RESEARCH UPDATE

Napa Valley Unified School District
Napa Valley, CA

iRead® Students Demonstrate Significant Growth on DIBELS Next

PROFILE

District: Napa Valley Unified School District
Evaluation Period: 2014–2015
Grades: K–2
Model: 20–30 Minute Model
Assessment: Dynamic Indicators of Basic Early Literacy Skills, Next (DIBELS Next)

OVERVIEW

Research shows that when students are not exposed to positive literacy experiences at a young age, small differences found in kindergarten literacy skills become even more pronounced as students progress to first grade and beyond (Chatterji, 2006). When students start ahead they stay ahead, and when they start behind they tend to remain challenged learners for their school career.

With an understanding of how children learn to read and an appreciation for its pivotal role in cultivating life long learning, *iRead* was designed to provide students with explicit, systematic instruction and ongoing practice in foundational literacy skills. Foundational literacy skills are essential for beginning readers to learn how to read and comprehend the complex texts that they will face as they progress in their education (Adams, 1990). Harnessing adaptive technology, *iRead* individualizes instruction for each child's unique learning needs and interests, allowing the child to work toward proficiency in each domain of foundational literacy in a way that is meaningful and effective for him or her.

iRead allows schools to support students sooner so that they can put an end to a "wait-to-fail" method for providing interventions. Whether school districts are striving to meet Common Core State Standards or other state specific standards, this is an era in which all educators expect more

rigor immediately (Bassok, Latham, & Rorem, 2015). Developed to meet the needs of burgeoning readers and those who are honing their skills, *iRead* is a catalyst for school districts in meeting their goal of having all students learn to read by third grade, and then read to learn thereafter.

The study presented in this Research Update examined the effectiveness of *iRead* at providing foundational literacy skills instruction for students in Grades K-2 in Napa Valley Unified School District (NVUSD). These results indicate that *iRead* is an effective early literacy program for beginning readers.

DISTRICT CHARACTERISTICS

During the 2014-2015 school year, NVUSD served 18,610 students in Grades TK-12. The majority of the students were Hispanic or Latino (53%), approximately 30% were Caucasian, 7% were Filipino, 4% were two or more races, 3% were African American, 2% were Asian, >1% were American Indian or Alaska Native, >1% were Pacific Islander, and >1% were not reported. Forty-nine percent of the students were eligible for free or reduced-price meals, 22% were considered English learners (EL), 10% were students with disabilities, and 4% were migrant students.

IMPLEMENTATION OVERVIEW

During the 2014–2015 school year, NVUSD was building on an extensive multistage roll out of *iRead* for all students in Grades K–2 district-wide[1]. *iRead* was implemented as a digital supplement to the regular English Language Arts (ELA) curriculum.

Building on the first year of *iRead* implementation during the 2013-2014 school year, NVUSD's leaders remained committed to professional development for their teachers that highlighted the ways in which *iRead* could benefit beginning readers. Ongoing *iRead* professional learning included initial training, frequent coaching sessions

[1] Results from NVUSD's first year of *iRead* implementation during the 2013–2014 school year are available on the HMH *iRead* website: hmhco.com/iread.

throughout the school year, and an *iRead* lead teacher at each school to support all teachers in effectively implementing the program. The *iRead* lead teachers received additional professional learning provided by both NVUSD staff and Houghton Mifflin Harcourt consultants, including cadre meetings[2] and half-day literacy seminars.

Implementation Model

iRead implementation varied across the district and within the schools. NVUSD building leaders and teachers took advantage of *iRead*'s versatility and used it with the whole class in a computer lab or as part of small-group rotations in the classroom for 20–30 minutes daily. NVUSD also used *iRead* on multiple platforms, including desktop computers, laptops, and iPads. Taking advantage of *iRead*'s "Anytime, Anywhere Access," NVUSD launched an extensive "*iRead* at Home" campaign, which helped bolster student access to the *iRead* software and support family engagement. In addition, struggling students were given more time on the *iRead* software before and after school through extended-day targeted interventions. To further support struggling students, NVUSD implemented *iRead* for an extended school year, enabling students to continue practicing their foundational literacy skills during the summer months.

Participants

A total of 3,187 students at 19 elementary schools using *iRead* were included in this analysis. To be included in this analysis, a student was required to have DIBELS Next data, demographic data, and to have completed at least 20 or more *iRead* sessions. The data collected and analyzed in this report reflects students' *iRead* use during the regular school year, from August 2014 through May 2015. Of the students included in the analysis, 27% were Caucasian, 9% were Filipino, 4% were African American, 1% were Asian, 1% were American Indian or Alaska Native, and the remaining students were other ethnicities. Overall, 54% of the participating students were Hispanic. Ten percent were students with disabilities, 42% were considered English learners (EL), and 52% were eligible for free or reduced-price meals.

MEASURES

Software Usage Data

iRead usage data were collected during student use of the software program. The number of session days that took place during this time was collected, as well as the number of *iRead* topics, series, and units that were completed.

Dynamic Indicators of Basic Early Literacy Skills, Next (DIBELS Next)

DIBELS Next is designed to identify students experiencing difficulty in acquiring basic early literacy skills and provides information on four critical skills for beginning reading: phonemic awareness, phonics, reading fluency, and reading comprehension. Student performance is reported as both a scale score and as one of three corresponding performance levels: At or Above Benchmark, Below Benchmark, and Well Below Benchmark. DIBELS Next subtest administration is determined by students' grade level and time of year.

RESULTS

Software Usage and DIBELS Next Findings

Across the grades, students used the *iRead* software an average of 48 hours over the year. An average of 107 sessions took place during this time, which resulted in the completion of 102 topics.

Across all grades, more software usage was associated with greater DIBELS Next growth. The differences between the percentage of students performing At or Above Benchmark who had completed 100 or more topics on iRead compared to the percentage of students who had completed less than 100 topics described below were all statistically significant.

A greater percentage of kindergarten students who completed 100 or more topics performed At or Above Benchmark on DIBELS Next Phoneme Segmentation Fluency subtest at end of year than students who completed less than 100 topics (93% compared to 73%, respectively). Similarly, a larger percentage of kindergarten and first grade students who completed 100 or more topics performed At or Above Benchmark on DIBELS Next Nonsense Word Fluency-Correct Letter Sounds subtest than students who had completed less than 100 topics (87% compared to 43% of kindergarten students; 86% compared to 58% of first grade students). In addition, the percentage of first grade students who performed At or Above Benchmark on DIBELS Next Nonsense Word Fluency-Whole Words Read subtest was greater than the percentage of students who completed less than 100 topics (90% compared to 69%, respectively). See Graph 1.

Following this trend, a greater percentage of first and second grade students who completed 100 or more topics performed At or Above Benchmark on DIBELS Next Oral Reading Fluency (DORF) Words Correct subtest at end-of-year than students who completed less than 100 topics (80% compared to 46% of first-grade students; 74% compared to 44% of second-grade students). On the DORF Accuracy subtest, a larger percentage of first and second grade students performed At or Above Benchmark after completing 100 or more topics compared to the percentage

of students completing less than 100 topics (83% compared to 54% of first-grade students; 82% compared to 52% of second-grade students). See Graph 2.

CONCLUSION

Results from these end of year analyses provide evidence that elementary students who participated in *iRead* made significant improvements in reading achievement by end-of-year as measured by the DIBELS Next assessment. These findings held for each grade level of students in Grades K through 2 and were particularly strong for students who completed more topics in the software. As the DIBELS Next results demonstrate, students were able to become more proficient at more complex reading skills as they progressed through the *iRead* program. All in all, this research demonstrates that *iRead* can provide a springboard for literacy growth for kindergarten, first-grade, and second-grade students.

Graph 1.
NVUSD *iRead* Students, Kindergarten and Grade 1 (N=2,018)
Impact of *iRead* Software Use on DIBELS Next End-of-Year Performance, 2014–2015
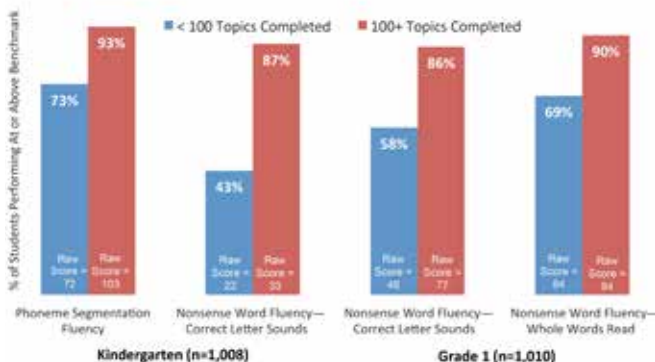
Note. The differences in the percentage of students performing At or Above Benchmark (and the differences in raw scores) were statistically significant on all subtests.

Graph 2.
NVUSD *iRead* Students, Grades 1 and 2 (N=2,054)
Impact of *iRead* Software Use on DIBELS Next End-of-Year Performance, 2014–2015
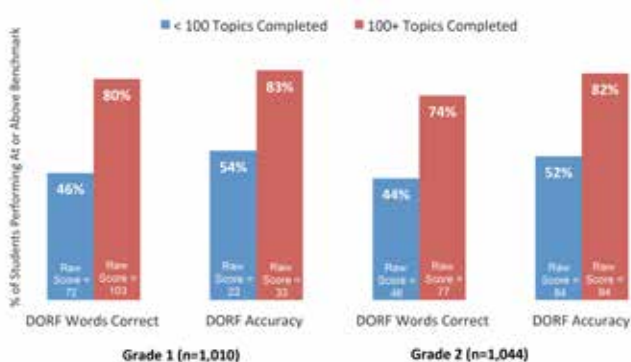
Note. The differences in the percentage of students performing At or Above Benchmark (and the differences in raw scores) were statistically significant on all subtests.

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RESEARCH UPDATE

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