

ServeMinnesota's Reading Corps

Case Study on Using Evidence for Improvement

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Overview

This issue brief is part of a series of publications of the Forum for Youth Investment (Forum) focusing on how policymakers can better use evidence to improve the lives of children, youth, and their families. It follows the Forum's recent report [*Managing for Success: Strengthening the Federal Infrastructure for Evidence-Based Policymaking*](#), which provided a landscape scan of the federal infrastructure for evidence as of January 2017 and recommended ways in which policymakers could better coordinate and strengthen the use of evidence across the federal government.

The report organized the recommendations into three categories: elevating evaluation, integrating multiple types of evidence into decision-making processes, and using evidence for improvement.

This brief serves as a case study for the third category of recommendations and will take a broader look at how evidence can be used to improve programs by highlighting ServeMinnesota's use of evaluation and data to improve its Reading Corps program.



Contents

- 01** Using Evidence for Purposes of Improvement
- 02** ServeMinnesota and Reading Corps
- 04** Key Findings
- 07** Conclusion and Takeaways for Policymakers



Using Evidence for Purposes of Improvement

Evidence can be used in a variety of ways. Often it is used to justify increasing or decreasing funding for a particular program through the annual budgetary process. Whereas that may be a worthy way to use evidence, such use will generally be limited. It is unrealistic to think that policymakers will increase funding for every program that is backed by reliable evidence given ongoing budget constraints at all levels of government. It is similarly unrealistic to think that funding will be eliminated for every program that lacks reliable evidence as programs may have constituencies who will support them regardless. The problem a particular program is attempting to solve will also not resolve itself after cuts are implemented.

Both such uses can quickly take on a partisan nature, which limits their reach and can trigger a backlash against the creation and use of evidence itself. There is less incentive to use evidence if evidence of impact does not necessarily lead to funding increases and evidence of little or no impact does not necessarily lead to the consideration of new approaches.

A third option is needed if advocates are going to scale the use of evidence so that it becomes a pervasive feature of how government operates at all times. This third option can include both broadening the types of evidence that is conducted (including but not limited to impact evaluations) and broadening the ways that it is used. The Forum's report *Managing for Success* highlighted how policymakers should use evidence to improve programs outside of the regular budgeting process.

Improvement through the use of evidence can take many forms. Policymakers can incorporate a “pay-for-success” model into their work that provides funding based on results achieved rather than services delivered—encouraging a focus on improvement. Officials can introduce new or modified program components into their current model based on new research or evaluations. Policymakers have also started to use performance data to test small-scale interventions that incorporate behavioral science insights.

What all of these strategies incorporate is strong attention to the use of evidence in all its forms, with careful attention to each form's strengths and weaknesses, throughout the policymaking process.

This often requires supports within the program that can inform policymakers about how a program is being run and what effects it is having on its target population as well as clear strategies or processes to incorporate new findings into ongoing theories of change.

In this issue brief, we examine the decision by ServeMinnesota's Reading Corps to add a new weekly monitoring component for students after they exit the program's primary intervention component, literacy tutoring for students with an AmeriCorps member. We present the evidence that led to the creation and piloting of this new component and the initial results from the pilot suggesting its success.

ServeMinnesota and Reading Corps

ServeMinnesota is the state's administrator for federal AmeriCorps funding, which is provided by formula and competitive grants from the federal Corporation for National and Community Service (CNCS). The organization provides grants to local nonprofits that are part of the AmeriCorps program as well as trainings and technical assistance for 15 AmeriCorps programs. ServeMinnesota also ensures that those organizations are in compliance with federal law and monitors the activities of approximately 1,800 AmeriCorps members working in Minnesota.¹



One of ServeMinnesota's largest programs in terms of overall budget and individuals served is Reading Corps, which trains AmeriCorps members to provide individual reading and literacy tutoring to children. The goal of the program is for all children to meet reading proficiency targets by the end of the third grade. Reading Corps is available for both pre-kindergarten (pre-K) and kindergarten-through-third-grade (K-3) students and takes place within schools. This case study focuses on the K-3 portion of the program.

The program requires clear literacy targets at each grade level from pre-K through grade three and benchmark assessments three times a year to identify students in need of one-on-one interventions.² Students who fail to meet certain grade-specific benchmarks during these assessments are placed in the one-on-one tutoring program.

Tutors provide individualized literacy interventions, use regular assessments to monitor student progress, and return students to standard classroom activities after they demonstrate growth. Tutors typically work with 15 to 18 students each day for roughly 20 minutes each.³ These tutoring sessions generally focus on standard literacy concepts for each grade level such as phonological awareness, phonics, fluency, vocabulary, and comprehension.⁴



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The power of AmeriCorps. The power of you.

The program includes support from an on-site coach who ensures individual tutors are implementing the program correctly and a master coach who helps on-site coaches and tutors use the data they are receiving to make informed decisions about when students should exit the program.⁵ Tutors, internal coaches, and master coaches all receive training during the summer prior to the school year.

The program started in 2003 and now serves 30,000 students at more than 800 sites across the state of Minnesota.⁶ The program is now the largest AmeriCorps tutoring program in the country.⁷

Policymakers fund high quality research that not only demonstrates the effectiveness of the program, but also identifies possible ways to keep improving it.

In March 2014, NORC at the University of Chicago completed an evaluation of the impact Reading Corps has on short- and long-term literacy outcomes. Funded by CNCS, the study utilized a rigorous research design. To select schools for the study, evaluators used stratified random sampling to divide schools by how urban or rural they were as well as by overall need for literacy services based on the number of students the program had previously served.

Students at the 23 selected schools completed a benchmark assessment in the fall. Students identified by this assessment as eligible for Reading Corps were then randomly assigned to a treatment group (receiving the program's services) or a control group (not receiving the program's services). Students were matched with another student with an identical benchmark score from the other group for the purposes of comparison. The study ultimately included 1,341 students.

AmeriCorps tutors provided students in the treatment group the standard services and collected outcome data through regular triannual benchmark assessments as well as through weekly progress monitoring. Students who achieved high enough growth in their literacy skills based on the benchmark assessments were transitioned out of the program and back into standard classroom arrangements.⁹

The research design included a number of key elements that proved instrumental in allowing program developers to use the findings to identify ways to improve the program. The design assessed the impact of the Reading Corps program for the treatment group as a whole, but also for various subgroup populations (by race, gender, dual-language-learner status, and free- or reduced-lunch-eligible students). The study collected information about the background of the tutors as well. The study also looked at weekly monitoring data to better understand the pattern of program impacts over time as well as a full year of assessment data to better understand the long-term impact of the program on K–3 students.

KEY FINDINGS

*** The intervention had positive effects on literacy skills for most students.** The study found that “kindergarten, first and third grade students who received [Reading Corps] tutoring achieved significantly higher literacy assessment scores by the end of the first semester than did control students who did not participate in [Reading Corps] tutoring.”

*** The educational background of tutors did not appear to affect student results.** Data showed no significant differences based on the background of the tutor each student interacted with, suggesting that even AmeriCorps members without an education background can successfully implement the program.

*** Younger participants benefited the most.** Younger students typically demonstrated higher gains in literacy skills with third-grade students experiencing lower effects and second-grade students experiencing no significant effects. The study also found that some subpopulations of third-grade students (black and Asian students as well as dual-language learners) experienced no significant effects.

*** Younger participants improved fastest.** Weekly monitoring data showed that kindergarten students tended to show immediate and large gains during the first few weeks they received tutoring while first-, second-, and third-grade students tended to show smaller, steadier progress over the course of their participation in the program.

*** Starting earlier in the school year improved longer-term outcomes.** The study found that “participating in [Reading Corps] result[ed] in longer-term effects on literacy outcomes when interventions begin earlier in the school year” suggesting that “early intervention from [Reading Corps] for struggling students results in a higher likelihood of positive longer-term outcomes.”

The specificity of these findings allowed policymakers and program developers to identify possible ways to make this good program even better. Since the research showed that second and third graders had less literacy gains than younger students, program developers were able to focus their attention on making programmatic changes for those grade levels. And since second- and third-grade students tended to show smaller, steadier progress over the course of their participation, program developers were able to hypothesize that they may benefit from staying in the program for a longer duration, and that they may benefit from receiving some form of monitoring and support after they exit the program.

ServeMinnesota funds a follow-up study to learn more about an aspect of the program targeted for improvement: how and when students should exit the program.

As policymakers and program developers examined the question of how and when students should exit the program, they found a gap in the research literature: whereas many studies address the effectiveness of interventions supporting student literacy, less information is available on when it is appropriate to stop providing students with additional support and what effect ending such support will have on longer-term literacy outcomes.

ServeMinnesota helped address this gap in the literature by internally funding a follow-up study that examined “the extent to which students exited from an intervention . . . maintained target-level performance at the end of the school year and at the beginning [of] the following school year.”

The study assessed student outcomes based on data from triannual benchmarking assessments and weekly progress monitoring sessions. Data came from 10,885 students across schools located in multiple states. All students participated in the daily tutoring sessions that are the primary component of Reading Corps and are provided by AmeriCorps members.

It is important to note that the study was limited to students who received the intervention and did not include a comparison group of similarly at-risk students who did not receive the intervention (it was not possible to determine a “base rate” for the various outcome data measured).



“Since the research showed that second and third graders had less literacy gains than younger students, program developers were able to focus their attention on making programmatic changes for those grade levels.”

KEY FINDINGS

*** Students who achieved literacy benchmarks, and therefore exited the tutoring program, had higher longer-term outcomes than students who never achieved the literacy benchmarks (and therefore remained enrolled in the tutoring program).** While this may seem self-evident, it is still an important piece of the puzzle to understand. The study found that students who exited the intervention “tended to have a higher probability of achieving key long-term benchmarks than students who were not exited from the intervention.” The tutoring intervention is effective in achieving higher literacy outcomes, even as researchers are interested in understanding whether those outcomes are as high as they could be.

*** The longer-term outcomes for students who achieved literacy benchmarks, and therefore exited the tutoring program, were lower than hoped.** The study found that while “a large number of students who were exited from [Reading Corps] based on grade-level performance maintained that trajectory of growth over time . . . the observed results point to a concerning rate of decline among students who receive—and successfully respond to—supplemental reading support.” A significant number of students who achieve literacy benchmarks that are “indicative of grade-level proficiency,” and therefore exit the tutoring program, subsequently “fail to meet spring and fall benchmarks.”¹⁸ The evaluators conclude, therefore, that “the probabilities of students successfully exited from [the] intervention going on to meet the spring and fall benchmarks were lower than might be expected.”

Although the benchmark scores were lower than expected, it is important to emphasize that the outcomes were still higher (as shown in the first study). This study, however, pointed to a potential flaw in the intervention. If some of the students who assess out of the program and return to standard classroom-based services fail to meet grade-level benchmarks, then the intervention will struggle to improve long-term reading outcomes by the end of the third grade, a key indicator of future academic success. Policymakers needed to find a way to sustain the initial results they were seeing among all of the students.

Policymakers and program developers test improving Reading Corps by adding a weekly monitoring check-in for students who have exited the program.

The authors of the evaluation study described above recommended several strategies to support those students who had left the program. One approach, which policymakers and program developers decided to pilot, was “closely monitoring the reading performance of students after the decision to remove supplemental support” as “students who were previously at risk for reading problems may require additional support despite responding to an intervention and meeting intervention exit criteria.”

ServeMinnesota decided to embark on a pilot study adding a weekly monitoring check-in for students who had exited the program. This approach was seen as a potentially low-cost, low-intensity solution as weekly monitoring sessions last only roughly five minutes per week for each student. If successful, the monitoring component might even pay for itself by reducing the number of students who exit the program, fall behind, and then later have to be reenrolled to catch back up again.

The pilot study looked at students who participated in Reading Corps during the 2017–2018 academic year, had both fall and spring benchmark scores, and met the intervention exit criteria during the year. A sample from this group participated in a new pilot that involved weekly post-exit progress monitoring. The pilot used propensity score matching to create a control group of students with academic and demographic profiles similar to those of students in the intervention group. All of the students in the intervention group completed triannual benchmark assessments and grade-specific weekly progress monitoring exercises as well.

It is important to note some of the study’s limitations: there was no randomization of tutors or students in the study, which would provide better data on causal effects of this intervention, and the study could not account for any differences in classroom settings between the students, which may have an effect on differences in student outcomes.



KEY FINDINGS

*** Students who participated in weekly monitoring sessions had a higher probability of reaching literacy benchmarks during spring assessments than those who did not.** The evaluation demonstrated that progress monitoring did act as a low-intensity practice opportunity for students and “may offer some protection against declines in student performance” as measured by the increased probability of the students engaging in the weekly monitoring sessions reaching the spring benchmark assessment target when compared to the control group.²³

*** Male students and first-grade students may benefit the most from the monitoring component.** Male students and first-grade students stood out from the rest of the sample as students who had a particularly low probability of end-of-year success once they exited from the tutoring intervention. The authors suggest that these groups of students—because of that elevated risk—are more likely to benefit from ongoing monitoring sessions once they exit the intervention.

This pilot shows that the weekly monitoring sessions for students who have assessed out of the initial tutoring sessions can help maintain literacy gains and ensure that more students reach their benchmark assessment targets.

In 2018, an additional study conducted by NORC through an Innovative Approaches to Literacy grant funded by the U.S. Department of Education further supported the hypothesis that second- and third-grade students benefit from a longer duration of time in the program.

This study found that if you support second- and third-grade students for the entire school year (rather than just one semester) they do in fact show strong gains.

Although it did not include the weekly progress monitoring checks that were the focus of the pilot, the 2018 study still suggests that adding the weekly monitoring check-in for students who have exited the program was, in fact, a wise way to improve the program.²⁴

Conclusion and Takeaways for Policymakers

CNCS made a strategic investment funding a sophisticated evaluation of ServeMinnesota's Reading Corps program that not only demonstrated its effectiveness but also revealed opportunities for it to continue to improve. Key lessons from this experience include these:

Invest in grantees' internal research capacity. With support from CNCS, the Minnesota state legislature, and private funders, ServeMinnesota has created its own internal research and development capacity. The organization has several staffers involved in research, evaluation, and performance monitoring efforts, which allows it to create and manage a sophisticated data management system. In addition, internal staff members routinely leverage the interests of academic researchers to address applied research questions that have bearing on AmeriCorps programming as well as the existing academic knowledge base. The internal research capacity and strong connection with other institutions of research positions ServeMinnesota not only to participate in a sophisticated evaluation but also to then use the results in sophisticated ways to improve its programming over time.

Invest in studies designed to ascertain not only whether a program works but for whom the program works, in what contexts, and implemented in which ways. Policymakers often want to know whether a program works, and they fund evaluations that provide more or less a yes or no answer. For Reading Corps, policymakers invested in a more sophisticated research design that provided information that not only revealed that the program, on average, works, but also suggested ways to improve it. While such an evaluation design may be more expensive, that investment will often pay off by improving program results.

The 2018 evaluation also showed that the program worked particularly well for younger students as well as various subpopulations, such as boys, African Americans, and English-language learners. This type of information could help administrators target the program to those who will gain the most from it.

Fund and evaluate pilots based on research findings.

Evaluations in and of themselves never change children's lives. It is only the use of such findings to make changes to a program that can achieve those ends. As this case study illustrates, such changes do not always need to be costly; sometimes a strategic change can be at low cost or no cost. But the last step is an essential one: an evaluation is necessary to test whether the change worked before rolling it out to a broader set of sites.

Build relationships and trust. Too often, grantees fear the prospect of being evaluated, seeing it as a potential first step toward declaring the program ineffective and shutting it down. Reframing evaluations as part of a process of program improvement can open up the type of candid conversations through which policymakers and program designers can view each other as partners striving toward the same common end: a program that delivers the best possible results.

By asking the right types of questions, investing in research designs that can answer them, and building partnerships between researchers, practitioners, and policymakers, CNCS, ServeMinnesota, and Reading Corps have demonstrated just what is possible when you set out to use evidence to improve programs and policies.



Endnotes

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- ¹⁴ P. Nelson, E. Van Norman, and D. Parker, “An Examination of Student Reading Outcomes Following Tier II Exit Decisions,” Journal of School Psychology 68 (2018): 145.
- ¹⁵ Ibid., 145-146.
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- ²⁰ Ibid., 151.
- ²¹ P. Nelson and D. Parker, “Let’s Stay in Touch: Maintaining Intervention Effects via Ongoing Progress Monitoring,” draft document, 4-7.
- ²² Ibid., 10-11. 23 Ibid., 9.
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