Actionable Evidence Initiative Case Study

A Multi-Year Evidence Building Partnership: The Duke Endowment Summer Literacy Initiative

Dr. Helen I. Chen

March 2022
The Actionable Evidence Initiative
Led by Project Evident with funding from the Bill & Melinda Gates Foundation, the Actionable Evidence Initiative seeks to understand and remove barriers to building evidence that is equitable, useful, credible, and relevant for practitioners as they aim to improve the outcomes of students who are Black, Latino/a/x, or experiencing poverty. Please visit https://www.projectevident.org/actionable-evidence to learn more, join our network, and find partners interested in working together on actionable evidence solutions.

Actionable Evidence in Education Cases
This case is one in a series commissioned by the Actionable Evidence Initiative in 2020 and 2021. (Cases are published on the Project Evident website.) The series illustrates how researchers, evaluators, practitioners, funders, and policymakers across the country are exemplifying principles of the Actionable Evidence framework. It profiles a range of settings, actors, learning questions, methods, and products, unified by a commitment to practitioner-centered, timely, practical, equitable, and inclusive evidence building. Each case describes the origins, development, and results of a research or evaluation project, along with the authors’ reflections on their experiences. Our hope is that these cases will provide both inspiration and practical guidance for those interested in generating and using evidence that leads to better and more equitable outcomes for youth and communities.

Case Study
The Duke Endowment Summer Literacy Initiative
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>About the Project</td>
<td>2</td>
</tr>
<tr>
<td>Alignment with Actionable Evidence Principles</td>
<td>16</td>
</tr>
<tr>
<td>Reflections and Conclusion</td>
<td>20</td>
</tr>
<tr>
<td>Resources and Further Reading</td>
<td>22</td>
</tr>
<tr>
<td>About the Author and Author’s Acknowledgments</td>
<td>23</td>
</tr>
</tbody>
</table>

---

Case Study: The Duke Endowment Summer Literacy Initiative
Actionable Evidence in Education: The Duke Endowment Summer Literacy Initiative

Dr. Helen I. Chen

Executive Summary
The Duke Endowment’s Summer Literacy Initiative is a multi-year collaboration among a supporting funder, North Carolina churches, local schools and districts, evaluators and other stakeholders to design an evidence-informed summer reading program for rising first through third grade students in rural communities. With the goal of providing access to high-quality summer reading support for students at risk of reading loss, The Duke Endowment’s Rural Church program area funds rural United Methodist churches across the state to hold summer reading camps consisting of literacy instruction, enrichment, family engagement activities and wraparound services. Today, 16 church-based sites serve about 250 students annually, most of whom are from low-income families and about half of whom are Black, Latinx or Native American. (Current enrollment is limited by small class sizes in the context of the Covid-19 pandemic.) As a funder, the Endowment has made a long-term commitment to supporting this initiative by building a learning agenda, making evidence-based decisions around funding, engaging stakeholders in program improvements and incorporating evaluation as a key component in sustaining and scaling the program.

The summer reading program originated in 2012. In 2016, with two sites in operation, the Endowment engaged the author of this case study to provide the program’s first external research support, focused on codifying the model and developing measures for student reading outcomes. As the initiative has evolved, so have the partners’ learning goals, taking on more sophisticated questions related to implementation and outcomes that were relevant to reading teachers and church leaders as well as to the Endowment and other stakeholders. By 2019, 12 churches across North Carolina were funded to implement summer reading programs. This rapid growth prompted the addition of a new research partner, Project Evident, which helped to build an evidence roadmap that included the recommendation to engage another evaluation firm that could support a large-scale impact study. In 2020, American Institutes for Research (AIR) was engaged to play that role, with the author continuing her involvement as a technical assistance provider.

This case study explores a multi-year collaboration in which a funder also acted as a program designer, working with site-level program providers, a flexible slate of research partners and numerous other stakeholders to live out its commitment to building evidence in a systematic and intentional manner, while elevating the voices of practitioners and recognizing them as valued partners with expertise about their students and communities.
About the Project

Origins
The Duke Endowment (the Endowment) is a private foundation that works to help people and strengthen communities in North Carolina and South Carolina by nurturing children, promoting health, educating minds and enriching spirits. This mission is reflected in the four program areas established by its founder: Higher Education, Health Care, Child & Family Well-Being and Rural Church.

Beginning in 2012, the Endowment launched an effort to engage rural churches in a multifaceted summer learning intervention to improve literacy among elementary school students in their communities. Based on a concept paper written by an Endowment Fellow who examined summer reading loss in North Carolina’s rural school districts, core components of the summer program model were identified as small class size, individualized student instruction, enrichment, wraparound services and evaluation. In North Carolina, about 40 percent of students attend rural schools and one in five school-aged rural children lives in poverty. Only a third of the state’s rural fourth graders performed at or above proficiency in reading on the 2019 National Assessment of Educational Progress. Given the well-documented occurrence of summer learning loss affecting children in low-income communities disproportionately, the Endowment believed that funding churches to host summer reading programs was one meaningful way for rural United Methodist churches to address a pressing issue in their communities and produce measurable impact for families. Another impetus for the Rural Church program area to engage in this initiative was the lack of evidence-based programs to leverage the church’s unique gifts to address summer learning loss, particularly in rural communities.

John Wesley, founder of the Methodist movement, outlined three rules for Methodists to adhere to, summarized by United Methodist Bishop Rueben P. Job as: Do no harm; do good; stay in love with God.1 With this mandate to “do good,” the churches were primed to play a pivotal role in the lives of families in their communities by delivering these faith-placed programs. (“Faith-placed” means that programs are located in churches, with pastors, site directors and volunteers playing a critical role in delivering the full suite of services. They are not faith-based, so they are open to children of any or no faith background, with no proselytizing or expectation of worship attendance.)

Today, 16 rural United Methodist churches in North Carolina run local reading programs for rising first through third grade students as part of what has become The Duke Endowment Summer Literacy Initiative (SLI). The Endowment provides funding, professional development and technical assistance to support churches in implementing an evidence-informed program during summer reading camps for local students in need of literacy support. In 2019, two lenses were introduced that are now considered core program values: cultural humility and

---

1 This language was coined in Job’s Three Simple Rules: A Wesleyan Way of Living (Abingdon Press: 2007).
trauma-informed approaches. Informed by these values, churches hire staff that include a site
director and state-certified lead teachers. The programs provide high-quality literacy
instruction, enrichment and family engagement activities, and wraparound services including
meals, transportation and before- and after-hours care. Most students served are from
low-income families and about half are Black, Latinx or Native American. Each church site
operates independently, but they share three common goals:

- Improve literacy outcomes for students they serve
- Foster deeper community-church relationships
- Enrich the lives of families and congregation members

Furthermore, the programs are anchored by six guiding principles that make the model
distinct from other summer literacy programs:

1. Start with a thriving and engaged church community
2. Enlist strong community investment
3. Provide wraparound services
4. Hire empowered and effective teachers
5. Provide data-informed and student-focused instruction
6. Involve and engage the students’ families

Partners

The Duke Endowment plays a unique role as both the funder and the developer of the Rural
Church Summer Literacy Initiative (SLI). Within the Endowment, key players included the
leadership of the Rural Church program area, which oversees and supports SLI, as well as the
Endowment’s evaluation department.

Multiple independent researchers and evaluators were part of the evidence building
partnership. First was the author of this case, Dr. Helen I. Chen, who worked as a researcher
on a summer reading intervention at Harvard’s Graduate School of Education from 2010
through 2017 before starting an education consulting firm focused on strategy consulting and
evaluation. Dr. Chen was engaged by the Endowment in 2016 to conduct an initial evaluation
of SLI’s student outcomes and remains involved with the project. In later phases, two other
organizations participated in different roles. In 2019, Project Evident, a nonprofit that helps
leaders and organizations harness the power of evidence to achieve greater impact, worked
with the SLI team to articulate a multi-year vision for building evidence with a Strategic
Evidence Plan. In 2020, the Endowment engaged AIR, one of the world’s largest behavioral
and social science research and evaluation organizations, to help the team advance toward
its stated goal of a rigorous impact study.

Local United Methodist churches are the operators of the summer literacy programs at each
site. Pastors, site directors and teachers at each site have been deeply involved in defining,
building and using evidence.
Other partners include local school districts and schools; community partners, including churches of other denominations as well as local universities and nonprofits; and United Methodist Conferences in North Carolina. In what has become a unique public-private partnership, the North Carolina Department of Public Instruction (DPI) has played an important role in the scope of SLI services as well as in coordinated evaluation and learning efforts. In 2019, DPI recognized the Endowment’s reading camps as viable complements to district-run Read to Achieve reading camps (see p. 9) and is sharing administrative data with AIR through a data use agreement.

Thus, what started out as a partnership between the Endowment and rural churches has expanded significantly. Over the years, the Endowment has been shown to be a very hands-on funder, with program officers deeply involved in cultivating relationships with United Methodist churches across the state, as well as leading the efforts to plan and execute both research and implementation of the programs. While the Endowment initially defined the learning agenda and priorities for gathering evidence, local public school partners and DPI provided student reading data and shared assessments. SLI teachers and site directors were also critical in shaping learning questions each year, in particular around assessments and best practices for reading instruction. Additionally, the Endowment regularly surveys families served by SLI to solicit their feedback and suggestions for improvement.

**Approach**

The design, collection and use of evidence over the past eight years is deeply intertwined with the development of the Summer Literacy Initiative more broadly. The expansion of the program has been paralleled by the development of a program model, guiding principles, logic model, evidence roadmap, plans for a multi-year research design and accompanying implementation protocols, and other learning tools. At each stage, the Endowment and its program and research partners sought to identify the most important questions to answer to meet the evolving needs of the foundation, sites and other partners. As these questions evolved, there were corresponding changes in methods, data sources and external partners.
2013-2015: Laying the Foundation for a Program Model

How were the churches and the Endowment to know that they were “doing good, and not doing harm?” With this question in mind, the Endowment undertook an evidence building journey that started in 2013, when their key questions were:

1. Can rural churches implement summer literacy programs that produce positive outcomes for students in need?
2. What supports do churches need to implement a literacy program?
3. As practitioners, what do churches and teachers want to learn?

From 2013 to 2015, the Endowment asked their first site, and then their second, to use formative reading assessments during the six-week camps in order to track student progress over the course of the summer. After the first three years, the Endowment and churches had anecdotal evidence of positive student outcomes as well as informal formative assessments given by teachers. Both the summer reading teachers and students’ fall teachers reported student reading gains, leading the Endowment to believe that the camps were effective. Church pastors, site directors, volunteers and teachers all agreed that these camps were special and that there was a “magic sauce” that made them different from other district-based summer reading programs. Robb Webb, director of the Endowment’s Rural Church program, and Kristen Richardson-Frick, associate director, wanted to confirm these student gains with an external evaluation, so in early 2016 they engaged the author of this case study in what was to become a multi-year process of building and measuring evidence.

2016: Bringing in Outside Evaluation

Initial observations of the first two sites were that the programs had promising features (instruction tailored to individual student needs, skilled teachers in small classrooms,
wraparounds to overcome barriers to participation) and that each was committed to improving student reading outcomes, but that the sites functioned as independent entities. If the Endowment was to launch a “program,” it needed to develop a program model and guiding principles. What would make this program different from other summer reading camps? If other churches wanted to participate, what standards would they have to adhere to in order to be considered part of this program?

Drawing on my previous experience with a university-based research study of a summer reading intervention, I worked with the Rural Church staff on a plan for measurement and evaluation to answer their questions. With the Endowment and the two church sites, we developed an Implementation Guide that included six guiding principles and protocols for implementation. Evaluation questions and accompanying measures were developed for each guiding principle. I developed student, parent, teacher, site director, volunteer and pastor surveys, combining questions from validated instruments and ones unique to our sites. An independent contractor was hired to administer assessments such as running records and the Iowa Test of Basic Skills (ITBS) vocabulary and reading comprehension batteries.

After getting to know church teams and analyzing the 2016 summer data, despite seeing gains in student pre- to post-test scores, it was apparent that there were many inconsistencies in program implementation at the two sites. After discussing the findings with both sites and hearing from them how they hoped to improve and what questions they wanted to address the next year, I crafted a report for the Endowment that included recommendations to build evidence in a way that would further the Endowment’s research agenda and provide concrete instructional and programmatic guidance to practitioners:

1. Develop program guidelines that would give churches specific guidance about how to implement the programs
2. Collect teacher data to better understand classroom instruction and teacher experiences
3. Align evaluation goals with those of the sites. For example, teachers were collecting a wide range of formative assessment and progress monitoring data and independently tracking students’ state-mandated tests to look for student progress. It was clear that sites, and teachers in particular, had their own questions about student growth.
4. Start planting the seeds of fidelity of implementation with an eye to scaling up the program in the future

In 2017, with the same two sites implementing the program, the evidence focus shifted to an implementation analysis to confirm that the six guiding principles accurately represented the Endowment’s vision for the reading camps, and to assess how well sites adhered to these principles. Building on the recommendations from 2016, the Endowment, churches and I worked to tighten up program implementation using an Implementation Guide; teachers were surveyed to better understand their instructional approaches and experiences; new learning
questions were raised collaboratively among stakeholders; and tools to define and measure fidelity of implementation were introduced to make sure there was more consistency between the sites. This year was pivotal in establishing the program model, and a new set of key questions drove the data collection and analysis:

1. What defines the Rural Church summer reading programs?
2. What conditions enable successful implementation?
3. What supports do the programs need to implement according to the principles?
4. What data do programs need to be effective?

Findings from the 2017 evaluation were anchored to each of the six guiding principles, and my recommendations for the following year emerged from discussions with the Endowment and church teams. Specifically, I wanted to understand teachers’ experiences of participating in a research study while simultaneously being charged with shepherding their students toward higher reading levels. What was reasonable to ask of teachers who needed to focus on instruction while also adhering to program guidelines and data collection demands? Further, what did site directors need in order to improve student recruitment procedures, and how could they better engage families in their children’s summer reading experiences? On the funder side, what did the Endowment want to learn the following year, and what pieces of evidence did the Endowment Trustees need in order to continue funding the initiative? Pastors, site directors, teachers and Endowment staff provided invaluable information that led to a set of targeted recommendations:

1. Standardize data collection procedures and provide sites with templates and “containers” to store their data, rather than miscellaneous stacks of surveys and hand-written notes
2. Develop a set of model lessons with input from sites’ lead teachers
3. Provide professional development to guide classroom instruction and ensure consistency across classrooms and sites
4. Start earlier on student recruitment efforts
5. Do a literacy census in each district to see what other reading camp options were available to students

Importantly, 2017 was the first year that a large-scale impact evaluation was discussed, as the Endowment had a foundation-wide focus on funding high-quality, evidence-based programs, with the gold standard being a randomized control trial. Given this goal, providing sites with clear guidance and using measures that would capture growth became high priorities. My recommendations after the summer of 2017 also included tightening teacher hiring practices and standardizing assessments (to include staff-administered pre- and post-program tests as well as state standardized test scores provided by districts). Findings were shared with the Endowment leaders as well as the two church sites.
Feedback from the churches indicated that one of the biggest challenges was the use of the ITBS as our pre- and post-program assessment. Teachers noted that results for both the pre- and post-test were available only well after the camps had ended. They also expressed concern about a floor effect that limited the ability to capture changes in reading performance for those at the lowest reading levels. Teachers and site directors wanted data in a timely manner, and they cared deeply about ensuring that the tests measured changes in their students’ reading levels, regardless of starting point. They wanted to see student growth, but they were equally invested in seeing these programs expand if they were truly effective in supporting improvement in reading.

This feedback led to key changes. We provided prepaid overnight mailers so sites could ship tests directly for scoring and worked with the company to expedite scoring processes. We also switched to the Gates-MacGinitie Reading Test (GMRT) based on research and recommendations by reading experts. The Endowment team was keen to see test scores but also understood that qualitative data could complement reading scores to better understand the impact of these programs, so we expanded qualitative data collection with additional pre- and post-program surveys and interviews with church team members.

In 2018, a third church site joined the Summer Literacy Initiative, and the key questions driving evaluation activities were:

1. Are the summer reading programs producing intended gains in student reading skills?
2. What additional measures could be included beyond reading scores to measure the impact of the summer reading programs on students and their families?

The 2018 evaluation focused on program evaluation as measured by the GMRT, weekly teacher-administered formative assessments selected by teachers themselves and expanded qualitative measures.

That February, Kristen Richardson-Frick and I, along with a member of the Endowment’s evaluation staff, held a weekend-long retreat for the three sites’ pastors, site directors and teachers. After two years of listening to and responding to feedback from the site teams, it was clear that they had questions of their own, and that their input was essential to the evidence-building process. We also wanted to bring the sites together to form a learning community that could leverage each other’s ideas and expertise. Following a working session at that retreat, teachers proposed formative assessments in the areas of reading comprehension, decoding and fluency. They agreed that all three sites would use CARS (the Comprehensive Assessment of Reading Strategies), CORE Phonics, and Reading A-Z weekly during camp to track student progress in comprehension, decoding and fluency, respectively. By working closely with site teams, we were able to elicit teacher input in a way that was empowering to teachers, effective for measurement and helped bring consistency and fidelity to program implementation. The retreat also offered the opportunity to introduce Individualized Student Instruction Plans to teachers, who saw the value of outlining individual student reading goals and tracking them. This guided instruction helped teachers and the
evaluation team understand how well students were meeting reading goals. Finally, the retreat working sessions were used to introduce the idea of recruiting a control group, which would be essential for any future randomized control trial. We came away from the 2018 retreat with a much deeper understanding of what was required to implement the camps. We also came away with a conviction that building enduring, safe relationships with stakeholders was critical, and that, as we brought in new sites, it would be important for them to share experiences and best practices with each other.

2019: Additional Evaluation Resources
By 2019, 12 churches were queued up to host summer reading camps. It had become apparent that the Endowment needed a comprehensive roadmap, given their goal of a large-scale impact study to measure the effectiveness of what had become the Summer Literacy Initiative, or SLI. It was clear that this initiative was going to continue growing, given the great interest from churches and educators alike, and that it needed more direction and expertise than one person could offer. We needed to grow the evaluation team and bring in additional resources.

I connected the Endowment with Project Evident after conversations with a colleague there. Between January and March of 2019, the Rural Church program area collaborated with the Evaluation team at the Endowment and a multidisciplinary team from Project Evident to develop a Strategic Evidence Plan for the SLI. Project Evident helped to develop a learning agenda that aimed to leverage practitioner and community voices and advance actionable knowledge needed by the Endowment and its partners to make decisions about how to scale the SLI to best serve its communities. With a logic model and a roadmap for building evidence in hand, I continued to serve as an evaluator, while preparing to hand that role off in 2020 as the Endowment started the process of engaging a firm to continue evaluation activities.

Another key development in 2019 was a new partnership with the North Carolina's Department of Public Instruction (DPI), in which DPI endorsed the Endowment's church reading camps as a strong option for families whose kindergarten through second grade children were in critical need of summer literacy programming. Districts were required to offer Read to Achieve summer camps for all students not reading at grade level at the end of first through third grade, and DPI's endorsement gave churches credibility as they recruited. Church sites made sure to recruit students who were rising first through third graders in order to not overlap directly with the districts’ mandates for their own camps for rising fourth graders, which helped the Endowment develop its partnership with DPI. By offering complementary summer reading camps, rather than competing ones, churches were able to help districts and schools serve even more students in need of summer reading support.

---

2 The Read to Achieve program in North Carolina is a part of the Excellent Public Schools Act, which became law in July 2012. The goal of this program “is to ensure that every student read [sic] at or above grade level by the end of third grade and continue [sic] to progress in reading proficiency so that he or she can read, comprehend, integrate, and apply complex texts needed for secondary education and career success.”
The partnership with DPI also involved a shift in assessments. DPI used mCLASS DIBELS (Dynamic Indicators of Basic Early Literacy Skills) assessments three times during the school year, and I was able to work with DPI so that the SLI camps administered DIBELS every two weeks, adding to DPI's database so they could track student progress beyond the school year. Our approach in partnering with DPI was to invite their endorsement while also making it beneficial to them, as they were very interested in quality summer programs and in seeing how individual students progressed during the summer.

In 2019, the key learning questions that guided the evaluation were based on Project Evident's evidence roadmap:

1. Can churches across a broader range of rural communities implement the programs and produce intended outcomes?
2. How do churches adapt the principles and model for their communities?
3. Are there variations in outcomes that are correlated with implementation?

With 12 participating sites, we learned that there was great variability across the state, even if all of the programs were in rural areas. Local contexts, community demographics and partner districts contributed to different needs and agendas in participating in summer reading programs. It was important to recognize the tension between consistent implementation of a standard program model and adapting the program according to context. In other words, the evaluation efforts had to have both fidelity and flexibility.

Based on teacher and site director feedback about the pre- and post-program assessments not being timely enough, we made another switch to the Lexia RAPID after consulting with reading and psychometric experts at Project Evident. Teachers and site directors were sophisticated and thoughtful partners in examining the data, often asking how the assessments and classroom instruction were aligned to make sure students were being tested on what they were learning. The RAPID is a computer-adaptive assessment that is quick to administer and gives real-time results and we believed it better captured student growth in skill areas that were being taught in SLI classrooms.

Finally, to get a better sense of what was happening in classrooms across all sites, I added classroom observations to the evaluation using the Classroom Assessment Scoring System (CLASS). Two certified CLASS observers rated every classroom in three domains: emotional support, classroom organization and instructional support.

**2020-2021: Toward a Large-Scale Impact Study**

In early 2020, the Endowment engaged the American Institutes for Research (AIR) as an evaluation partner, and I officially shifted to the role of coach and technical advisor for church sites. This shift was due to several factors, all of which centered on making sure that, as a team, we were all building evidence for the SLI and moving toward a large-scale summative study. AIR brought its team of experts and resources to build on the previous years of
evaluation work, and I was able to fully support 13 sites in implementing their programs with fidelity and flexibility, particularly in light of Covid-19 challenges and restrictions.

The key learning questions that guided the 2020 evaluation were:

1. How do students’ outcomes vary by demographic background and program context?
2. What are the core or essential elements of the Summer Literacy Program model (e.g., location/setting, enrichment services, parent engagement) that predict program outcomes?
3. How should intervention fidelity be defined, and what variations are acceptable?

Historically, the Endowment's central leadership team, not just the Rural Church program area, expressed a strong preference for a randomized control trial (RCT) to establish evidence that the SLI resulted in meaningful reading gains for participants. Over time, the foundation has become increasingly open to exploring rigorous, high-quality quasi-experimental designs. Cultural shifts within the Endowment, along with pushback from different stakeholders at different times, have shaped the Endowment’s expectations, with both church partners and DPI expressing serious concerns that a random assignment evaluation would require denying some students access to an intervention that could potentially benefit them. Project Evident and AIR both offered non-RCT research designs that could produce rigorous evidence of effectiveness while addressing stakeholder concerns. AIR's willingness to engage in iterative, long-term discussions with the Endowment and stakeholders about the viability of different study designs is one reason they were brought in as an evaluation firm. They added to and joined the culture of a learning community. As we prepare for an impact study in the next few years, the RCT design and other options remain possibilities as all stakeholders work toward the best fit that will benefit the greatest number of students.

Challenges and Responses

Research Design

As indicated above, perhaps the biggest challenge in building actionable evidence has been in coming up with a research design that is both rigorous and feasible, particularly given the Endowment’s partnerships with churches and DPI, both of which leaned against a randomized control trial (RCT). My own experience in running RCTs also led me to lean toward this as the ideal approach but, even in 2016, I could see that there would be barriers to such a design. When I introduced the idea to our two church partners in 2016, I framed it as a pilot year in which we would see if we could recruit a waiting list, exploring whether we could generate a large enough sample to allow for randomly assigned treatment and control groups. Pastors, site directors and teachers were very concerned about the possibility of excluding any students who were in need of summer reading support. As churches with a mandate of doing no harm, their perspective was that establishing a control group necessarily meant “harming” half of the students. At that time, we were not yet ready to launch a full-scale RCT, so we continued to explore how partners might receive it. This obstacle came up again in 2019 with the DPI partnership, when state leaders explicitly said that, by law, they could not knowingly
place half of any group of students in a group that would not receive reading support that they needed.

The Endowment team has been very receptive to this pushback from both churches and DPI, and during no year have we successfully recruited a waiting list at all sites, nor have we pushed churches strongly. Nonetheless, the partners continue to explore designs that might be acceptable to key stakeholders while also generating more rigorous evidence of program impact. In engaging Project Evident, it was always a goal to see what other rigorous research design options might yield actionable evidence that would demonstrate student gains while making sure that partners were comfortable with the design. Project Evident offered a quasi-experimental design option in which SLI students would be compared to matched nonparticipants based on state DPI administrative data.

Interestingly, 2020’s Covid-19 restrictions led to program variations that may inform the design of a future study. For example, some sites offered a condensed four-week camp and still saw increases in reading skills at the end of the summer. This revived an earlier idea of offering back-to-back four-week reading camps, with half of the students assigned randomly to the first session and half to the second. This would allow for students assigned to the second session to serve as a control group during the first session.

Since joining the project, AIR has worked to better understand how churches recruit their students and how this might affect a future large-scale study: how many applications are sent out, by whom and to whom? How many applications are returned, and of these, which students are actually admitted, and on what basis? Recruiting procedures have varied across sites over the years, with some sites pre-selecting students based on teacher recommendations, admitting students on a rolling basis and closing admissions once the available slots are filled. As an initial step, AIR codified recruitment processes in 2021, asking all sites to make applications available to all students who are eligible based on reading score cutoffs that are consistent across the state. Sites were asked to distribute and collect applications on a given date, then fill their slots all at one time based on students with the lowest reading scores. Recognizing that churches have worked hard to establish relationships with families in their communities, priority was next given to siblings who also met reading score cut-offs, then to returning students if they still met reading score cut-offs.

This is an ongoing conversation as we continue to build evidence and determine the best research design that will meet the needs of multiple stakeholders. It is notable that all stakeholders are willing to take a “wait and see” approach to the research design, recognizing that, as we build evidence together each year, new insights might surface that make a particular design more or less feasible. Just as the 2020 sites showed us that four-week camps can yield positive student outcomes, stakeholders understand that changes in DPI or church perspectives might lead to more comfortably implementing an RCT design, or student administrative data might be matched in such a way as to lead to a rigorous quasi-experimental design. The priority each year has been to build evidence that is valuable
to the Endowment as well as practitioners, trusting that, as we build this base, we will come to a consensus on a design for a summative evaluation.

**Fidelity versus Flexibility**

As site numbers have increased, there is a tension in research between fidelity and flexibility – what program elements must be adhered to strictly, without exception, and where can we be flexible to allow for differences in local contexts and extenuating circumstances that inevitably arise? Both the AIR team and I have approached this with an emphasis on lifting up practitioner voices, understanding that they know their communities and parishes best. One example of this type of flexibility is when a site wants to serve a student who falls outside of the eligibility criteria. Without disrupting the small class size and teacher-student ratio, we have allowed churches to admit an occasional “extra” student who does not participate in evaluation activities such as testing and surveys but still receives the full range of instruction, enrichment and wraparound services. Another site has a student population that is 100 percent Native American, and for one week each summer the entire community celebrates a homecoming week. The site said that they needed to close their reading camp that week, and we saw this as an acceptable variation that respected the norms of the community. In both cases of acceptable variations, data were collected, evidence was built and practitioners’ judgments were validated.

At other times, variations have not been acceptable. For example, one church asked to host its reading camp at one of the local elementary schools, with the school and district playing a larger role in program implementation. This was a departure from a core guiding principle of housing the reading programs in a thriving and engaged church, rather than in a traditional school setting where students and families might have already experienced challenges that contributed to the current need for summer support. In this case, discussions with church and school leaders led to a better understanding of the SLI and how its goals were aligned with those of the district and school; district and church reading camps were held concurrently, allowing for more students in high need to be served. Striking the balance between fidelity and flexibility is often about making decisions based on trusting relationships; district and school leaders needed to trust that the church program would be beneficial, and not harmful, to their students, and the SLI’s evidence base up until that point helped build trust that it was a legitimate option for local students.

As the Endowment works to systematically understand which aspects of the program are essential to achieve desired outcomes, evidence-building activities since 2019 have attempted to identify critical elements using both quantitative and qualitative methods. Finding a balance between fidelity and flexibility therefore also means understanding where program adaptations are appropriate, or where they might jeopardize or limit the program’s intended outcomes for students.

**Bringing in the Lenses of Trauma-Informed Instruction and Cultural Humility**

One concern was that church congregations and the populations they serve in the SLI often come from different racial and socio-economic backgrounds. This came to the fore at one
site when afternoon volunteers, who were mostly older retirees, tended to approach behavior and discipline in ways that did not always reflect an understanding of how adverse childhood experiences and toxic stress can impact children's brain development. In 2019, I worked with Kristen Richardson-Frick and the Endowment’s associate director of evaluation, Laila Bell, to introduce trauma-based approaches to instruction and cultural humility. Beginning with our onboarding retreat, we provided resources about adverse childhood experiences and how they can impact children's learning processes. We also brought in guest speakers trained in cultural humility to talk about the role of the church in serving its community. Site teams were very open to these sessions, and we received feedback about how it impacted their training of church volunteers. Some sites began to lay the groundwork for forming parent advisory councils to incorporate parent voices in the summer reading program. Other sites responded by making sure that their summer program materials were translated into languages used by their families, and one site intentionally adjusted some of their teaching practices to meet the tactile learning styles they learned might meet the learning preferences of their Native American students. Because trauma-informed approaches and cultural humility are now embedded in our work, we have recently shifted toward referring to them as core program values rather than as lenses (a term that might imply they are put on and taken off at different times).

As a technical assistance provider and coach to the churches, incorporating these values has made me think more carefully about training and professional development. If we know that children’s learning can be impacted by adverse childhood experiences, how do we create classroom spaces that will best facilitate learning for all students? What instructional practices will allow for differentiated learning based on specific student needs? What data will show us these areas of need in order to drive individualized instruction? How do we engage parents in ways that are empowering to them and respectful of their home contexts? These types of questions are highlighted during team meetings with church teams, the Endowment and AIR as we continue building evidence in service of our students and families.

Results
Student Outcomes
Evaluation findings have consistently indicated statistically significant student reading growth, positive changes in student attitudes and behaviors related to reading, and positive changes to the child’s home literacy environment. Specifics are detailed below:

- **2016**: Three months of reading comprehension growth as measured by the ITBS; increases in reading accuracy and speed as measured by running records; positive effects on student reading behaviors and attitudes

- **2018**: Statistically significant gains in raw scores and National Percentile Rank across all sites and all grade levels, with students gaining on average three months of learning as measured by the GMRT; weekly gains in comprehension, fluency and decoding; positive effects on student reading behaviors, attitudes and intrinsic
motivation, as well as increases in parental engagement with their children around literacy activities

- **2019**: Statistically significant gains in Reading Success Probability and all three of its component domains (Word Reading, Vocabulary Pairs and Following Directions) as measured by the Lexia RAPID assessment; gains on the DIBELS formative assessments; positive effects on student reading behaviors, attitudes toward reading, intrinsic motivation and home literacy environment; increases in parental support of their children around reading activities

**Strengthening Partnerships**
Findings are shared with stakeholders each year as soon as they are available. We share

### Results on Core Outcomes

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>~40</td>
<td>~70</td>
<td>~200</td>
<td>~140*</td>
<td>~265*</td>
</tr>
<tr>
<td>Pre/Post Assessment</td>
<td>ITBS</td>
<td>GMRT</td>
<td>Lexia RAPID</td>
<td>Lexia RAPID</td>
<td>Lexia RAPID</td>
</tr>
<tr>
<td>Reading gains</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Student reading behavior</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Student attitudes/beliefs</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Student intrinsic motivation</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Parent perception of shifts in student reading behavior</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

* 2020 and 2021 enrollment were affected by Covid-19 pandemic conditions

aggregate findings in a large-group meeting, and feedback and questions are documented. Then, Endowment staff and I meet with each site individually to share a “data card” that outlines that site’s student demographics, pre- and post-test results, as well as student and parent survey findings (in aggregate) that show changes in student intrinsic motivation, attitudes toward reading and home literacy environment. During these individual site “after-action review” meetings, we take notes on a shared screen, asking guiding questions about what surprised sites, what challenges they faced and how they might iterate and improve the next year. These notes are shared with the sites immediately, and again at the following year’s planning retreat. In addition, the Endowment puts together a public-facing document for each site that they can share with school and district partners as well as their congregations. We have found that churches are keen to use these findings each year to
improve their engagement with families and students, their instructional practices and their wraparound services.

Each year, as we have expanded data collection, added new sites and built evidence, there is more commitment from partners who see the impact of the programs on children and families. This incremental approach to building evidence and making transparent the research goals has reaped big benefits in stakeholder buy-in as well as funder commitment to the SLI. Practitioners believe that their contributions are not only welcome, but valued, so we generate new learning questions each year in a collaborative way. The Endowment continues to invest in my role as well as that of AIR, understanding that it takes time to build actionable evidence, and that a long-term commitment is needed in order to yield results that will lead to a sustainable, scalable program.

Alignment with Actionable Evidence Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>In This Case...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Centers on Community Needs and Voices</strong>&lt;br&gt;Addresses the context, perspectives, priorities and assets of students and families, along with the challenges they face</td>
<td>The design and implementation of the summer reading programs are responsive to the needs of students and families, from providing wraparound services such as meals and transportation to introducing a one-week program hiatus for the Lumbee Homecoming cultural celebration at a site serving Lumbee students. From the perspective of evidence building, this may mean simply ensuring that core implementation is not compromised (e.g., that the site serving Lumbee students still offers 4-6 total weeks of programming). In some cases, there are opportunities to learn from variations, as AIR is seeking to do by examining data from sites that adopted different approaches to wraparound support in the Covid context.</td>
</tr>
<tr>
<td><strong>Prioritizes Practitioner Learning and Decision-making</strong>&lt;br&gt;Answers questions that are highly relevant to policy and practice, and that help practitioners prioritize decisions in service of</td>
<td>Evidence related to SLI is built and used by multiple types of practitioners, each with their own questions and needs. The author maintained frequent and close contact with stakeholders to understand their priorities and the daily realities of implementation. The Duke Endowment plays the roles of both funder and practitioner with SLI. As practitioners, the Endowment staff had to demonstrate to their internal stakeholders that this program was</td>
</tr>
</tbody>
</table>
**students and families**

effective, which drove evidence building in the direction of a randomized control trial, a quasi-experimental design or another rigorous design that can quantify student reading outcomes (an ongoing conversation). Along the way, they used data to make decisions about grantmaking, technical assistance, codifying the program model, scaling strategy and evaluation planning.

Church teams, including teachers and site directors, are also practitioners. They are motivated by the desire to serve their communities and to provide reading camps to as many children and families as possible. Their desire to build evidence has evolved, from viewing evidence as an interesting byproduct of a good program to becoming partners in evidence building in order to effectively serve children at risk of reading failure. Site directors, many of whom are retired reading teachers, challenged the Endowment to use assessments that actually measure what is being taught in the reading camps, and encouraged us to align summative assessments with progress monitoring. In 2020, an Instructional Advisory Council composed of site directors was formed to leverage their expertise and prioritize their learning needs.

| Enables Timely Improvements | **Enables Timely Improvements**
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows practitioners to make evidence-informed decisions in a timely manner</td>
<td>Data and evaluation timelines are deliberately aligned with programmatic and decision-making needs. For example, in order for churches to get high response rates on surveys at the beginning of programs, they need survey instruments to be ready for their open houses or program orientations. Research partners had to adjust survey development schedules to meet the needs of the very first church that started implementation. Findings from our certified CLASS observers are also turned around quickly in order for site directors to use this information as they train and/or recruit their teaching teams for the following summer. Also, after-action reviews with sites allowed them to reflect on program results, identify what contributed to those results, and then consider and document how they might adapt or improve their programs in response. Each site's learnings are then used for the next year's planning and help sites incorporate lessons learned.</td>
</tr>
<tr>
<td><strong>Credible and Transparent</strong></td>
<td>The Endowment placed a high priority on using high-quality data and rigorous analysis from the outset. Rather than relying on anecdotal evidence or their own internal evaluation team, they first engaged the author, then Project Evident and finally AIR to provide external program evaluation. They recognized the need for external evaluation and a rigorous research design, along with strong data analysis to find out about cost-effectiveness, essential elements of the program model and variations by local context. The project has prioritized the use of established assessments that are not only valid and reliable but allow for comparisons to relevant populations. In addition, the Endowment engages in a collaborative process of sharing data back with the sites in aggregate and individually, reflecting on data and processes through feedback loops that promote transparency and continuous improvement. The Endowment values both quantitative and qualitative data, including summative and formative assessments as well as surveys and focus groups, in order to best represent the impacts of the program on students and their families.</td>
</tr>
<tr>
<td><strong>Responsive to Operational Context of Practitioners</strong></td>
<td>As noted above, the evidence building approach is deeply attuned with the context of practitioners at the Endowment as well as at church-based program sites. One additional contextual factor is the unique partnership with the North Carolina Department of Public Instruction (DPI). In partnering with DPI, the Endowment made the choice in 2019 to align with the state for formative assessments/progress monitoring tools to drive individualized student instruction. Teachers, who had previously recommended other tools for these formative assessments, agreed that aligning with state and district assessments would build continuity from the school year into the summer, making the data useful for practitioners at the state and local levels.</td>
</tr>
<tr>
<td><strong>Accessible and User-Centered</strong></td>
<td>Data collection webinars at the outset of the program explain what it means to participate in research, why researchers ask for each piece of data and how we will use it – offering an opportunity for site directors and teachers to express any concerns about any data we ask for. We also talk about how sites themselves will have access to data and how they would like to use it. Practitioners can engage with evaluation and data in multiple forums, including retreats, webinars, annual one-on-one reflection sessions with sites and peer learning opportunities. The author worked with the Endowment to ensure that site-specific “data cards” are accessible and usable, and we are consistently pleased with the degree of knowledge that pastors, site directors and teachers have about data and how to use their data.</td>
</tr>
<tr>
<td>Builds Practitioner Capacity for R&amp;D</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Provides practitioners with data, products, tools and trainings to own and advance their evidence agenda</td>
<td></td>
</tr>
</tbody>
</table>

The formation of an Instructional Advisory Council in 2020 is one way that we are building capacity. We view site directors as leaders in helping to align assessments with instruction, providing training webinars on instruction (i.e., focusing on vocabulary instruction) and social and emotional learning/trauma-informed approaches to instruction.

<table>
<thead>
<tr>
<th>Attends to Systemic and Structural Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considers systems, policies, practices, cultural norms, and community conditions that drive inequity, including those related to poverty and racism</td>
</tr>
</tbody>
</table>

A fundamental goal of the Endowment’s SLI is to narrow achievement gaps and reduce disparities in educational outcomes among different populations of students. Students in rural areas often have less access to programs than their peers in suburban and urban areas, thus widening the achievement gap, particularly during summers. The design of these reading programs is to target students who are most in need in order to help close gaps over the summer.

One guiding principle of the initiative is that churches provide wraparound services (i.e., meals, transportation and full day care). Sites identify and address barriers that may hinder a child’s participation in the program, which often represent underlying inequity related to poverty and racism.

Program-related materials are offered in multiple languages as necessary based on the home languages of students and guardians.

Church sites are asked to use a lens of cultural humility in their hiring processes, especially as it relates to teachers and volunteers from the community. Sites are encouraged to think about the adults involved in the program, including teachers and church and community volunteers, and how they might reflect the backgrounds of the students and families that they serve.

The Endowment shares data cards that, as of 2021, include the racial demographics of targeted schools as well of the site, side by side, so programs can see how representative their programs are of local school populations.

Every year, several churches will ask to admit a few students who fall outside of the research guidelines (reading scores are too high, age range is outside of parameters, etc.), but whose families they want to serve. We always say yes, include them in your program, but we won’t include them in the study. This is one way churches move within their communities as service providers, understanding that sometimes they need a touchpoint to help families know that they are loved and cared for. Almost always this is related to race and poverty, as families need food or childcare that they wouldn’t otherwise receive if the church didn’t welcome them in via the reading camp “gateway.”
Reflections and Conclusion

The multi-year collaboration around The Duke Endowment’s Summer Literacy Initiative is unique in its approach to building actionable evidence in several notable ways:

Intentionality

There has been an intentional plan to build evidence, continuously learn and iterate on the learning agenda, improve on measurement and data collection, and scale up the programs across sites at a cadence that allows for reflection and midcourse adjustments. The details of that plan, though, have unfolded year after year based on learnings, new questions and outside circumstances such as the Covid-19 pandemic. This has taught stakeholders to hold plans lightly, while still remaining focused on and even clarifying the “must-haves” that anchor the initiative.

Flexible Use of Evaluation and Technical Assistance Resources

The author’s own role as researcher and evaluator has evolved over time as the initiative has grown and project needs have changed. For me, this has offered tremendous freedom to move between the roles of outside evaluator and coach, or what I think of as walking alongside church teams as they learn and improve their programs each year, all with the shared goal of building evidence to support programs that we believe can transform the lives of children and families. My research background, combined with the relationships and knowledge about SLI that I have built over the past five years, position me to make research accessible and actionable for the church teams while also connecting this work to the field. The Endowment has continued to fund my role in different capacities, valuing the institutional knowledge that comes with my years working on the initiative — and has, more recently, invested in bringing on new partners that offer different resources and complementary expertise. As the project’s needs have changed, the team has changed with them. This has required not only resources but also humility, collaborative spirit and a willingness to transcend what is sometimes seen as a strict boundary between researcher and advisor.

Strong Partnerships that Elevate Practitioner Voices

As a team, we have learned that building trusting relationships takes time, transparency and commitment. Practically speaking, churches’ commitment to “doing good” has meant respecting teacher and site director voices as they deliver the program. As the ones directly interacting with students and families, they provide feedback that informs the research design, data collection processes, data collection tools, use and sharing of findings, and instructional practices. As different voices have been heard and valued, perspectives and priorities have shifted. For example, foundation leaders who had previously strongly advocated for an RCT design to demonstrate program effectiveness have been willing to listen to Rural Church Program leaders, evaluators and practitioners as we continue to make difficult decisions about research design and measurement. Trust, coupled with evidence,
makes it possible to truly elevate practitioner voices; building trust and evidence have certainly given credibility to how the initiative has developed and been measured.

**Funder Commitment**

The Duke Endowment has made a commitment to actionable evidence by adopting a hands-on approach to recruiting church sites, supporting implementation by funding the role of a coach, involving different evaluation partners to align with specific stages of evidence building and engaging in a reflective process of learning and improving each year.

Researchers and evaluators have to want this type of involvement from a funder, as a collaborative approach like this takes time, sensitivity and an openness to review and input in order to improve outcomes for students. By the same token, funders have to want to commit to an initiative like this that requires time to build evidence, willingness to listen to practitioner voices and giving up some of the power that typically comes with being a funder. As such, this initiative is unusual in its shared commitment by all parties to serve students and families.
Resources and Further Reading


Hossain, Farhana, May 2021. “Mobilizing Rural Churches to Improve Early Childhood Literacy in North Carolina: How The Duke Endowment is Using Evidence to Build and Scale a Summer Literacy Program in Rural Communities,” Project Evident.
About the Author

Dr. Helen I. Chen is a consultant and the owner of Highland Consulting, LLC. Helen provides thought partnership to leaders intent on delivering high-quality, evidence-based programs, at scale, with the goal of reducing gaps in opportunity. Helen guides organizations in program evaluation, project management and coaching to improve their direct services and capacity for scale and sustainability.

Author’s Acknowledgments

The author wishes to thank all those who have contributed to the design, implementation and improvement of The Duke Endowment Summer Literacy Initiative throughout the years, including Endowment staff (especially Kristen Richardson-Frick, Laila Bell, Robb Webb, Bill Bacon, Michele Manceaux and Yara Quezada), church leaders, SLI site directors, teachers and evaluation partners at AIR and Project Evident. Thanks are also due to the students and families who have participated in learning and evaluation activities.

Case Keywords

K-12 | rural | program design | implementation support | program improvement | impact evaluation | surveys | student assessments | nonprofit service provider | foundation | external evaluator | academic learning outcomes | trauma-informed approaches | cultural humility