

The Impact and Scaling of the 2019-20 Future Forward Literacy Program Prior to School
Closures Due to COVID-19

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Future Forward is an early elementary literacy program that leverages a school-community-family partnership approach (Epstein et al., 2002) to support the literacy development of students and families. Future Forward provides one-on-one tutoring to students while also supporting literacy development opportunities at home and in the community. In 2011, Future Forward was awarded an Investing in Innovations (i3) development grant to develop the program and test the impact of two years of participation on students in seven Milwaukee schools. Participation in two years of Future Forward was found to have positive impacts on literacy development and school attendance (Jones, 2018; Jones & Christian 2021). In 2017, Future Forward received an Education Innovation and Research (EIR) Mid-Phase grant from the U.S. Department of Education to expand to 14 schools across seven school districts in three states. An important change made to Future Forward during the new grant was that participation was shortened from two years to one. This was done to reduce cost and to increase implementation flexibility. This paper presents the results of an implementation and impact evaluation of this shortened Future Forward approach executed during the 2019-20 school year.

The Future Forward Approach

The Future Forward approach to literacy development accounts for skill deficits while also addressing reasons why students are unable to read by third grade. Future Forward was developed in response to the mixed evidence about how well skill-based program impacts are sustained after students leave a program (D'Agostino et al., 2017; Hurry & Sylva, 2007). After an intervention helps a student get back on track in their literacy development, there is a risk that the same family, school, and community factors that led them to fall behind originally will again

interfere with the student's education. Future Forward accounts for this by not solely focusing on literacy skill development but also working to build an environment around students that is more conducive to students learning to read and to maintaining their literacy development beyond their participation in Future Forward. Through its school-family-community partnership approach (Epstein et al., 2002), Future Forward views literacy through a systems lens (Bronfenbrenner, 1979) (Figure 1). At its center, students receive 30 minutes of phonics-focused, one-on-one tutoring from a paraprofessional or volunteer three times each week. Learning opportunities are also embedded in the community through community events. Family engagement involves ongoing communications with families regarding their student's progress. Communications are focused on student successes and meant to be positive (Love, 1996). Families are also provided development opportunities for supporting their student's literacy outside of school. These occur during home visits and monthly family events held at the school or a community center. Teachers work with Future Forward staff to align instruction and supports to individual student's strengths, interests, and needs. Teachers may help plan and often attend family events, leveraging the resources of Future Forward to effectively engage families and connect with students. The collaborative work between teachers, Future Forward staff, and families helps develop a learning team and builds trust between the three partners (Graham-Clay, 2005) that may continue past a student's direct participation in Future Forward.

At each site, an instructional coordinator, who is typically a certified teacher, oversees and supports the tutors and coordinates the collaboration between local Future Forward and school staff. Tutors participate in a series of all-program trainings at the beginning of the year, which include the implementation of the lesson, how to develop a lesson plan, and how to administer and use literacy assessments. At the site level, other individualized training

opportunities are developed throughout the year as needs arise. These are more specialized trainings that reflect the different components of the lesson plan. Tutors are informally observed and supported while they provide tutoring. They are also formally observed, using a structured observation instrument, at least once monthly by their program manager and receive feedback following these observations.

Each site also has a family engagement coordinator who leads engagement efforts with participating students' families. Family engagement coordinators are typically community members and often parents of children attending the school. Their work is designed to bridge the divide between school and home by translating literacy concepts, educating families about a variety of literacy activities, and validating the literacy practices already happening in the home. Family engagement coordinators receive a variable amount of training, depending on their experience, but all receive training about Future Forward tutoring, how to document communications, using scripts to facilitate effective communications, how to conduct a family night, how to conduct a safe home visit, how to build trust, and cultural differences in communicating with families.

Tutoring

One-on-one tutoring is managed by a certified teacher who oversees a group of five to seven tutors in each school. Tutors are typically paraprofessionals but may also be community members or college students. If possible, the same tutors work with students for the entirety of their participation in Future Forward. Students are pulled out of non-core classes during the school day for 30 minutes, up to three times per week. Each tutoring session includes a number of literacy-focused activities. First, tutoring starts with a *Familiar Activity*, reviewing skills they recently learning. Next, students receive phonics-based instruction. *Word Play* (Wasik & Jacobi-

Vessels, 2016) includes two core activities: *Word Sorts* and *Making Words*. *Word Sorts* involve students sorting words into various categories to increase their understanding of the structure of sounds and letters (Morris, 1982; Zutell, 1996; Zutell, 1998). Students also use letters to *Make Words*, which supports students learning the way sounds are put together to make words (Cunningham et al., 1998). *Word Play* also involves reading phonics-based books and other activities designed to support student understanding of targeted skills. Tutors then support students reading a book at their instructional level. This typically starts with a “book walk”, introducing students to the book’s content and vocabulary. Tutors use a variety of strategies to help students decode and make meaning of text. Part of this involves helping students use graphic organizers to build comprehension skills. Students then write sentences connected to the *Word Play* or book. This may involve the use of *Elkonin boxes*, which helps build phonological awareness by segmenting words into individual sounds/boxes (Keesey et al., 2014). Each lesson then ends with tutors reading a book aloud.

Family engagement

Future Forward family engagement involves a variety of activities and communication strategies that help develop literacy support in the natural environment of students and families. Sites send home a monthly newsletter, hold monthly family events, send books home to help build a home library, and conduct home visits. Communications are intended to keep families updated about their student’s progress in the program and to broker conversations between home and school. These can include phone calls, emails, texts, and face-to-face conversations at the school. The motivation behind family engagement work is to leverage the family as a critical partner in the reading development of students. Engaging families in tutoring programs has proven to improve student academic knowledge, skills, and confidence (Bryan, 2005; Little,

2009; Harvard Family Research Project, 2009). This approach has proven to have an even greater literacy benefit for low-income children with less-educated parents (Dearing et al., 2006; Lin, 2003). Future Forward family engagement goes far beyond the typical approach of education programs that focus on superficial engagement like families attending events, receiving information from staff, volunteering (Epstein, 2001), and exhibiting “good parent” behaviors (Li, 2010). Instead, Future Forward honors what the family is already doing at home to support the development of their student’s academic skills (Nieto, 2012), empowering them to be more effective in doing so. Future Forward also helps mitigate challenges to family engagement, such as if there is a mismatch between schools and families in terms of language, schedules, and expectations (Lopez & Stoeling, 2010). Schools getting to know families and the ways that their lives are structured outside of the educational setting may lead to a reciprocal relationship that can increase their involvement over time (Graue & Hawkins, 2010). Further, research has shown school, family, and community partnership practices can decrease the likelihood that students are chronically absent from school (Sheldon & Epstein, 2004). Students need to regularly attend school to improve their literacy.

Previous Future Forward Research/Evaluation

Two i3-funded randomized control trial (RCT) studies established the impact that Future Forward has on student reading development and school attendance. The first RCT study, funded by i3, was a pilot evaluation conducted as the program was still being developed in six Milwaukee schools during the 2011-12 and 2012-13 school years (Jones, 2018). While Future Forward had a small but significant impact on reading achievement (0.12 standard deviations), no significant impact was found on school attendance. However, since the family engagement component was being developed, and therefore was not fully implemented, the study did not test

the impact of the FE component as it was intended (Jones, 2018). The second study, also funded by i3, found positive and statistically significant impacts on literacy development and school attendance (Jones & Christian, 2021). Specifically, after two years of tutoring, participants' literacy assessment scores improved by 0.23 standard deviations. Further, Future Forward students were absent from school 4.5 fewer days than students receiving only business-as-usual (BAU) reading instruction from the school. Interestingly, the impact of Future Forward was mostly realized after just one year of participation. This study also reported that the impact of Future Forward was the greatest for students with the greatest need for literacy help. The second study also established implementation benchmarks . Across the two years of participation, students received an intense amount of tutoring (average of 122.5 tutoring sessions or 61 hours of tutoring) and family engagement (the average family was engaged 32 times).

2019-20 Study of Future Forward

The 2019-20 school year was the second full year of implementation for the EIR grant. The 2018-19 program was a pilot year when sites hired staff and learned program implementation (Jones et al., 2020, September). During this time, Future Forward leveraged partnerships with local Boys & Girls Clubs to staff each site's program and to facilitate access to schools and students. The 2019-20 program year was the first year of the Future Forward EIR grant that had a randomized study of its impact attached to it. This report presents the results of this study, examining evidence of the scalability and impact of one year of Future Forward on the reading achievement and school attendance of students in 14 schools across three states (Table 1): nine schools are in the state of Wisconsin, two are in Alabama, and the remaining three are in South Carolina. These 14 schools partnered with six local Boys & Girls Clubs to deliver Future Forward. Seven schools are within large, urban districts. The remaining seven

schools are in small, rural communities. Participating schools had a history of overall literacy performance that placed them in the lowest 20% of schools in their state or had a history of large reading achievement gaps between races or economic groups. Eight of the study schools served a large number of Black students. The great majority of students in all but one school were eligible for free or reduced lunch.

Research Questions

We explore the implementation of Future Forward to address the following question:

How well was Future Forward implementation scaled up to 14 schools across three states?

In the Spring of 2020 schools were shut down nation-wide because of the COVID-19 pandemic and instruction moved online. Thus, no spring testing occurred in study schools. This limited the study to only answering the following question about the impact of Future Forward on school attendance:

What is the impact of one year of Future Forward participation on regular-school-day attendance compared to students receiving business-as-usual literacy instruction?

And the following exploratory research question:

Did Future Forward have a differential impact on the regular-school-day attendance of student subgroups?

Evaluation Methods

This evaluation study utilized an RCT design, with students randomly assigned to receive Future Forward literacy or only BAU literacy instruction provided by their school.

Study Eligibility

Eligible students were kindergarten, first, and second graders without an Individualized Education Plan (IEP) and who were not English Learners. The specific numbers of students who were ineligible is not known because schools were instructed to not distribute consent forms to students who did not meet eligibility criteria.

Random Assignment

In the fall of 2019, 587 families consented for their student to participate in the study. Schools decided who to distribute consents to, so it is not clear how many families received consents. After the completion of consenting, two hundred ninety-three were randomly assigned to the Future Forward group and 294 to BAU reading instruction. Students assigned to Future Forward received Future Forward programming plus the typical reading instruction provided by their school. Assignments were made within blocks, defined as grade levels within schools (a grade level within a school is one block). Considering three participating grade levels, 14 schools involved in the study, and that two schools did not serve kindergarten students, the study included a total of 40 assignment blocks ($3 \text{ grade levels} * 12 \text{ schools} + 2 \text{ grade levels} * 2 \text{ schools} = 40$). The number of study participants in each block was twice the capacity of the program to serve. Of these, half were randomly assigned to Future Forward and the other to BAU reading instruction within each block. The number of study participants per block ranged from 6 to 33, with an average of 14 per block. Assuming a fixed program effect, and 40% of the variance in outcomes explained by covariates, the current study, prior to attrition, had an 80% likelihood of detecting an impact of 0.184 standardized units.

Instruments

Future Forward collected and shared program implementation data. Participating school districts provided all other data directly to the research team.

School Attendance. School attendance was measured twice, during the program (from December to March) and prior to the start of the program (from September to December). Attendance rates were computed by dividing the attended days by the total days of school during that time.

Reading/Literacy Assessments. Reading achievement assessments administered at baseline included the Phonological Awareness Literacy Screening (*PALS*), the MAP reading assessment for primary grade (*MPG*), the Dynamic Indicators of Basic Early Literacy Skills (*DIBELS*), and the Formative Assessment System for Teachers (FAST) - *FastBridge* reading assessments. Assessments were intended to be administered again at the end of the school year, but COVID-19 forced schools nationwide to be closed in March of 2020.

The *PALS*, used by seven of 14 schools, is a criterion-referenced, teacher-administered assessment of foundational literacy (Invernizzi et al., 2003). The assessment's internal reliabilities range from 0.76 to 0.83, inter-rater reliabilities are 0.92, and test-retest reliabilities are between 0.92 and .96 (Invernizzi et al., 2015). The assessment also has strong evidence of predictive validity (Invernizzi et al., 2004). The *MPG* was used by three schools. *MPG* is a norm-referenced assessment of reading achievement and its measures of reliability and validity of the MAP test are high (NWEA, 2009). The reliability ranges from 0.70 to 0.90 and the predictive validity lies between 0.65 and 0.85. The *DIBELS*, used by two schools, refers to five measures that assess the reading skills of K-8 students (Center on Teaching and Learning, 2018). The one-minute short measures have been "thoroughly researched and demonstrated to be

reliable and valid indicators” (DIBELS, 2021). Three measures have excellent alternate form reliability of 0.90+, and two measures have good reliability of 0.80+ (Center on Teaching and Learning, 2018). The composite score, which was used in the current study, combines the results from the individual assessments (University of Oregon, 2020). Composite score test-retest reliability is high, ranging from 0.70 to 0.93 depending on the grade level and form used. It also has high concurrent and predictive validity with the Iowa Test of Basic Skills (University of Oregon, 2018-2020). The *FastBridge* reading assessment, used by two schools, is norm-referenced and has strong validity and reliability (Christ & Colleagues, 2015, p.20).

Modeling Strategy

General linear models, with fixed block effects, were used to estimate the impact of Future Forward on regular-school-day attendance rates. Attendance rates were selected as the outcome rather than absences to account for different program durations between different sites. Attendance rates were modeled using the following linear regression equation -

$$Y_{ij} = \beta_0 + \beta_1(FF_{ij}) + \beta_2(A_{ij}) + \beta_3(P_{ij}) + \sum_{m=1}^M \beta_{4,m}X_{mij} + \sum_{j=1}^{J-1} \beta_{5,j}Block_j + \varepsilon_{ij} \quad 1)$$

Where Y_{ij} is the outcome (attendance rate) for the i^{th} student in the j^{th} block; β_0 is the intercept; β_1 is the impact of Future Forward; FF_{ij} is a binary indicator for Future Forward participation; A_{ij} is baseline attendance rate (measured prior to the start of the program from September to December, depending on site); P_{ij} is the standardized baseline achievement score. Baseline achievement was standardized within grade levels separately for each reading assessment and then combined; X_{mij} is the m^{th} of M additional covariates representing demographic characteristics (e.g. gender, free/reduced lunch, and race); $Block_j$ is the fixed effect of assignment block (grade level within school); Within each block, all Future Forward and BAU

students received the same literacy assessment; and ε_{ij} is the error term. In addition to including the fixed block effects, error terms were clustered by assignment block (Athey & Imbens, 2017). For a robustness check, we stripped out all model effects except block fixed effects and Future Forward participation. We also conducted a treat-on-treated model to measure the impact of Future Forward who received the full expected amount of tutoring and family engagement.¹ Differential effects of Future Forward on student subgroups (race, gender, F/R lunch eligibility, grade levels, baseline attendance, and baseline achievement) were explored by separately including interaction terms for each characteristic with Future Forward in the simple model. The differential impacts of Future Forward on subgroups with significant interaction terms were then explored by running the simple model separately for each subgroup.

Sample Characteristics and Attrition

Overall, 58.7% of the study participants were Black and 84.3% were eligible for free or reduced lunch (Table 2). Students assigned to Future Forward and BAU were similar across demographic backgrounds and had nearly identical baseline attendance (Table 3) and baseline achievement (Table 4). Twenty students ($20/587 = 3.4\%$) exited the study. These included five students who left the program, 14 students who changed schools, and one who left for unknown reasons. Eight BAU ($8/294 = 2.7\%$) and twelve Future Forward ($12/293 = 4.1\%$) students attrited. Students who dropped from the study were not replaced. The combination of overall and differential attrition is low, within conservative levels of acceptability as established by the What Works Clearinghouse (2020). After attrition, the characteristics of students in different assignment conditions did not significantly change (Table 2). The resulting analytic sample still included mostly low-income Black students (Table 2) and was balanced regarding both baseline

¹ https://ocw.mit.edu/courses/14-387-applied-econometrics-mostly-harmless-big-data-fall-2014/resources/mit14_387f14_causaleffects/

attendance (Table 3) and baseline achievement (Table 4). No students in the analytic sample were missing baseline data.

Implementation Results

Due to challenges obtaining informed consents many sites started working with students later than planned. In 11 schools, participation started in early December, two schools started serving students in early November, and one in late October. Given that programming stopped in early March, most students and families were engaged for a maximum of three calendar months in Future Forward. Time in the program was further reduced by winter recess and other holidays during program months. Accounting for days away from school, the typical participant was engaged just 2.5 months in Future Forward before schools closed because of COVID-19.

During the shortened program, tutoring implementation was strong, with the average Future Forward participant receiving 2.6 tutoring sessions each week (Table 5). Of the 281 Future Forward participants, 252 (89.7%) received at least two sessions each week, the minimum expected implementation intensity. Students in all 14 schools averaged at least two sessions each week. However, the shortened program period impacted the total amount of tutoring students were able to receive. The average student received 25.9 tutoring sessions before schools closed because of COVID-19, roughly one-quarter the tutoring students received across two years of participation in the i3 study (Jones & Christian, 2021). If schools had not closed, students were on pace to receive between 50-60 sessions, roughly what was expected for one year of participation in Future Forward. Students likely would have received more than the expected amount of tutoring had participation also started earlier in the school year.

There was more variability between schools regarding family engagement implementation (Table 5). While overall, the typical student's family was engaged a total of 4.1

times, or 1.8 times per month, family engagement implementation varied significantly between schools, ranging from 1.7 to 7.9 total contacts and 1.0 to 3.1 contacts each month. Considering families in the i3 study averaged 32 total contacts, the amount of family engagement was significantly less than what was observed in that study. If the program had not ended early, families were on pace to be contacted roughly eight times, less than one-fourth what was observed over the two years in the i3 study. Even if participation had started at the beginning of the school year, it is likely families would have been contacted fewer times than expected. Regarding specific family engagement activities, the shortened program period prevented Future Forward from conducting home visits and limited the number of family events held. Sites did send home monthly newsletters and books to support the development of home libraries.

After schools were shut down in early March, Future Forward continued to communicate with families and find ways to support them during the unsure first few months of the pandemic. Future Forward worked to help families gain access to computers and the internet. Future Forward then moved tutoring online in April. From April through the end of May, 161 students received some amount of online tutoring, averaging 1.8 sessions. The impact of these efforts goes beyond this evaluation and are not reflected in the limited impact analyses presented in this paper.

Impact Results

As previously stated, students were not tested in the spring of 2020 due to the pandemic, preventing the study from assessing the impact of Future Forward on reading achievement. However, measuring its impact on school attendance was still possible. Mean unadjusted attendance rates were higher for Future Forward compared to BAU students during the tutoring period by 1.4 percentage points (91.2% vs. 89.8%) (Table 3). The typical Future Forward

participant missed one fewer day of school during the program. This difference was statistically significant in both the full ($\beta = 1.39, p = 0.021$) and simple models ($\beta = 1.42, p = 0.013$) (Table 7), suggesting an impact of roughly 1.4 percentage points. The magnitude of this impact is consistent with the 4.5 days impact reported across two years of participation in the i3 study (Jones & Christian, 2021). Considering the high family engagement implementation variability between schools, we explored if the impact on attendance was driven by schools with greater family engagement implementation. However, no connection was found in a residual score analysis between school levels of implementation and the program's impact on school attendance. At the student level, higher amounts of Future Forward related with higher school attendance rates. Partialling out preprogram attendance rates, there was a significant positive correlation between the amount of tutoring received and school attendance rates during the program ($r = .402, p < .001$). Students were expected to receive at least two tutoring sessions each week. The compliance rate for tutoring was 89.7%. Dividing the average program effect by the compliance rate provides a slightly higher treat-on-treated estimate ($1.42 / .897$) of 1.58 percentage points.² There was no correlation between the number of family contacts and school attendance so we did not conduct a treat-on-treated estimate for this.

The overall impact of Future Forward was largely driven by its impact on underserved students (Table 6). Significant interaction terms with Future Forward participation suggest the impact of Future Forward was modified by participant race ($p = 0.018$) and baseline attendance rates ($p = 0.045$). The interaction terms of grade level, gender, F/R lunch participation, and baseline achievement were not significant. The magnitude of the impacts of Future Forward on Black students ($\beta = 2.41, p = 0.006$) and students who started the program with below median

² https://ocw.mit.edu/courses/14-387-applied-econometrics-mostly-harmless-big-data-fall-2014/resources/mit14_387f14_causaleffects/

school attendance ($\beta = 2.34, p = 0.035$) were considerably larger than the overall impact. Future Forward did not impact the attendance of White students ($\beta = -0.34, p = 0.750$) or students starting the study with above median attendance ($\beta = 0.63, p = 0.357$). The impact on Black students who started the program with low attendance was particularly large ($\beta = 3.57, p = 0.030$). For this subgroup's unadjusted attendance, Black Future Forward participants were absent from school 3.4 fewer days. Together, these results suggest the more the sample was similar to the sample from the i3 study (Jones & Christian, 2021), which included mostly Black struggling readers, the greater its impact on school attendance.

Conclusions and Discussion

The purpose of the EIR-funded RCT study of the 2019-20 Future Forward program was to examine the scalability and impact of one year of participation on school attendance and reading achievement. The pandemic interrupted our ability to do this. Students and families had limited engagement in Future Forward before schools shut down and schools did not administer end-of-year reading assessments. For most schools, programming occurred from early December through the end of February. As the pandemic unfolded and Future Forward staff worked to support families, the study became an afterthought. What mattered was that students were safe and families had resources to support their student's education and health. Future Forward put aside its programmatic goals and did its best to support families during this unsure time.

Before schools shut down, Future Forward was on pace for meeting tutoring implementation targets. Students across all 14 schools were receiving an intense amount of tutoring, consistent with the intensity observed in the i3 study of Future Forward. It is less clear that family engagement met implementation targets. Families were contacted significantly less

than observed in the i3 study. There was considerable variability between sites though regarding the extent families were engaged.

Future Forward was found to have a statistically significant positive impact (1.4 percentage points) on school attendance during the limited time students were in the program. While the magnitude of the impact was only about one school day, considering the short length of participation during the 2019-20 program, this was consistent with the size of the impact on school attendance measured in the i3 study (Jones & Christian, 2021). It is interesting that only tutoring participation was predictive of regular-school-day attendance. The reasons for family engagement not also predicting school attendance are not entirely clear. One possible explanation is that it was their student's participation in Future Forward that motivated families to have students attend school more regularly. Participation in Future Forward was viewed by families as a great opportunity for students. It is possible that families were more conscientious regarding school participation knowing that their student might miss out on some of this opportunity. The processes for why students in Future Forward attend school more frequently will be examined qualitatively in future research.

Through its systems (Bronfenbrenner, 1979) and partnership approach (Epstein, 2001) to supporting students and families, Future Forward is designed to have a lasting impact on students. In a five-year follow-up study of participants from the i3 study, two years of Future Forward was found to have sustained impacts on reading achievement, school attendance, and on the likelihood that students would receive specialized services (Jones et al., 2023). The limited intervention students received during the 2019-20 school year makes it unlikely that its impact on attendance, or its unmeasured impact on reading achievement, would be sustained past their participation. Even what little potential remained for the 19-20 program to have a lasting impact

on students was likely eliminated as COVID-19 continued to impact schools during the 2020-21 school year (Kuhfeld et al., 2020).

It is important to spotlight that Future Forward's impact on school attendance was greater with Black students. How and why participation in Future Forward was particularly impactful to Black students is unclear and will be a focus of future research. Future Forward was developed in Milwaukee, with a clear understanding that schools underserve Black students. The implicit bias of teachers negatively affects Black students as early as prekindergarten (Gilliam, 2005). Teachers expect less success and more trouble from Black students (Gershenson & Papageorge, 2018). White teachers have lower expectations of Black students than Black teachers (Gershenson et al., 2016). Witnessing a student's success in Future Forward may help correct this tendency and help teachers see the potential in Black students. Future Forward may also help teachers see the potential in Black families (Lawrence-Lightfoot, 2004). Many Black families have histories of negative school interactions (Koonce & Harper, 2005). Through its partnership approach, the positive exchanges facilitated by Future Forward with families may work to increase trust between the school and families (Graham-Clay, 2005). Parents should feel respected by teachers (Lindle, 1989) and Future Forward may create space for that to develop. All of this might translate into improved school attendance and achievement for Future Forward participants.

Despite the continued disruption to schools caused by COVID-19, the EIR-funded Future Forward project continued during 2020-21 school year. Future Forward was motivated to help mitigate some of the difficulties families and schools continued to face. Like so much of schooling, Future Forward moved online by modifying its program to be virtual. Future Forward made this decision, understanding that any research about the impact of the virtual iteration of

Future Forward would not directly inform our understanding of the impact of Future Forward, as designed in the i3 study. They also understood that the EIR Mid-phase grant would therefore end without a true assessment of Future Forward's implementation and impact. Future Forward made the commendable step of putting the needs of communities above its programming and organizational needs. Even without true test of the impact of Future Forward during the EIR Mid-phase grant, in 2021, Future Forward was awarded an EIR expansion grant. This grant will provide additional opportunities to study the implementation and impact of Future Forward at scale.

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Figure 1: Future Forward systems framework for sustained literacy development

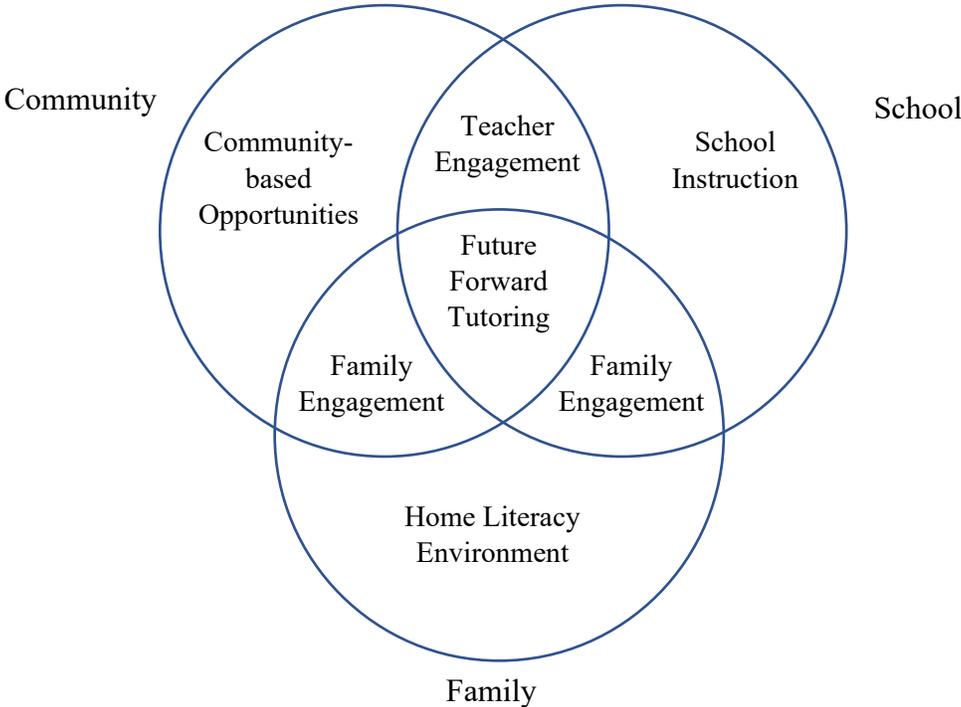


Table 1: Participating schools

	State	Community Type	Percent Black Students	Percent White Students	Free/Reduced Lunch Eligibility
School 1	WI	Urban	97.4%	0.0%	89.5%
School 2	WI	Urban	89.7%	7.7%	84.6%
School 3	WI	Rural	0.0%	86.7%	63.3%
School 4	WI	Rural	6.9%	82.8%	86.2%
School 5	AL	Urban	61.5%	23.1%	71.8%
School 6	SC	Rural	54.1%	40.5%	100%
School 7	WI	Rural	4.2%	91.7%	72.9%
School 8	AL	Urban	31.6%	50.0%	39.5%
School 9	WI	Rural	2.2%	88.9%	71.1%
School 10	WI	Urban	97.5%	0.0%	92.5%
School 11	WI	Urban	97.3%	0.0%	97.3%
School 12	WI	Urban	97.5%	0.0%	100%
School 13	SC	Rural	94.7%	5.3%	100%
School 14	SC	Rural	72.5%	26.1%	100%

Table 2: Participant characteristics

		Study Sample		Analytic Sample	
		BAU	FF	BAU	FF
Grade Level	KG	82 (27.9%)	81 (27.6%)	81 (28.3%)	77 (27.4%)
	1 st	108 (36.7%)	108 (36.9%)	105 (36.7%)	104 (37%)
	2 nd	104 (35.4%)	104 (35.5%)	100 (35.0%)	100 (35.6%)
School	School 1	20 (6.8%)	20 (6.8%)	20 (7.0%)	18 (6.4%)
	School 2	20 (6.8%)	20 (6.8%)	19 (6.6%)	20 (7.1%)
	School 3	15 (5.1%)	15 (5.1%)	15 (5.2%)	15 (5.3%)
	School 4	15 (5.1%)	15 (5.1%)	15 (5.2%)	14 (5.0%)
	School 5	21 (7.1%)	20 (6.8%)	21 (7.3%)	18 (6.4%)
	School 6	20 (6.8%)	20 (6.8%)	19 (6.6%)	18 (6.4%)
	School 7	25 (8.5%)	25 (8.5%)	25 (8.7%)	23 (8.2%)
	School 8	20 (6.8%)	20 (6.8%)	19 (6.6%)	19 (6.8%)
	School 9	23 (7.8%)	23 (7.8%)	23 (8.0%)	22 (7.8%)
	School 10	20 (6.8%)	20 (6.8%)	20 (7.0%)	20 (7.1%)
	School 11	20 (6.8%)	20 (6.8%)	18 (6.3%)	19 (6.8%)
	School 12	20 (6.8%)	20 (6.8%)	20 (7.0%)	20 (7.1%)
	School 13	20 (6.8%)	20 (6.8%)	18 (6.3%)	20 (7.1%)
	School 14	35 (11.9%)	35 (11.9%)	34 (11.9%)	35 (12.5%)
Race/ Ethnicity	Black	169 (57.5%)	173 (59.%)	164 (57.3%)	169 (60.1%)
	White	108 (36.7%)	101 (34.5%)	105 (36.7%)	95 (33.8%)
	Other	17 (5.8%)	19 (6.5%)	17 (5.9%)	17 (6.0%)
Gender	Female	156 (53.1%)	155 (52.9%)	153 (53.5%)	148 (52.7%)
	Male	138 (46.9%)	138 (47.1%)	133 (46.5%)	133 (47.3%)
F/R Lunch	No	45 (15.3%)	48 (16.4%)	44 (15.4%)	45 (16%)
	Yes	249 (84.7%)	245 (83.6%)	242 (84.6%)	236 (84%)
Total		294	293	286	281

Table 3: School attendance

		Baseline attendance (Before FF)							Attendance during FF						
		Attendance Rate		Attendance Days		Absence Days		<i>n</i>	Attendance Rate		Attendance Days		Absence Days		<i>n</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Study Sample	BAU	93.8%	6.9%	55.5	12.8	3.8	4.4	288							
	FF	93.8%	7.0%	56.0	13.0	3.7	4.1	292							
	Total	93.8%	6.9%	55.8	12.9	3.8	4.2	580							
Analytic Sample	BAU	93.8%	6.9%	55.5	12.8	3.8	4.4	286	89.8%	11.4%	60.3	13.8	6.7	7.2	286
	FF	93.8%	7.0%	56.2	12.9	3.7	4.2	281	91.2%	8.4%	61.0	12.8	5.7	5.4	281
	Total	93.8%	6.9%	55.9	12.8	3.8	4.3	567	90.5%	10.0%	60.7	13.3	6.2	6.4	567

Table 4: Standardized baseline achievement (before Future Forward)

		<i>M</i>	<i>SD</i>	<i>n</i>
Study Sample	BAU	-0.02	1.01	294
	FF	0.02	1.00	293
	Total	0.00	1.00	587
Analytic Sample	BAU	-0.03	1.01	286
	FF	0.02	1.00	281
	Total	0.00	1.00	567

Table 5: Implementation

	Average tutoring sessions per student (<i>SD</i>)	Average tutoring sessions per week (<i>SD</i>)	Students receiving 2+ tutoring sessions per week	Average family contacts per student (<i>SD</i>)	Average family contacts per month (<i>SD</i>)	Families contacted 1+ times each month	Families contacted 2+ times each month	Students
School 1	21.3 (3.9)	2.3 (0.5)	14 (77.8%)	2.11 (1.5)	0.99 (0.7)	8 (44.4%)	3 (16.7%)	18
School 2	20.9 (5.0)	2.3 (0.6)	16 (80.0%)	3.10 (2.2)	1.41 (1.0)	13 (65.0%)	6 (30.0%)	20
School 3	19.5 (2.8)	2.5 (0.4)	14 (93.3%)	2.00 (1.4)	0.92 (0.6)	7 (46.7%)	0 (0.0%)	15
School 4	22.0 (3.6)	2.6 (0.4)	14 (100%)	7.86 (6.9)	3.06 (2.7)	12 (85.7%)	7 (50.0%)	14
School 5	33.2 (3.3)	2.5 (0.2)	17 (94.4%)	5.67 (4.7)	1.82 (1.6)	12 (66.7%)	7 (38.9%)	18
School 6	27.0 (6.5)	2.8 (0.6)	15 (83.3%)	1.74 (1.4)	0.75 (0.6)	3 (15.8%)	1 (5.3%)	18
School 7	40.1 (4.0)	2.7 (0.2)	23 (100%)	4.17 (2.7)	1.19 (0.8)	14 (60.9%)	2 (8.7%)	23
School 8	39.1 (2.0)	2.9 (0.2)	19 (100%)	6.79 (3.6)	2.14 (1.1)	16 (84.2%)	10 (52.6%)	19
School 9	25.8 (3.8)	2.7 (0.4)	22 (100%)	5.14 (2.2)	2.25 (1.0)	19 (86.4%)	14 (63.6%)	22
School 10	24.1 (2.3)	2.7 (0.2)	20 (100%)	4.50 (1.9)	2.05 (0.9)	18 (90.0%)	8 (40.0%)	20
School 11	20.2 (4.9)	2.2 (0.5)	12 (63.2%)	4.74 (3.0)	1.98 (1.2)	15 (78.9%)	8 (42.1%)	19
School 12	19.8 (3.7)	2.4 (0.5)	15 (75.0%)	3.35 (1.8)	1.82 (1.0)	20 (100%)	8 (40.0%)	20
School 13	25.8 (2.7)	2.6 (0.3)	19 (95.0%)	2.35 (0.9)	1.09 (0.4)	12 (60.0%)	0 (0.0%)	20
School 14	22.5 (4.3)	2.8 (0.6)	32 (91.4%)	4.43 (0.7)	2.57 (0.5)	35 (100%)	34 (97.1%)	35
Overall	25.9 (7.7)	2.6 (0.5)	252 (89.7%)	4.12 (3.1)	1.75 (1.2)	204 (72.3%)	108 (38.3%)	281

Table 6: Impact of Future Forward on school attendance

	Modeling Results				Unadjusted attendance (<i>SD</i>)	
	<i>Robust</i>				Future Forward	BAU
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>n</i>		
Full model*	1.39	0.58	0.021	567	91.2% (8.4%)	89.8% (11.4%)
Simple model*	1.42	0.54	0.013	567	91.2% (8.4%)	89.8% (11.4%)
Black students*	2.41	0.83	0.006	333	90.8% (9.3%)	87.9% (13.8%)
White students	-0.34	1.04	0.750	200	92.1% (6.7%)	92.5% (5.7%)
Students w/ low attendance*	2.34	1.07	0.035	284	87.6% (9.7%)	85.7% (13.9%)
Students w/ high attendance	0.63	0.67	0.357	283	94.5% (5.0%)	94.2% (5.1%)
Black students w/ low attendance*	3.57	1.57	0.030	181	87.1% (10.8%)	83.7% (16.0%)
Black students w/ high attendance	0.93	1.30	0.477	152	94.4% (5.5%)	94.0% (6.0%)

* $p < .05$