The National Tutoring Corps: Scaling Up Proven Tutoring For Struggling Students

Concept Paper

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Executive Summary

We are facing an extraordinary crisis in the education of disadvantaged students in the U.S. These students have long performed below the level of other students on average, but the Covid-19 school closures have added a great deal to their educational disadvantages.

Among all types of educational programs, none are as effective in accelerating the reading and math achievement of struggling students as structured one-to-one and one-to-small group tutoring. This concept paper proposes a strategy to provide proven tutoring programs to millions of students in grades 1-9.

Objectives:

1. Provide proven tutoring programs to as many struggling students in grades 1-9 as possible. We estimate serving four million children per year starting in 2021-2022.
2. Develop, pilot, and evaluate new programs, especially for middle and high schools, to extend availability of proven programs for scale-up.
3. Identify already scaled-up but unevaluated programs and evaluate them.
4. Continuously develop a substantial set of proven tutoring models capable of serving millions of students struggling in reading and mathematics, and deliver these effective approaches to increasing numbers of students.
5. Use tutoring as the start of a tutor-to-teacher pipeline to add capable teachers in hard-to-staff areas.

Our proposal has three distinct phases:

Phase 1 (January-August, 2021)

- Establish a steering committee
- Identify tutoring programs proven to increase student achievement in reading and math.
- Invest in building capacity for proven programs to greatly increase scale.
- Establish demonstrations to help proven programs learn to manage scale, with approximately 2000 tutors in total.
- Fund capable developers to create and pilot new programs, especially in secondary reading and math tutoring.
- Fund organizations with existing scaled-up programs to establish demonstrations at larger scale.
- Fund Title I schools to hire about 100,000 tutors to implement proven programs starting in September, 2021.
- Contract with third-party evaluators for evaluations of new programs, and design a common evaluation design for all programs.

<u>Phase 2 (August, 2021-August, 2022)</u>

- Launch scaled-up implementations of proven tutoring programs, with approximately 100,000 tutors.
- Launch third-party evaluations of new programs that are ready for evaluation.
- Launch evaluations of scaled-up but unevaluated programs.
- Report on outcomes, and identify additional proven programs to add to scale-up.
- Continue development and piloting of new programs.

Phase 3 (September, 2022 and beyond)

- Add 50,000 tutors each year starting in 2022-2023 to enable additional scale-up, especially of new programs.
- Continue development and piloting of new programs.
- Continue evaluations of new programs.

The National Reading Corps: Scaling Up Proven Tutoring for Struggling Students

Disadvantaged students in the U.S. have long performed below other students on average, but the Covid-19 school closures have added a great deal to their educational difficulties. No one knows exactly how much they have lost, but most of these children have profited little, if at all, from remote instruction, and by the time schools re-open, they will have been out of school for many months.

Business as usual is simply not acceptable in this crisis. We must provide students who are far below grade level in reading or math with the most effective tools we have: One-to-one or small-group tutoring. No other intervention in all of educational research has a comparable impact (see Neitzel, Lake, Pellegrini, & Slavin, in press; Nickow, Oreopoulos, & Quan, 2020; Pellegrini, Neitzel, Lake, & Slavin, in press).

We propose to the incoming Biden administration a plan designed to provide research-proven tutoring to millions of children who are most at risk due to Covid-19 school closures or to any other factor. However, we will also need non-federal funding to get this plan started quickly and well in spring/summer 2021, in preparation for a major large-scale rollout in September, 2021.

The plan laid out here is intended to put on the table for discussion some key ideas about how to identify, pilot, and then substantially scale up proven tutoring programs as rapidly as possible, with an ultimate goal of establishing a National Tutoring Corps of about 100,000 tutors in September, 2021, and growing after that as additional proven programs become ready for scale-up.

Assumptions

1. At full operation, full-time tutors should be able to provide a full course of tutoring (about 60 daily sessions per student, on average) to 40 students per year. This assumes a mix of 1-4, 1-3, 1-2, and 1-1 arrangements, with a strong preference for small groups rather than 1-1 (to reach more students).
2. Assuming 100,000 tutors can each work with an average of 40 students per year, this would be about 4 million children per year, 10-11% of all 38 million students attending grades 1-9.
3. Tutoring must focus on programs proven to be effective in rigorous experiments (see Appendix, #2, and Tables 1 and 2).
4. There are several proven tutoring programs for elementary schools in reading, fewer in math, and few replicable programs in either subject for grades 7-9. We propose a robust and rapid process of a) scaling proven programs, b) developing and evaluating new programs, and c) evaluating existing scaled-up programs that lack rigorous evaluation evidence.
5. The National Tutoring Corps will require legislation in the next Congress, which would be unlikely to happen until spring, 2021. Yet a great deal could be put in place between now and September, 2021, when major federal funding might be available for schools to begin implementation. This substantial early work would ideally be funded by joint investments by government and private foundations. It would be focused on:

    a) Identification of proven programs ready for immediate scale-up.

b) Scale-up of proven programs for reading and math, with approximately 2,000 tutors to begin in February/March, 2021.

c) Rigorous evaluations of existing programs lacking an adequate research base by independent evaluators, starting in September, 2021.

d) Development and piloting of new programs, to be evaluated in fall, 2021.

e) Capacity building, to enable proven and promising programs to build the staff and infrastructure to work at much larger scale than they do now.

6. The entire process should be designed to be as simple as possible, so that it can expand very rapidly without losing quality.

7. In light of the above considerations, the program rollout should take place in two phases:

<u>Pilot Phase (now to August, 2021)</u>

a) Identification of existing proven programs

b) Demonstrations of existing proven programs

c) Identification and demonstrations of scaled up but insufficiently evaluated programs

d) Development and piloting of new programs

e) Capacity building for programs ready to go to scale

<u>Full Implementation (September, 2021 to August, 2022)</u>

a) Large-scale implementations of proven programs

b) Evaluations of new programs

c) Evaluations of scaled-up but insufficiently evaluated programs

d) Continued development of new programs

Planning

1. Establish a steering committee

   We propose establishing a steering committee to plan the overall effort and the piloting process, with a subcommittee to plan the development and research.

2. Seek funding

   Approach potential funders for support for planning, piloting, development, and evaluation. Piloting will require funding from government and large foundations, and the size of the pilot can be modified to fit the funding available. Establish criteria for proven programs ready to go to scale (see Appendix, #2) and process for inviting and evaluating them.

3. Establish a process for grants to proven tutoring program providers to do large demonstrations and build capacity and funding for them (see Appendix, #2).
4. Establish qualifications for pilot and demonstration schools, and amounts of funding to offer. Create request for proposals.
5. Establish qualifications for tutors, lead tutors, and any other personnel (see Appendix, #3).

Phase 1, Demonstrations and Pilots (now to August, 2021)

Starting ideally in March, 2021 (with preparation before then), we suggest implementing demonstrations of proven programs to help them go to scale with about 2,000 tutors in 1,000 schools (2 per school). Schools would volunteer to implement programs they want to implement from a list of proven programs, or they might agree to be pilot sites for programs in development. Pilots of new programs would be mostly in middle and high schools, where

programs in development will mostly be asked to recruit their own tutors who meet the project criteria (BA and experience with children; see Appendix, #3).

Schools would apply to serve as demonstration or pilot sites (criteria to be devised), to be ready to start in March, 2021, through May, 2021. Demonstrations and pilots may also be carried out during summer, 2021.

Schools in the demonstrations and pilots would receive grants of approximately $50,000, enough to hire two teaching assistant tutors and receive needed materials, software, and professional development in February/March to May, 2021. Training, follow-up coaching, materials, software, help desk, and other services would be provided by the tutoring program providers, compensated by the project.

Tutoring would be provided to the lowest-achieving students in each grade served (see Appendix, #1). As students make rapid progress, they may be excused from tutoring, and other students would be rotated in. All students should receive at least 60 daily 30-minute sessions, or 30 one-period sessions (e.g., in middle schools). Tutoring will be scheduled during the school day, at times other than reading or mathematics periods.

Development and Piloting of New Programs

We propose that about 10-20 reading and math programs, especially for grades 6-9, should be developed during January to September, 2021, in time for evaluation in fall, 2021 (see Appendix, #2, and Timeline, Figure 2). The idea would be to identify developers with experience and demonstrated capability, such as those programs that are already scaled up but have not been adequately evaluated, programs created by organizations that already have successful models in other grades, or non-tutoring programs that could be readily transformed into tutoring programs,

to create many pilot programs quickly. These developers might be offered modest one-year grants to create and pilot new programs, and then these would be rigorouslyevaluated when they are ready, hopefully starting in September, 2021.

Phase 2: Scale-Up and Evaluations (August, 2021 to August, 2022)

The full-scale rollout of the National Tutoring Corps would take place over the 2021-2022 school year. Also, evaluations of new and scaled up but previously unevaluated programs will take place starting in Phase 2. (See Timeline, Figure 2)

Scale-up Schools

At the end of Phase 1, if all goes well, we will have learned a great deal. The project will have worked with about 2,000 tutors in 1,000 schools, and 10-20 additional reading and math programs, mostly for grades 6-9, will have been developed, piloted, and made ready for evaluation. In 2021-2022, we propose a rapid scale-up, offering funding for tutors to serve thousands of Title I schools.

Funds will be made available by formula for all elementary Title I schoolwide projects. Based on school sizes and percent poverty, schools could receive from one to four teaching assistant tutors to work with the lowest-achieving students in each grade. There are approximately 50,000 Title I elementary schools, so if the average number of tutors per school were two, this would be 100,000 tutors.

Tutors

Schools would be notified of the number of tutors they can expect for the 2021-2022 school year, hopefully in early summer, 2021. They could then assign existing teaching assistants with college degrees to this task, or recruit additional ones who meet the requirements. Tutors will be hired provisionally before training, and only those successfully completing training, including carrying out tutoring with students, will be hired.

Some schools may prefer to have trained and qualified tutors from other organizations, rather than hiring through their own procedures. Local organizations such as AmeriCorps grantees, with expertise in management of school staff, may create such offerings, or providers of proven tutoring programs may offer such a service. The main requirement is that whatever their source, all tutors would meet hiring requirements, and would agree to use proven tutoring approaches (selected from the identified list; see Tables 1 and 2).

In each district or region, lead tutors would be engaged, at a ratio of approximately one lead tutor for every 15 tutors. Lead tutors would manage tutors, visit tutoring sessions, and coordinate with principals, other district staff, and tutoring program providers.

Tutoring Materials, Software, Training, and Coaching

Tutors would be trained in local or regional in-person sessions or in virtual trainings by experienced members of the staffs of tutoring program providers. The initial trainings would probably take place in July-September, 2021, with amounts and strategies for training up to the school districts and tutoring providers. After tutors begin tutoring, lead tutors will circulate among tutors, observing sessions, modeling strategies, and giving feedback. Regional coaches from tutoring program providers would visit each cluster of schools monthly, traveling with the lead tutor to visit as many tutors as possible. Virtual coaching may also be employed, and virtual

meetings among tutoring staff, lead tutors, and tutoring program provider regional coaches may also be used. Data on the progress of every tutored student will be electronically transmitted to the tutoring provider's regional coaches for use in coaching communications.

Evaluations of Existing Programs

From September, 2021 to May, 2022, third-party evaluators should be funded to carry out randomized evaluations of up to 20 elementary and secondary reading and math programs. These would be newly developed and piloted programs as well as programs that are operating broadly but have not been evaluated in experiments meeting the evaluation standards. The evaluation would be carried out by one or more independent evaluators, under contract to the U.S. Department of Education. Each evaluation would use the same design, measures, and procedures (see Appendix, #2).

Schools. Approximately 1000 schools would be recruited to volunteer to participate in the evaluations. The precise experimental designs and procedures would be determined by experts in experimental design. Elementary schools, as one example, might be asked to implement a given program only in grades 1-3, or only in grades 4-5/6. Schools would then be matched on test scores, free lunch, ethnicity, size, and urbanicity, and then randomly assigned by the researchers to implement either in 1-3 or 4-5/6. For middle and high schools, schools could randomly assign half of students to receive tutoring in the fall (experimental), half in the spring (control).

There might be studies evaluating 20 programs, for a total of about 500 schools and 1,500 to 2,000 tutors.

When all schools have been identified and assigned, their low-achieving 50% of students would be pretested in September, 2021, tutored daily for a semester, and posttested in February.

Beyond Phase 2

If all goes as planned, the National Tutoring Corps will reach its full intended tutor force of 100,000 tutors in 2021-2022. By spring of 2022, it will have enabled schools to serve approximately four million students who were struggling in reading or math. It will be poised (in 2022-2023) to begin to offer tutoring in additional programs, especially for secondary students who need those services. It will have added a great deal to knowledge about how to solve reading and math problems at all grade levels, 1-9. The program will have created jobs for at least 100,000 tutors.

In 2022 and beyond, we would recommend that funding be made available to increase the numbers of tutors by 50,000 each year, as additional tutoring programs come on line (especially secondary and math programs) and as program providers and school districts increase their capacity to serve more students with quality. Also, many students will need booster sessions to maintain gains in tutoring (e.g., 2-3 week tutoring session each year to check in on maintenance), and some will need more than a year of tutoring, so building up capacity will enable schools to continue to serve additional students while maintaining necessary services for the earlier cohorts of students.

Tutor-to-Teacher Pipeline

Many tutors will experience the joys of teaching, and schools will get to know highly motivated and capable tutors. As a result, plans should be made to use tutoring as a route into teaching careers, providing successful and talented tutors accelerated teacher certification

building on their successful experiences. One benefit of this is that tutors are likely to be recruited locally and to be highly diverse, so the teaching force may be enriched by recruits with a strong motivation to make a difference in their own communities.

Tutoring and Evidence-Based Reform

The National Tutoring Corps could represent the first example in the history of education in which research, development, evaluation, practice, and policy all work in tandem to make a substantial difference in the lives of very large numbers of students. The model of leveraging evidence-based practice and then building from practice back to evidence could be used to solve many problems in educational practice and policy, yet this has never been done. The Covid-19 crisis may provide an opportunity to demonstrate how evidence could become the core of reform in education.

References

Gersten, R., Haymond, K., Newman-Gonchar, R., Dimino, J., & Jayantha, M. (2020). Meta-analysis of the impact of reading interventions for students in the primary grades. *Journal of Research on Educational Effectiveness, 13* (2), 401-427.

Neitzel, A., Lake, C., Pellegrini, M., & Slavin, R. (in press). A synthesis of quantitative research on programs for struggling readers in elementary schools. *Reading Research Quarterly.* Also available at www.bestevidence.org

Nickow, A. J., Oreopoulos, P., & Quan, V. (2020). *The transformative potential of tutoring for PreK12 learning outcomes: Lessons from randomized evaluations.* Boston, Abdul Latif Poverty Action Lab.

Pellegrini, M., Neitzel, A., Lake, C., & Slavin, R. (in press). Effective programs in elementary mathematics: A best-evidence synthesis. *AERA Open*. Also available at www.bestevidence.org.

Wanzek, J., Vaughn, S., Scammacca, N., Gatlin, B., Walker, M. A., & Capin, P. (2016). Meta-analyses of the effects of tier 2 type reading interventions in grades K-3. *Educational Psychology Review*, *28*(3), 551–576.

Appendix

1. Which students should be tutored?

Priority for tutors should initially the lowest-achieving students in their grades in reading or mathematics, based on diagnostic testing. Schools should be funded to provide tutoring proportionate to their number of students and levels of poverty (free lunch count, adding children of undocumented immigrants who would qualify for free lunch).

2. Evidence Standards for Tutoring Programs

Tutoring can be very effective, but not all programs result in increases in student achievement. In order to be scaled up in the National Tutoring Corps, programs must have already been evaluated, or will have been evaluated as part of the National Tutoring Corps initiative and found to be effective. The validating studies for the first set of programs must meet at least the following criteria:

a. Random assignment to tutoring or standard practice (control), or matching in advance.
b. Pre- and post-measures not over-aligned with the experimental treatment and not administered by the students' own teachers or tutors.
c. At least 30 tutoring sessions per student of at least 30 minutes.
d. Sample size of at least 30 experimental and 30 control students.
e. Analyses of posttests controlling for pretests.
f. Effect size of at least +0.20 in at least one qualifying study

The National Tutoring Corps will carry out its own evaluations of programs not already successfully evaluated, both existing but unevaluated programs as well as newly developed programs. These evaluations will be done by third-party evaluators, and will have higher standards than the ones described above. They will require random assignment to conditions, a sample size of 50 schools in a cluster-randomized design, and common measures of reading or math.

3. Development.

The National Tutoring Corps should have funds available both to develop and evaluate new tutoring programs and to evaluate existing programs not adequately evaluated at present. Priority for development and evaluation should be on in-person small group tutoring by teaching assistants, programs for reading in grades 7-9, programs mathematics in grades 1 to 9, and tutoring programs specific to English learners. Online versions of proven programs may also be made available for students being taught remotely, but our assumption is that schools will be open by September, 2021, and that in-person tutoring will be more effective and cost-effective than remote online tutoring.

4. What will the characteristics of the tutors be?

Successful tutoring programs have primarily used tutors who at least have a college degree. Tutors should meet the following criteria:

a. College degree, but not necessarily teaching certificates.

b. Successful experience with children, ideally in tutoring or teaching roles, or as camp counselors, scout leaders, or Sunday school teachers, for example.

c. Deep love for children and belief in their potential for success.

d. Clean security records.

Certified teachers may serve as tutors, but they should probably be paid as teaching assistants. Tutors may work part time, and part-time tutoring positions may be attractive to some certified tutors.

Lead tutors should have at least the same qualifications, but would be expected to have extensive experience in tutoring or teaching. These are more likely to be certified teachers.

5. Will tutoring be virtual or in person?

Tutoring will be offered to schools in two forms:

a. In-person, to groups of up to one-to-four or five
b. Virtual, to groups of two or three (until there are proven one-to-four models)

In schools that are still providing remote teaching, virtual tutoring will be provided to students at home, or it could be provided to students in school if they are monitored by school staff during tutoring.

After schools open fully for in-person instruction, tutoring should transition to in-person, small-group models (up to one-to-four), which have much more extensive evidence of effectiveness at present as well as higher cost-effectiveness.

6. How would the project be managed?

An office for the National Tutoring Corps should be established at the U.S. Department of Education in Washington. Its functions would be as follows:

a. Development and administration of policies to ensure effective functioning of the overall program.
b. Reviewing applications from schools for tutoring services (or if states do this, reviewing state procedures).
c. Reviewing applications for tutoring program providers.
d. Soliciting and reviewing applications for development and evaluation of tutoring programs to add to the list of approved programs.
e. Overall evaluations of program operations and outcomes for students.
f. Reports to Congress and Secretary of Education.
g. Communications to the general public, educators, and researchers.

7. Training Management Structure

Figure 1 shows the management structure for training of tutors used by Tutoring With the Lightning Squad, the Success for All Foundation's one-to-four model for grades 1 to 5. It is just provided as an example of how tutoring program providers might reach significant scale with modest increases in staff. This management model is itself adapted from the Success for All Foundation's training management structure, which currently serves about 1,000 schools and 200,000 teachers nationwide.

8. Timeline.

Figure 2 depicts a timeline for the three phases of the proposed project.

9. Tutoring Programs Currently Meeting Evaluation Standards

Table 1 lists reading tutoring programs that we believe may meet the initial evaluation standards, and Table 2 lists promising math tutoring programs.

Table 1: Promising Reading Programs				
	Grades Levels	Group Size	No. Studies	Effect Size
One-to-One, Certified Teachers				
Lindamood (1-1)*	K-2	1-1	2	+0.69
Targeted Reading Intervention	K-1	1-1	2	+0.50
Reading Recovery	1	1-1	4	+0.42
Descubriendo la Lectura (Spanish)	1	1-1	1	+0.41
One-to-One, Teaching Assistants, and Paid Volunteers				
Sound Partners	K-1	1-1	4	+0.44
SPARK	K-2	1-1	1	+0.51
SMART*	1-2	1-1	1	+0.40
Reading Rescue*	1	1-1	1	+0.39 (QED)
Experience Corps (AARP)	K-3	1-1	2	+0.11
Reading Partners	2-5	1-1	1	+0.09
One-to-Small Group, Certified Teachers				
Lindamood (1-3)	1	1-3	1	+0.64
Lectura Proactiva (Spanish)	1	1-3/5	2	+0.49
Read, Write, and Type!	1	1-3	1	+0.42
Leveled Literacy Intervention (Fountas & Pinnell)	K-2	1-3	2	+0.17
One-to-Small Group, Teaching Assistants and Paid Volunteers				
Tutoring With the Lightning Squad	1-5	1-4	1	+0.40
Quick Reads	2-5	1-2	2	+0.22
Passport to Literacy	4	1-4/7	1	+0.12
Burst/mCLASS Tutoring (Amplify)	K-3	1-3/5	1	+0.10

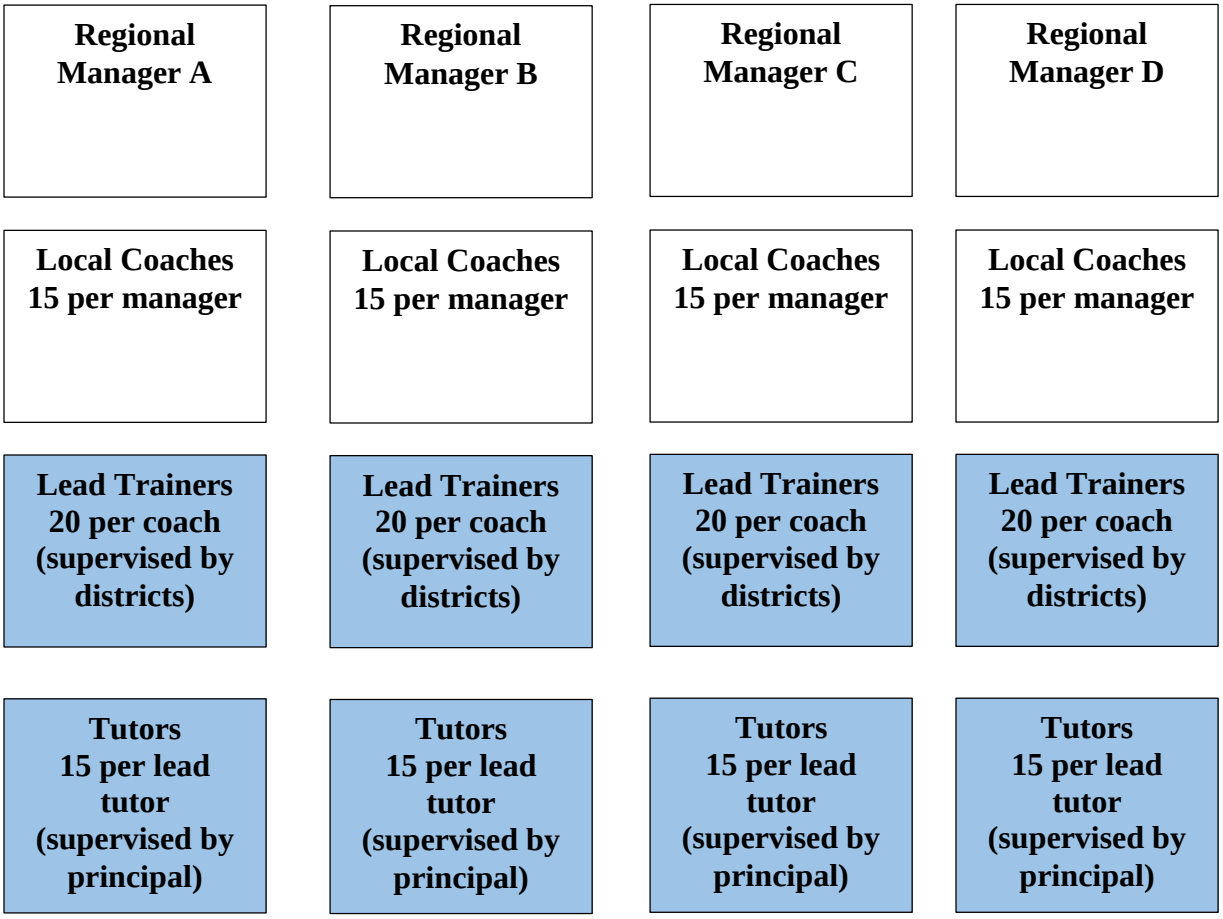
* Evaluated use for 2+ years

Table 2 Promising Mathematics Programs					
	Grades Levels	Group Size	No. Studies	Topics	Effect Size
One-to-One, Certified Teachers					
Math Recovery Intervention	1	1-1	1	Whole No. Operations	+0.24 (QED)
One-to-One, Teaching Assistants					
Pirate Math (Fuchs)	3	1-1	1	Computations, Word Problems	+0.37
Galaxy Math (Fuchs)	1	1-1	1	All	+0.25
One-to-Small Group, Certified Teachers					
Number Rockets (Fuchs)	1	1-2/3	1	All	+0.34
One-to-Small Group, Teaching Assistants					
Fractions Face-Off (Fuchs)	4	1-2	2	Fractions	+0.57
ROOTS	K	1-2/5	3	Addition, Subtraction	+0.19
Focus MATH	3-5	1-2/6	1	All	+0.24
Saga Math	9-10	1-2	1	Algebra	+0.13

Figure 1

Proposed Training Management Structure

Program Provider



Shaded: School district employees

Unshaded: Tutoring program provider employees

Note: this structure is based on the Success for All Foundation's Tutoring With the Lightning Squad program, and is only provided as an example.

Figure 2: Timeline

Phase 1 **(January-August, 2021)**	**Phase 2** **(August, 2021-August, 2022)**	**Phase 3** **(September, 2022-)**
Demonstrations of proven programs, reading and math	Scale-up of proven programs	Further scale-up of proven programs
Development and piloting of new programs (especially secondary, math)	Evaluations of new programs	Evaluations of new programs
Pilots of existing but unevaluated programs	Evaluations of existing unevaluated programs	Evaluations of existing unevaluated programs
	Development and piloting of additional programs	Development and piloting of additional models