I. INTRODUCTION
Horizons National is the central organization for an award-winning network of six-week summer academic enrichment programs. Since 1964, Horizons programs have served low-income, public school K-8 students, supported by school-year components. In the summer of 2011, 20 Horizons affiliate sites and two pilot sites served over 2000 students in 10 states, and there will be 26 Horizons sites in 11 states in the summer of 2012. Horizons programs offer a balance of academic instruction in reading, writing, and math, and enrichment programming that includes swimming, arts, recreation, and science.

Horizons has a long history of student-centered evaluation and evidence-based program improvement initiatives, beginning with studies conducted by Yale University’s Dr. Ed Zigler in the 1980s and 1990s. Horizons uses student assessment data as a program improvement tool and to help instructors provide individualized instruction for their students each summer. Assessment data is reviewed annually at the local level by teachers and program leadership, and at the national level across all Horizons affiliates to identify trends, best practices, and other important information. Assessment analysis at the National level is conducted with the help of Wireless Generation and the consultant team of Ken Terao and Francis Yuen.

In 2006, Horizons National began providing grants to a small group of affiliates in order to study how modest funding could be leveraged to improve the quality and rigor of our academic programming. These initial grants allowed affiliates to use a common set of student assessment tools to evaluate student reading ability and growth. STAR Reading by Renaissance Learning was piloted at five affiliates for grades 3-8 in 2007.

After wider use of STAR Reading in 2008, Horizons launched the Literacy Initiative in 2009. This nationally funded initiative provided resources to every affiliate to:
- extend the use of STAR Reading throughout the Horizons network;
- add mCLASS:DIBELS by Wireless Generation for use with students in grades K-2;
- provide affiliates with funding for a summer Reading Specialist.

Student data, qualitative surveys, and reports from affiliates were used to identify trends and lessons learned. The Reading Specialists were trained by Horizons National to implement the student assessments and to coordinate literacy instruction with Horizons classroom faculty at each site. The roll-out of the Reading Specialist position had a dramatic and positive impact on student performance; therefore, the Literacy Initiative was continued in subsequent years and expanded to all affiliates. Ongoing analysis of the use of the Literacy Initiative resources resulted in further modifications to instruction, use of student assessment data to create differentiated instruction strategies, and curriculum development at each affiliate.

In 2010, a STEM Initiative was piloted to enhance Science, Technology, Engineering, and Math programming offered at mature affiliates and introduce the use of the STAR Math assessment for grades 3-8. In 2011, Literacy and STEM initiatives were merged to become the Leveraged Learning Initiative, which provides funding for:
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- an Academic Coordinator at each K-5+ affiliate site;
- a Reading Specialist at every affiliate site (PT or FT depending on program size);
- STEM funding to be used towards materials, staff salaries, or instructional resources;
- STAR Reading and Math and mCLASS:DIBELS assessments; and
- continued survey, assessment and best practice analysis by Horizons National.

As part of Leveraged Learning, Academic Coordinators and Reading Specialists participate in online training and attend a 2-day professional development conference. Affiliates implement the student assessments in a pre- and post-program format. Academic Coordinators, Reading Specialists, and Executive Directors contribute feedback and outcome data through reports and an online student and program metrics database. Horizons students and family members are also asked to participate in a qualitative survey.

In 2011, Academic Coordinator funding was provided to the following affiliates: Horizons Greater Washington, Greens Farms Academy, Rumson, Savannah, Atlanta, The Harley School, Colorado Academy, Salisbury, and Hampton Roads. Reading Specialist and STEM funding was provided to all affiliates.

II. STUDENT ASSESSMENT METHODOLOGY AND RESULTS

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

mCLASS:DIBELS Assessment

Horizons National used mCLASS:DIBELS to measure gains in reading skills for Kindergarten through second grade students. Seventeen affiliate sites used DIBELS in 2011, with a total of 776 students assessed by the end of the summer program. Wireless Generation analyzed the data and submitted a report to Horizons National. The findings below came from this report.

Wireless Generation analysis of mCLASS:DIBELS:

- High number of students at risk enrolled.
- Students furthest behind tend to show the greatest improvement.
- On average, students consistently improve by one risk level each summer.
- Students that have been in the program for three years show greater summer improvement.

CHART 1 shows the comparison of student performance of Horizons students at the end of school year 2010-2011 (beginning of 2011 summer) with that typically observed among the national mCLASS user base for grades K-2. These results show that Horizons students arrived at the 2011 summer program at greater risk of failure than generally observed nationally, with the exception of first grade, where Horizons students mirrored the national average.
The Wireless Generation report stated that, “As has been well documented through numerous research studies, the typical student suffers from a summer learning loss, arriving back at school having ‘lost’ some of the knowledge and skills acquired in the previous grade/year.” CHART 2 shows that students increased their reading skills after having participated in Horizons Student Enrichment Program, while students who did not participate in the program lost ground in their reading skills. Therefore, not only did the Horizons students maintain their reading skills during the 2011 summer, but they actually increased their reading skills. A description of DIBELS measures (PSF, NWF, ORF) can be found on the following page.
Description of DIBELS Measures

<table>
<thead>
<tr>
<th>DIBELS Measure</th>
<th>Description</th>
<th>Essential Component of Reading Measured</th>
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<tbody>
<tr>
<td>Phoneme Segmentation Fluency (PSF)</td>
<td>Phonemic awareness</td>
<td>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.</td>
</tr>
<tr>
<td>Nonsense Word Fluency (NWF)</td>
<td>Alphabetic principle (phonics)</td>
<td>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.</td>
</tr>
<tr>
<td>Oral Reading Fluency (ORF)</td>
<td>Fluency</td>
<td>Students orally read a grade-level passage.</td>
</tr>
</tbody>
</table>

STAR Reading and STAR Math Assessments

Students in grades three through eight who participated in a Horizons summer program were tested in math (351 students) and reading (539 students) for academic gain using the STAR Reading and STAR Math pre- and post-test protocol. As shown below, both Reading and Math scores rose more than two months during the summer term. Those students who began the summer below grade level experienced even higher growth.

<table>
<thead>
<tr>
<th>STAR Results 2011 – Growth in Months</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Overall</td>
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<tr>
<td>Below Grade Level</td>
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STAR Reading results over the five years of its use at Horizons are shown below. In the pilot year of 2007, STAR was used at five lead programs and then implemented throughout the Horizons network in 2008. Nationally funded Reading Specialists and other targeted resources associated with the Literacy Initiative were introduced at each site beginning in 2009. The data indicates that the Literacy Initiative resources have made a significant and positive difference in our students’ summer reading growth. We look forward to building a similar data history in math and conducting a longitudinal evaluation to confirm the relationship between individual summer gains and long-term student growth.
Further analysis of the STAR Reading and Math data indicates that:

- Reading score improvements were seen for all grade levels across Horizons programs.
- Pre-test results suggest a noticeable gap from the expected grade level. Post-test results indicate an overall growth trend that is equal to or better than expected growth over a 6-week session.
- Middle school students are more likely to achieve greater gains in reading than grade school students. This is likely attributed to a broader skill gap among older students, particularly in reading comprehension.
- Students in grades 3-5 tended to have greater gains in math skills than students in grades 6-8.
- Similar to findings from mCLASS:DIBELS data, STAR data confirms that Horizons students with the lowest pre-test scores have the greatest skill gains, and that Horizons is also helping higher performing students thrive.

III. FINDINGS FROM ACADEMIC COORDINATOR AND READING SPECIALIST REPORTS

Reading Specialists and Academic Coordinators contribute feedback about their experience through reports submitted at the end of the summer session. These qualitative reports allow Horizons National to evaluate the effectiveness of the resources invested to support these positions. The following is a list of the key findings from this feedback:

- Affiliates with Academic Coordinators who worked closely with faculty to design curriculum, address behavioral or learning challenges, and coordinate instruction tended to demonstrate stronger results in the student assessments in both STAR Reading and Math.
- Affiliates with Reading Specialists that collaborated closely with lower grade faculty on reading instruction and worked to implement reading interventions for the lowest performers tended to demonstrate the strongest results in mCLASS:DIBELS.
- Academic Coordinators helped improve communication with and among faculty.
- Affiliates tended to have Reading Specialists focus on lower grade interventions (K-3) and Academic Coordinators worked more frequently with middle and upper grades (3-8).
- At some affiliates, Academic Coordinators were able to improve communication with Horizons families and the students’ schools, an area where we will continue to work, based on parent feedback.
- STEM programming enhancements are very popular among faculty and students.
- Affiliates with a balance of traditional skill-based instruction and project-based learning demonstrated the strongest STAR Math results. However, qualitative feedback suggests a high motivational and inspirational value of projects and activities that cannot be captured by the STAR assessment.
- The added value of Academic Coordinators in school year programming will be examined next summer, after their first school year in place.

IV. PARENT AND STUDENT SURVEYS AND REPORTED RESULTS

As part of continuous self-assessment, surveys were administered to parents and students to capture qualitative information of the academic learning and other enrichment activity results of Horizons, and were analyzed by professional evaluation consultants Ken Terao and Francis Yuen. Results of both surveys show that students gained insight in areas that support the learning process. The appendix to this report contains the specific survey questions along with detailed responses.
Horizons program changed the attitude of students toward their willingness to learn. Students commented that they had a more positive outlook on school and were looking forward to next school year. Many students stated that learning was fun and studying was important to the learning process. Some students connected the relationship between their behavior and their ability to learn. As one student stated, Horizons “made me think of how I am going to behave and get good grades.”

Horizons programs also changed students’ outlooks on how they could strengthen relationships with others. Students shared that the most important thing they learned at Horizons was how to play and work with others, including showing respect, being kind, and making friends. Parents commented that the program increased their child’s social interaction and built character and self-esteem. Both the parents and the students were overwhelmingly positive about the Horizons program. Parents stated that they were satisfied with the program and would enroll their child again next year; students stated that they enjoyed the program and hoped to return next year.

V. CONCLUSIONS AND NEXT STEPS

The success of the Leveraged Learning Initiative is evident in the results from the student assessments and qualitative feedback received from affiliates, Horizons families, and students. Horizons National will continue the initiative in 2012 and will work with affiliates to implement recommendations resulting from the 2011 feedback.

In the first year of funding the Academic Coordinator position for affiliates, we saw improved communication and coordination among faculty, enhanced programming, and increased parent communication. Academic Coordinators were valuable in helping introduce and implement best practices in curriculum design and STEM programming. In addition, affiliate Executive Directors benefited from the presence of the Academic Coordinators, who allowed them to focus more on fundraising, planning, and strategic direction of their program. Horizons National will work with affiliates this spring to implement best practices in effective use of the Academic Coordinator in areas such as pre-summer planning, selection of faculty, training interns and volunteers, and to strengthen communication with public schools and families. The school year role of the Academic Coordinator position will be further developed.

Reading Specialists continue to be an invaluable asset for Horizons students. They play the lead role in implementing the student assessments, facilitating the use of student data for differentiated instruction, assisting with literacy interventions and curriculum design, and helping those students with the greatest needs. In grades K-2, the Reading Specialists, working with the diagnostic data from DIBELS and their own observation, are able to focus on early grade level reading proficiency. The coordination among Reading Specialists and the Academic Coordinators allows for program and faculty support to all grades.

STEM program funding through the initiative has further reinforced student learning by helping staff to become more intentional about incorporating science and math into daily learning. Not only are math gains improving as a natural consequence of STEM programming, but there were other positive results: confidence increased as students contributed their individual strengths to team efforts; discipline issues decreased, especially at the middle school level; student teams enjoyed recognition as they displayed their work and participated in STEM contests; and reading and writing skills were naturally reinforced in the process.
The use of the STEM resources varied among the affiliates, but most affiliates followed recommendations from the 2010 STEM pilot, providing a balance of traditional math skills instruction, project-based and inquiry focused learning activities and to bring guest instructors to their programs. The expansion of STEM programming has also enabled some affiliates to explore partnerships with universities and other service providers to maximize program quality and expose students to other resources. As an outgrowth of our STEM initiative, Horizons National will study the use of technology to create virtual space for students and teachers from different sites to share their practices and projects.

The resources of *Leveraged Learning* are critical elements to helping Horizons students grow into their academic potential. The best practices and longitudinal evaluation will provide valuable information and contributions to the summer learning field. Horizons National will continue to work with affiliates to leverage these resources to increase their own fundraising ability. Since *Leveraged Learning* components represent between 5-15% of an affiliate’s total budget, it is critical that Horizons National continue to support this initiative while affiliates develop these components to their full impact. *Leveraged Learning* not only provides significant value and improved student outcomes for affiliates, but is a crucial resource for the entire network in helping to increase the value of belonging to a cohesive, visible and consistently excellent national organization.