



Inspiring Minds, Building Community, Transforming Lives



2010 LITERACY INITIATIVE SUMMARY REPORT

Introduction

Summer learning loss is the single greatest factor in the annual growth of the achievement gap between low-income and more affluent children. On average, this gap is 6 months in kindergarten and 2.5 years by 5th grade, as low income students typically lose two to three months in reading ability and even more in math skills over the summer. Horizons is a 6-week summer academic enrichment program for low-income, public-school, K-8 students that has been proven to address the summer slide. The summer session is supported by many school year components. Horizons' educational model blends academics with arts, sports, and cultural enrichment, as well as confidence-building activities—a combination which has been confirmed by recent research as the *most effective approach to summer learning programs addressing the achievement gap*. The program begins in kindergarten so that early intervention can address the gap while it is still small and before it becomes unbridgeable. Because students return to the program for an average of five summers, the cumulative gain in skills are truly transformative, narrowing both the achievement gap and the life opportunity gaps that severely undermine success for low-income children.

Horizons is a true private-public partnership. Programs are hosted on independent school campuses, and serve their neighbor public-school students. In the summer of 2010, almost 2000 students from over 300 public schools attended Horizons programs on 19 campuses in 10 states.

History

The original Horizons program began almost fifty years ago at New Canaan Country School and flourishes there to this day. Horizons National was established in 1995 to replicate the Horizons model for other communities. At the heart of Horizons National's mission and strategic thinking is a determination to 1) expand the number of programs which will benefit more children nationwide, and 2) continually improve our programming to create even more significant impact for every student. The Literacy Initiative is a major step in increasing the effectiveness of Horizons programs in terms of targeted assessment, intervention, evaluation, and curriculum. It was created to increase student gains in reading skills and to sustain this growth over time.

In 2006, Horizons identified a computer-adaptive test from Renaissance Learning called STAR as a promising tool to credibly and reliably measure the changes that took place over the course of our 6-week summer program without consuming too much valuable instruction time. The individual diagnostic and growth results from our pilot test of STAR were strong, so its use became program wide in 2008. The resulting data was incorporated in a Yale University School of Management evaluation which concluded that the average improvement in reading for below-grade-level Horizons students was about three months over the 6-week program.

Literacy Initiative – Building on Success

Components

The Literacy Initiative, which enters its third year in summer 2011, was developed around four basic components: 1) providing affiliates with the training and tools needed to conduct reading skill-based student performance assessment; 2) instructing affiliates in the use of data from the assessment as a reference for curriculum design and lesson plans; 3) providing affiliates with a Reading Specialist to focus on coordination of assessment, sharing of student data with teachers, and instruction to students that are furthest behind; and 4) conducting network-wide data analysis to identify trends, best practices, and areas for improvement. Horizons National works with our assessment partners Renaissance Learning and Wireless Generation, as well as other experts in evaluation and curriculum development to provide support and training for Horizons Affiliates.

Funding

Funding for the Literacy Initiative has come from an anonymous challenge grant for half of the two year \$250,000 budget, and from Newman’s Own Foundation, Mylan Charitable Foundation, the Xerox Foundation, Pitney Bowes Foundation, and individual donations. The Initiative provides reading specialist salaries, training, hardware and software for all Horizons affiliates, and centralized evaluation and management from staff at Horizons National.

Assessment Methodology and Results

Horizons implemented two assessment tools to measure student performance in literacy. These assessments, STAR Reading by Renaissance Learning and mClass DIBELS by Wireless Generation, are used in a pre- and post-test format. Pre-testing is conducted prior to the summer session (2-3 weeks before) or in the first days of the program. Post-testing is conducted during the last week of the 6-week summer session. Horizons National worked with Renaissance Learning and Wireless Generation to establish data processing guidelines in order to generate reports on the results of each assessment.

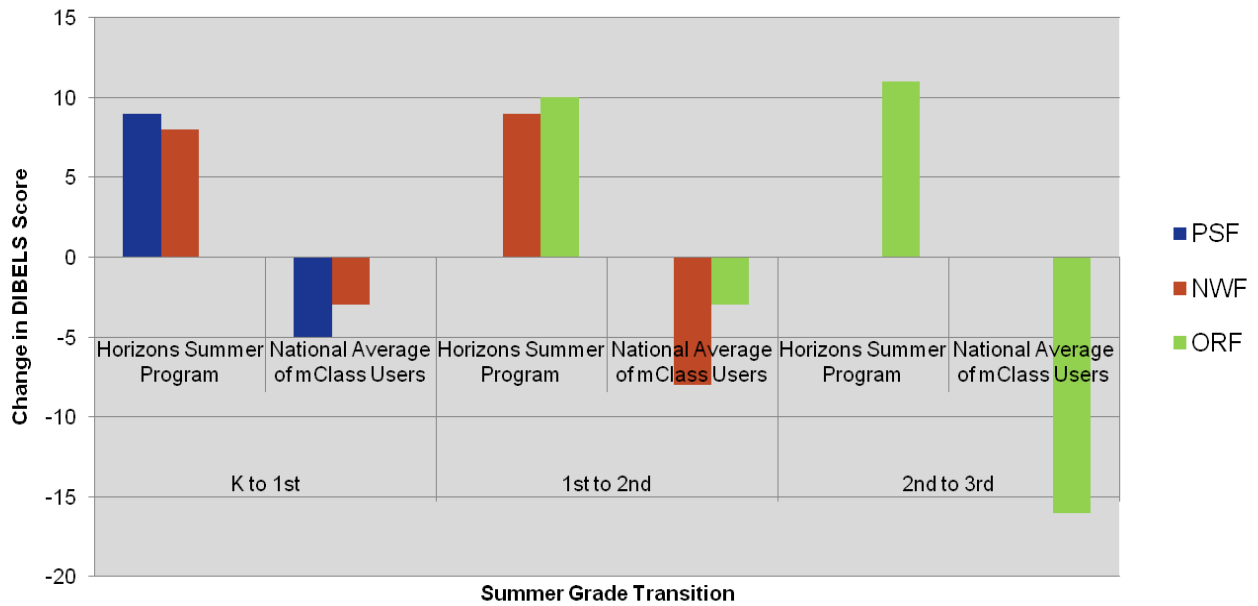
In order to capture changes in performance among typical student participants, parameters were set to create a “clean” data set. Outliers such as students who were extremely below or above the grade level during pre-test (i.e., 3 grade levels below or 2 grade levels above), or having drastic grade changes at post-test (i.e., 1 grade level lower or 1.5 grade levels higher) were not included in the analyses.

DIBELS Results

Chart 1 shows the reading results from summer of 2010 for grades K-2, compared to non-Horizons students with similar demographic profiles. These results were measured using mClass DIBELS assessments, and compiled by Wireless Generation, who also provided the national comparison from an expansive database of school year mClass DIBELS users (250,000+ students). Wireless Generation reported that the mClass DIBELS assessment comparison showed that Horizons students achieved 200-500% improvement over the non-Horizons students during the summer months.

CHART 1

Comparison of DIBELS Growth over Summer at Horizons to National mClass Average



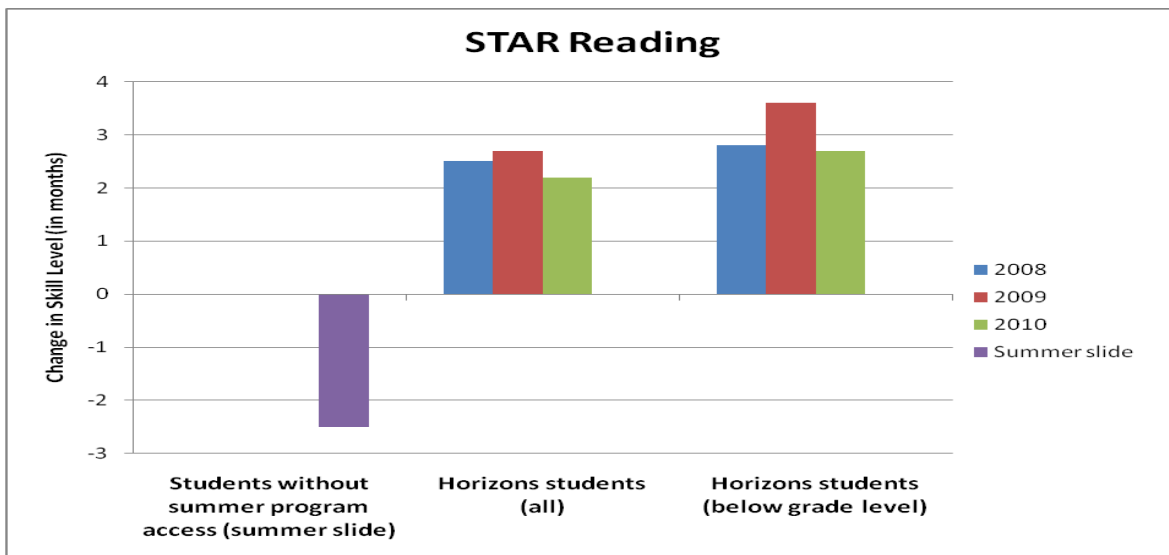
Description of DIBELS Measures

DIBELS Measure	Description	Essential Component of Reading Measured
Phoneme Segmentation Fluency (PSF)	Phonemic awareness	Students break words with two to five sounds into parts, with the highest score for each word being the number of phonemes in the word.
Nonsense Word Fluency (NWF)	Alphabetic principle (phonics)	Students read nonsense words spelled with two and three letters or they name the letter sounds. All nonsense words are spelled with a consonant–vowel–consonant (CVC) or vowel–consonant (VC) pattern.
Oral Reading Fluency (ORF)	Fluency	Students orally read a grade-level passage.

STAR Results

Similarly, Chart 2 shows the results from STAR Reading assessments for grades 3-8 over the last three years of the Literacy Initiative. Results consistently demonstrate impressive reading gains for all students. As would be predicted, students beginning the summer below grade-level show higher gains than those who began the summer at grade level, and students are 5-6 months better off than the 2.5 to 3-month loss they might have otherwise experienced each summer. On average, students improve 2.5 to 3 months in reading skills over the 6 week summer session.

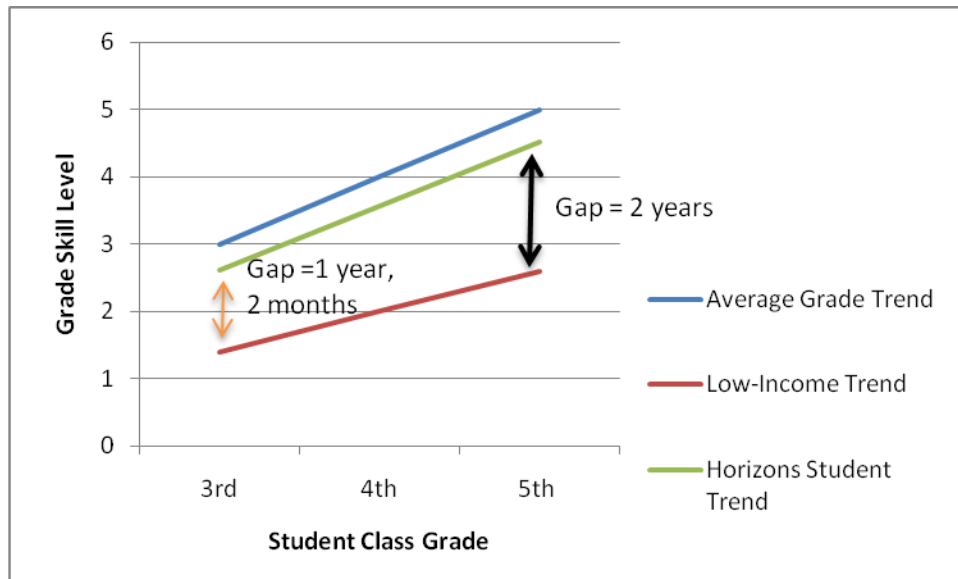
CHART 2
STAR Reading Assessment Results:
Horizons Participants vs Non-Horizons Participants



Comparison Model

Chart 3, below, is a model comparing three years of results from Horizons STAR Reading assessment to the trend suggested by research on the effects of summer vacation on achievement test scores (Cooper, H. 1996). It illustrates that although Horizons students continue to be below grade level, their rate of learning is similar to the expected grade progression and there appears to be a narrower achievement gap. Based on summer pre- and post- test results, students show a minimal loss of about 1/3 of a month over a three year period as compared to a 6 month loss or greater for students without quality summer instruction.

CHART 3
Comparison Model: 3 Year Results from the
STAR Reading Assessment Against the Trend



Grade Equivalent Analysis

Expert evaluators Ken Terao and Fred Yuen, co-authors of *Effective Grant Writing and Program Evaluation*, analyzed a sample of student results within a group of 488 students. Results show that nearly 60% of the students increased between 0.1 to 1.0 grade equivalent, 15% increased 1.1 to 3.3 GE, and while 20% of students experienced a drop-off or decrease—some margin of which could be attributed to test administration or student interest—a two-thirds majority (n=359, 74%) had shown increases in their grade equivalent at the end of the program.

Grade Equivalent Analysis Summary

Change in Grade Equivalent (GE)	Number of Students	Findings in %	
2.1 to 3.3	31	<ul style="list-style-type: none"> 6% improved between 2 to 3.3 GE 9% improved between 1 to 2 GE 	74% showed improvements in GE
1.1 to 2.0	44		
.1 to 1.0	284	<ul style="list-style-type: none"> 58% improved up to 1 GE 	
.00	36	<ul style="list-style-type: none"> 7% showed no change 	
-.1 to -1.1	93	<ul style="list-style-type: none"> 19% experienced drop off 	
	488 Total	100% Total	

Analysis of Reading Specialist Qualitative Feedback

At the end of each summer session, Horizons National collects qualitative data from each of the Reading Specialist supported by the initiative. This data allows for a deeper understanding of the needs of students, the effectiveness of the Reading Specialist, and the challenges that they both encounter. On average, a Reading Specialist will spend 4 –4.5 hours a day, every day, providing small-group or individualized instruction to students that are furthest behind. This instruction time includes read alouds, word fluency, vocabulary development, decoding, spelling, writing, and other skill-based activities that complement classroom instruction provided by Horizons teachers. The balance of the Reading Specialist's day is usually spent working with teachers to coordinate the instruction and curriculum, as well as conducting follow-up with parents and in some cases, the student's regular school. Reading Specialists in several affiliates also help coordinate take-home book initiatives that foster the love of reading by helping to establish student personal libraries.

Recommendations made by Reading Specialists include:

- 1) Conducting pre-testing before the summer session: Only about 20% of the Horizons Affiliates are able to test all students before the summer session. This practice allows for the use of pre-test data in earlier curriculum and lesson plan designs, as well as in creating differentiated student groups. The advantage is that teachers can be prepared in advance of the summer session instead of waiting for testing to be completed within the first week of programming. However, the cost of creating a pre-summer testing date (transportation, teacher salaries, etc.) and the lack of available space are barriers beyond the ability of many affiliates.
- 2) Having more follow-up during the school year: Horizons teachers return year after year and the same is true with Reading Specialists. Many of the Reading Specialists that returned for their second or third year recommended providing more support and follow-up during the school year to help students maintain the gains made during the summer.
- 3) Better coordination around Reading Specialist's schedule and work with teachers: Despite reporting that most Reading Specialists regularly meet with teachers to discuss student performance, Reading Specialists recommend coordinating schedules better to avoid conflicts in their instruction with other activities (e.g. enrichment or other subject instruction) to maximize student participation and attention. Better coordination with teachers will also help get the most out of small group instruction and pull-out instruction provided by the Reading Specialists.

Conclusions

The grade equivalent data indicate improvement in performance for the majority of the students who completed the Horizons National Student Enrichment summer program. In comparison to the available national data, the improvements are significant. While the results are exciting and consistency of the data over the last three years points to a very promising and positive trend, they also suggest the need for further investigation and more in-depth analyses. To this end Horizons National will continue to support the Literacy Initiative for a third year during the summer session of 2011 and has begun exploring funding opportunities to conduct a longitudinal study on the effects of our work.