade teachers reported the lowest percentages of independent reading practice. Students in these classrooms would greatly benefit from additional independent reading practice as long as students are provided independent reading level texts. Progress monitoring was reported 20-25% of the time equivalent to monitoring progress on a weekly basis. Effective fluency instruction must include consistent progress monitoring to ensure student progress in this area. Less than a third of teachers reported monitoring fluency progress during their instructional day.

Vocabulary

Table 9 shows the percentages of teachers who focused on specific areas of vocabulary instruction. It appears that teachers in Nebraska Reading First schools place an adequate emphasis on pre-teaching vocabulary words. Less than half of kindergarten, first and third grade teachers indicated pre-teaching vocabulary as compared to nearly 60% of second grade teachers. Pre-teaching

vocabulary words assists students in making connections and thereby improving comprehension during reading.

Over one-third of kindergarten teachers reported placing an emphasis on identifying and using meanings associated with common prefixes and suffixes. This seems like an extraordinarily high number considering that teaching prefixes and suffixes is beyond the scope of kindergarten curricula but may reflect using onset rime sets- in the future this question will be clarified. Approximately one quarter of second grade teachers reported using dictionaries for vocabulary instruction. This also seems quite high as dictionary use has not been found to be an effective strategy for vocabulary instruction (National Reading Panel, 2001).

The use of context to discover the meaning of unknown words was frequently used as an instructional practice. Since most new words are learned incidentally instruction in the use of context makes this practice a vital one for promoting word knowledge and improving text comprehension. The greatest area of concern is the lack of use of semantic mapping to organize new vocabulary. No teachers in grades k-2 reported using semantic mapping or any other visual strategies to teach vocabulary and only 7% of third grade teachers reported taking advantage of this valuable instructional tool. Semantic mapping allows students to make connections between terms and organize information in such a way that allows greater retention and comprehension (Marzano, 2005).

Table 9: Teacher Logs—Vocabulary Instruction.

	Kindergarten	First	Second	Third
Identifying and using meanings associated with common prefixes and suffixes	38.1%	32.0%	41.7%	37.0%
Identifying and using antonyms or synonyms	23.8%	16.0%	25.0%	37.0%
Identifying and using compound	14.3%	32.0%	20.8%	11.1%
Pre-teaching vocabulary	33.3%	40.0%	58.3%	44.4%
Using a dictionary to learn and confirm word meanings	14.3%	4.0%	25.0%	11.1%
Using context to figure out words' meaning	47.6%	36.0%	41.7%	51.9%
Using semantic mapping	0.0%	0.0%	0.0%	7.4%

Comprehension Instruction

Emphasis on reading comprehension grows in later grades. Figure 25 shows the emphasis teachers placed on specific areas of comprehension instruction. Clearly teachers across grade levels are relying mainly on students answering questions both orally and in writing. This can be effective means of improving comprehension when the questions require a good mix of higher and lower level thinking. An overemphasis in this area may not be beneficial to students as it detracts from other comprehension strategies as they usually reinforce single short replies, no elaboration, and a focus on a few students with no opportunity for error analysis.
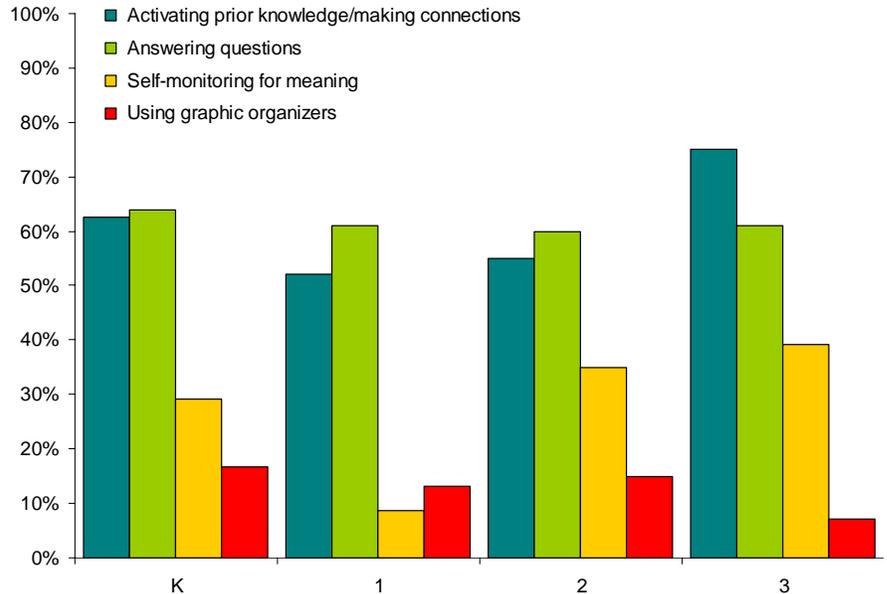
Figure 25: Teacher logs—Comprehension.

Many teachers are activating prior knowledge and making connections. According to the logs, teachers reported focusing on activating prior knowledge and making connections between 50-60% of the time in grades K-2, with nearly 80% of third grade teachers reporting the same. Ideally, every text introduction includes some degree of activating prior knowledge and making connections. This instructional practice enables students to better organize and retrieve new information.

Self-monitoring for meaning is a vital area in comprehension instruction especially important for struggling readers. Less than 40% of teachers across grade levels reported that they placed an emphasis on self-monitoring for meaning. In fact, less than 15% of first grade teachers reported focusing on this strategy. Teaching strategies that promote self-monitoring behaviors increases the likelihood that students will attend to meaning and employ strategies (i.e. re-reading or reading ahead to clarify) when meaning is lost. Finally, it appears that fewer than 20% of teachers report using graphic organizers to aid comprehension. Use of graphic organizers is highly beneficial for lower performers and for ELL students. Given the proven benefits of graphic organizers as texts become

more complicated it is important to make sure that a greater emphasis is placed on this instructional practice.

ASSESSMENTS

Assessments

Most assessments used in Reading First schools produced valid and reliable results. The evaluation did uncover a problematic pattern concerning the use of the DIBELS retell and Word Use Fluency measures.

The retell measure follows the Oral Reading Fluency measure. In table 10 we present the correlations between DIBELS measures and the Gates MacGinitie comprehension measure. The results show that retell is correlated only moderately with the Gates MacGinitie comprehension score (highlighted in yellow), while the Oral Reading Fluency measure is correlated much higher (highlighted in blue). In a follow up regression analysis we found that retell scores contributed very little to predicting comprehension after taking Oral Reading Fluency into account. This leads us to conclude that the retell measure has low validity and does not represent a significant improvement in our evaluation of student reading skills beyond what we learn from ORF scores alone. The use of retell scores to evaluate student comprehension should be attempted and no instructional decisions should be made based on this measure alone. We still recommend asking students to retell the text to prevent speed reading without holding students accountable for some measure of comprehension.

Table 10: Correlation of DIBELS and Gates MacGinitie measures by Grade.

	ORF	Retell
2nd Grade		
Retell	0.476	
Gates Comprehension	0.632	0.37
3rd Grade		
Retell	0.493	
Gates Comprehension	0.683	0.483

The use of the Word Use Fluency was not mandated by Nebraska Reading First, and in previous results we recommended caution in interpreting this assessment. To further examine the concurrent validity of this measure we conducted a correlational analysis. A similar analysis with the use of Word Use Fluency shows very similar results to the retell results subtest. The correlations

between WUF and the Gates MacGinitie vocabulary results show a weak relationship and cast a serious doubt over the adequacy of WUF as a measure of vocabulary.

Table 11: Correlation of DIBELS Word Use Fluency assessment and Gates MacGinitie Vocabulary Scores by Grade.

	Word Use Fluency
2nd Grade	
Gates MacGinitie Vocabulary	0.194
3rd Grade	
Gates MacGinitie Vocabulary	0.325

Recent publications have exposed significant problems in the use of DIBELS subtests and the choice of passages in the DIBELS Oral Reading Fluency assessment. As relevant research will be made public we will monitor their content to decide whether schools using the DIBELS should consider a change.

SUMMARY AND RECOMMENDATIONS

Summary and Recommendations

Reading First has been successful at the school, teacher, and student level. At the school level it is evident that faculty and administration have developed new research and data driven practices. Administration provides coherent and positive support and teachers are feeling optimistic about the chances of the vast majority of students to reach grade level. At the teacher level it is clear that teachers are approaching instruction in a deliberate manner relying on research based methods and assessment data to plan lessons. Students are increasing in achievement across all of Reading First classrooms and the impact is starting to be felt beyond the grades involved in Reading First. There are some challenges that Reading First must face in the coming years, with an emphasis on schools receiving the continuation grants. While we will focus on these challenges the reader must keep in mind that the overall outlook of Reading First is very positive- Reading First has made a real impact in all participating schools.

Two trends connect the 2004-5 and this report on Reading First. First, student achievement is increasing across most schools and grades. Second, gains are much more significant in kindergarten and first grade than in second and third grades. The same pattern is evident when examining the achievement gap- the gaps grow in later grades.

Assessment data shows that the cohort of 2005-06 is performing better than last year's cohort. The overall increase does not mean that achievement gaps are narrowing for traditionally weaker populations (ELL, SPED, minority groups). As achievement climbs all students are benefiting and gaps seem to be changed only slightly; here the results are mixed with some groups (ELL and F/RL) doing better than others (SPED, minority groups).

Corresponding to last year's results the progress in second and third grade is much slower despite having more to improve. Taken together, the success of kindergarten instruction (no impact from last year's efforts) and the relative slow progress of second and third grades (students that did benefit from RF last year), suggests a pattern. Carry over impact of Reading First is partial. It also suggests that instruction in second and third grades are qualitatively different and need special attention.

Teacher practice have changed significantly in kindergarten and first grade but significantly less changed in second and third grade. The emphasis on reading related skills of phonemic

awareness, decoding, and oral reading fluency is paying off in increased student achievement in these skills. The growth in basic skills does not necessarily translate into higher order abilities such as understanding vocabulary and comprehending text. This is where the challenge for the continuation grants lies- extending the success in basic skill instruction further. The difference between basic and higher order skills dictates similar dedication but a different instructional approach.

In the area of student assessment we recommend discontinuing the use of Word Use Fluency assessment altogether. Further we recommend limiting the use of DIBELS retell fluency to ensure accountability for students reading texts. We suggest looking for measures that will help all grade levels monitor vocabulary and comprehension effectively. As relevant research about DIBELS will be made public we will monitor their content to decide whether Reading First schools using the DIBELS should consider a change.

We suggest that coaches and state visit teams focus their attention on vocabulary and comprehension instruction across all grades, but especially in second and third grade. Professional development efforts should target the same skills (as they did this past summer) with an emphasis on classroom friendly approaches. The approaches used need to focus on practices that can be easily translated into classroom practice with existing curricula. We further suggest that the emphasis on basic skill instruction should not take away from struggling student instructional time in vocabulary and comprehension instruction.

Schools should use the improved efficacy and communication to create a support network to assist special education students who are lagging further behind then any other at-risk group and are not making enough gains to close the gap between them and other students.

References

Marzano, R. J. (2003). What works in schools: Translating research into action. Alexandria, VA: Association for Supervision and Curriculum Development.

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. Reports of the subgroups. Washington, DC: National Institute of Child Health and Human Development.

National Center for Education Statistic. (2005). The nation's report card: Reading highlights, 2003. (NCES Pub. No. 2004452). Jessup, MD: Dept. of Education.

APPENDIX

Questions asked in interviews used in analysis

1. How much do you believe that you and your peer teachers can impact students' reading achievements?
2. Do you believe that you and your team can bring ALL students to grade level reading?
    a. Do you believe that you and your team can bring MOST students to grade level reading?
    b. Why?
3. How did you feel about last year (the first year of RF)?
4. How clear are your responsibilities in Excellence in Reading?
5. When do you communicate with other teachers from your grade level (and other grade levels)?
    a. Are you satisfied with the amount of communication?
    b. Do you find the communication helpful to you professionally? Personally? Socially?
    c. What do you discuss in your communication?
    d. When it's official communication?
    e. When it's unofficial?
6. Have your students gained more than in the past as a result from Reading First?
7. How helpful has Excellence in Reading professional development and coaching been?