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## research in brief >

# Multi-Summer Programming Adds Up to Transformative Success

### INTERVIEWEES

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The Horizons National network of programs has been providing high-quality, six-week academic and enrichment summer programs for students from underserved communities since 1964. Horizons programs serve the same youth year after year, starting as early as pre-kindergarten and, in some cases, maintaining connection and support through a student's high school years. With more than 80 percent of students returning to the program every summer, CEO Lorna Smith and the Horizons National team wondered: did the academic gains these students made each year add up to something more over the long term? They turned to Lauren Scher and the research team at Concentric Research & Evaluation to help them find out.

## about the study:



### WHY WERE YOU EXCITED ABOUT THIS PROJECT?

**Lorna Smith:** Horizons is asked all the time: You are great at collecting pre/post summer data and showing that students make progress each summer. How do you know the gains are retained during the school year? Additionally, with our long-term theory of change we wanted more evidence of the progress we observed in our students after several years in the program.

**Lauren Scher:** At the time we started working on this project there was limited research on the investment in youth over multiple years. I had been drawn to research with a broader youth development

focus, not just academics but more whole child, which is a real aim for summer learning programs. I was interested in looking at something other than a one-summer project.

**Deana Darling:** So much of the work and who we are as a program is about long-term engagement; experienced practitioners know that this can have big impact on a child's future, so I was excited for us to look for substantial evidence that backs this up.





## WHAT WERE THE AIMS OF THIS STUDY? WHY WERE HORIZONS NATIONAL AND ITS AFFILIATES WELL-POSITIONED TO EXAMINE THESE QUESTIONS?

**Lauren:** Lorna and the Horizons team are always thinking about what happens when you provide services to kids long-term. Understanding this is incredibly important, not just for their program, but for the broader field of summer, afterschool, and wraparound programming.

The Horizons program offers a unique opportunity to measure long-term effects across many grades. Horizons enrolls children in pre-K or kindergarten and continues to invite them back each summer through at least grade 8. Horizons provides a combination of high quality academic and enrichment programming, and most youth (88 percent at the time of this study) return from one summer to the next. This intensive, multi-year programming is hypothesized to improve long-term academic performance and behaviors.

Horizons affiliates have collected and reported a wealth of data to the National office over many years, much of this in partnership with school districts the affiliates serve. For this study, we explored long-term, sustained effects by comparing youth who participated in Horizons for at least four summers to similar non-participants who attended the same schools. The study employed a quasi-experimental design to compare the outcomes of long-term Horizons participants with similar non-participants. Within each program site, propensity score matching techniques were used to match long-term Horizons students to comparison students who attended the same feeder schools. The study examined outcomes for multiple cohorts of youth. Specifically, an elementary analysis examined effects on test scores, attendance, steady grade progression and disciplinary incidents for fourth- and fifth graders. A middle school analysis examined the same outcomes for youth in grades 6 through 8. The high school transition analysis explored effects on GPA, credits earned, attendance, steady grade progression and disciplinary referrals for students in grades 9 or 10.

It was important but ultimately very easy to get the participating affiliates on board and enthusiastic about the study. This was a big commitment in terms of their own capacity, but they also get questions from their funders asking about more data or proof that the program has a long-term impact. While the Horizons Network now comprises more than 60 sites, we focused on the more mature affiliates to capture youth who had been in the program for at least 4 years.

## data and findings:



### TELL US ABOUT THE DATA THAT YOU COLLECTED FOR THIS PROJECT

**Lauren:** The study relied on administrative records provided by the school districts and Horizons participation data. Annual school records data were collected from school years 2010–11 through 2015–16, including school attended, demographic characteristics and academic outcomes. We collected district data on both Horizons-enrolled students and a comparison group of students from the same districts who had no connection to Horizons. From Horizons, we got information such as: at what grade level youth entered the program, and how many summers youth participated.

MULTI-SUMMER PROGRAMMING ADDS UP TO TRANSFORMATIVE SUCCESS

Districts, of course, had different ways of reporting information, so we did our best to develop common measures across sites and we controlled by site in the analysis to help address variation. We collected attendance data and calculated chronic absenteeism from this. We collected test scores; in the year we did this study, many states were using Common Core-aligned tests which was useful in interpreting what “percent proficient” means across sites. We collected data on grade retention, credits earned for high school, and cumulative GPA for grades 9 and 10. We also collected disciplinary data measures as suspensions, but this was more varied and it was hard to see variation in those outcomes, especially in the younger grades where suspensions are rare.

As might be expected, obtaining data from multiple school districts was a challenge. We leveraged close relationships that affiliate leaders had with school district staff, and we developed proposals and agreements that complied with school districts’ varied data sharing requirements. We presented a consistent data privacy plan across all districts that made it clear that the research team would not have access to any personally identifiable student information.

**Lorna:** We already had a long-standing culture of collecting and using lots of data, but because of variability across districts and states, there is no one protocol for data sharing agreements or how school-year data is accessed. Our affiliate contacts were the key to determining the right path to the data in each district. Once we were able to connect with the districts they were interested in participating, recognizing the value of the study results for their own learning.



### WHAT POSITIVE EFFECTS DID YOU FIND SHORT TERM AND LONG TERM?

**Lauren:** The Horizons students who participated in programming for at least four summers demonstrated stronger 2015-16 academic outcomes than comparison students. A summary of the results showed that:

- Attendance rates were higher and chronic absenteeism was less prevalent among long-term Horizons participants versus comparison students. Horizons students had the equivalent of two extra days of schooling in the elementary and middle school analyses and 6.5 additional days in the high school transition analysis.
- Long-term Horizons students had stronger academic achievement outcomes, including higher standardized assessments in math and science at the end of elementary school and higher GPAs and the equivalent of one full-year course credit by the end of grade 9.
- Long-term Horizons students were less likely to repeat a grade or receive a disciplinary referral during middle and high school.

**Deana:** In addition to the student results, we learned a lot about our affiliates and operations. Closer partnerships with districts was a positive outcome of this study.



### WAS THERE ANYTHING IN THE ANALYSIS THAT STOOD OUT TO YOU AS PARTICULARLY SURPRISING OR MEANINGFUL?

**Lauren:** We looked at subgroups of elementary, middle, and high school students. While we were mostly focused on long-term results, we found that much of the initial growth was apparent through the end of fourth

or fifth grade. For the middle school analysis, we didn't see as many big differences in growth in academic achievement because the big bump appeared in earlier years. However, the high school transition analysis suggests the long-term payoff of multi-year participation through the middle school years. Specifically, the analysis found large impacts in high school credits earned and GPA, which are linked to future success on outcomes such as high school graduation and post-secondary attendance.

This suggests that the Horizons model of mixed academics and enrichment was getting the core academics solid in the early years, and the supports provided throughout programming helped encourage older students to stay on track for the years beyond.

**Deana:** We weren't really surprised because we believed it to be the case that by high school not only had their academics improved but their academic *disposition* had changed: they had earned more credits, had fewer behavioral referrals, and were generally more on track to successfully complete high school and move on to college or career.

**Lorna:** I agree, it was very confirming. The RCTs done on Horizons in the 1980's and 1990's showed much the same in smaller slices: that the program had a positive effect on school year attendance, chronic absenteeism, and changes in math outcomes during the school year. This new study confirmed our theory that a whole-child approach over the *long-term* changes social and academic trajectories.

## the way ahead:



### HOW DO YOU THINK THESE LESSONS LEARNED COULD TRANSLATE TO OTHER SUMMER PROGRAMS?

**Deana:** Programs must create something that is really high quality and of interest to the students so they want to attend every day; we do this with a balance of academics, enrichment, and family engagement. The research shows that high attendance results in academic change, but you see that *long term* levels of high attendance puts students on a completely different trajectory.

**Lauren:** Horizons works hard to bring youth back year after year, and this could be attainable for other programs. This may not be the focus of many other summer programs, especially for those that are voluntary, but other studies have shown that if youth only attend sporadically, they aren't necessarily going to get the full benefit. While only some Horizons students included in our study were exposed to Horizons programming in high school, we still saw impacts in early high school for the students who had attended for multiple years through elementary and middle school. Additionally, the professional culture that Horizons aims to foster among the teachers and staff, and the huge value placed on recruiting enthusiastic, creative professional teachers likely plays a big role in the success of these programs.

**Lorna:** You can't underestimate the impact of engaging kids so that they want to keep returning year after year. Horizons Affiliates create different experiences, combined with lots of love and nurturing, for students at each grade level so they have something new to look forward to every year.

We want to be the banner-carrier of long-term engagement. For students at the highest and lowest needs of the achievement spectrum there are

more opportunities for support; we are targeting the ones in the middle who come from under-resourced schools and don't have a lot of options in the summer, especially to address the needs of the whole child. I hope that this study might encourage others to invest in long-term support throughout a child's K-12 years, whether through partnerships or comprehensive programs like Horizons.



### WHAT SHOULD POLICYMAKERS, FUNDERS, OR OTHER NON-PROGRAM STAKEHOLDERS TAKE FROM THIS RESEARCH?

**Lauren:** The study provides evidence supporting the idea that sustained high quality programming can yield long-term effects on academic achievement and attendance, and that these effects can last through high school. If you do short-term studies, you may not see immediate results. Kids are growing and developing in ways you don't realize in the early years. But after sustained programming, it is more likely that long-term payoffs linked to future success will be observed.

**Lorna:** New does not necessarily mean better. Programs like Horizons that have been around for a while are getting great results. We should all be exploring the similarities among these programs and build systems to help scale them through more partnership and less competition.

**Deana:** So much of what we do is about engaging an entire system of community, school, summer, and other resources, with youth and families at the center. The communities that can sustain these partnerships are seeing the results. It would be amazing to see long-term engagement funded for more programs.



### WHERE WOULD YOU LIKE TO SEE THIS RESEARCH HEADED NEXT?

**Lauren:** This study is an important addition to the limited body of research literature on the effects of long-term, intensive summer programming and its impact on students. Rigorous prospective studies could help validate these results. Also, for future study, we would want to include other outcomes that most school districts don't really collect, like social-emotional development and more behavioral outcomes. Certain aspects of the Horizons program beyond the academics are really interesting. The swimming instruction requirement is one component that aims to foster growth through willingness to try a new challenge — and you see the youth get so confident by the end of the summer. I would love to be able to measure the effects on that kind of outcome.

Because Horizons aims to change students' life trajectories, future studies should examine longer-term outcomes such as high school and college graduation, employment, and other healthy life outcomes.

**Deana:** I want to go deeper into what about our model is causing these changes, such as building social-emotional competency and the various ways we support academics. Without one particular instructional model across our programs, we need more study to understand what is driving this change and growth so we could replicate and expand on those specific practices.

**Lorna:** I agree with Lauren - I would like to invest in rigorous prospective research that looks at how programs like Horizons can change long-term outcomes like health, employment, and general well-being. Narrowing opportunity gaps can produce great outcomes — but it takes time!





#### **ABOUT THE NATIONAL SUMMER LEARNING ASSOCIATION**

The National Summer Learning Association is the only national nonprofit exclusively focused on closing the achievement gap by increasing access to high-quality summer learning opportunities. NSLA recognizes and disseminates what works, offers expertise and support for programs and communities, and advocates for summer learning as a solution for equity and excellence in education. NSLA's work is driven by the belief that all children and youth deserve high-quality summer learning experiences that will help them succeed in college, career, and life.



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