

Designing an Effective Home-Based Summer Reading Program That Encourages Family Engagement

In this study, we investigated how to design an effective summer reading program that would successfully engage students and families to support student learning. Engaging students and families is one of the key components of the MORE (Model of Reading Engagement) Program. However, we know that there are many factors that might shape a student's or their family's engagement with reading. The reading program might need to be at a specific reading level for the student; or students may need to express interest in the reading topic. Additionally, parents may need reminders to participate in summer reading, and students may prefer educational programs that are also fun. In this early study of the MORE program, we considered all these factors. Using an adaptive research design called a Sequential Multiple Assignment Randomized Trial (or a SMART), we compared different versions of a summer reading program to see what works best.

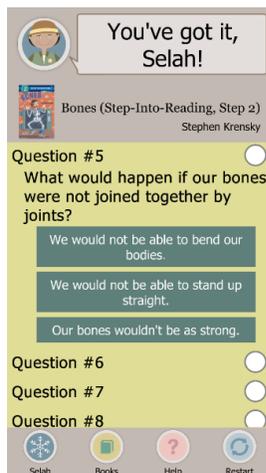


What features of a summer reading program are important for engaging students and their families?

We considered two different questions. First, if we provide students with reading materials, is it better to provide conceptually-coherent and rigorous books, or books on a variety of topics that are leveled near students' end-of year reading ability? Second, for students who don't seem initially engaged in the summer program, can a family messaging campaign engage parents to support their child's reading over the summer?

We worked with kindergarten through second grade students spread across 16 different classrooms at one high-poverty school.

Phase 1: The students were all able to select 10 books of their choice. They also received a set of reading lessons at the end of the school year and access to a free educational reading app with activities matched to each of the books that they selected. The classrooms were randomized, such that students in half of the classrooms initially selected their 10 books from a set of challenging and conceptually coherent informational texts and received lessons that also focused on the same conceptual topic. The other half selected a mix of fiction and non-fiction books near their reading level and received typical "balanced literacy" lessons.

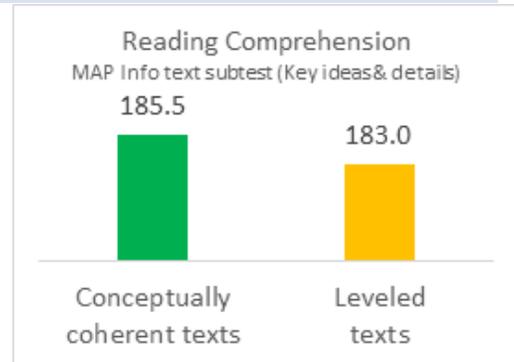


Phase 2: Students were also assigned into two groups of "extra supports" that they could receive over the summer if they did not seem to be engaged in the program. About a month into summer, we measured engagement using an educational reading app, and provided additional supports to the un-engaged students and families. For some students, the additional support was turning the educational reading app into a game. For other students, their parents also received text message reminders about reading in addition to the game.

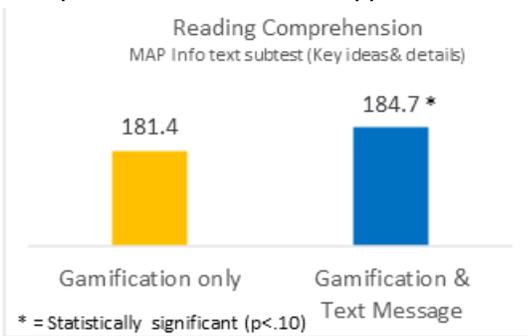
This brief describes work done for READS Lab at the Harvard Graduate School of Education based upon James S. Kim, Catherine A. Asher, Mary Burkhauser, Laura Mesite, Diana Leyva "Using a "Using Sequential Multiple Assignment Randomized Trial (SMART) to Develop an Adaptive K-2 Literacy Intervention With Personalized Print Texts and App-Based Digital Activities" doi:[10.1177/2332858419872701](https://doi.org/10.1177/2332858419872701) The research reported here was supported by the Chan Zuckerberg Initiative.

What factors help promote summer learning?

On average, providing students with challenging, conceptually coherent texts caused no significant difference in students' reading comprehension scores when they returned to school in the fall. Both groups of students scored about the same on the subtest of the MAP assessment that focused on main ideas and details. Because the use of leveled texts is so common in elementary schools, it is important for us to show that we found no evidence that providing challenging texts was worse for students.



While some of the families were actively engaged with the educational reading app at the beginning of the summer, the majority were not. This meant that a lot of our families were part of Phase 2, where we compared different sets of supports. We found that the combination of gamification and texting parents produces better outcomes than just gamification. First, those who were assigned to the text messages and gamification support were more likely to use the app than those whose support was just gamification, but this difference was not statistically significant.



We also see that those assigned to receive text messages scored higher on fall assessments of reading comprehension of informational texts than those who only received gamification. This finding is statistically significant,

which means that we have good reason to believe that it was not just due to chance.

Exposing students to conceptually-coherent, rigorous texts can be an effective way to improve students' reading.

Though we did not see statistically significant differences, this study does find that our students who received conceptually coherent books did slightly better than those who received leveled texts. We saw these positive differences even though the conceptually coherent texts were much more challenging than their reading level at the time. This suggests exposing students to conceptually-coherent, rigorous texts can be an effective way to improve students' reading and that conceptual coherences of the texts may make more challenging texts accessible to students.

We also show that offering text messaging "nudges" and tips about reading in the summer can improve reading scores when students return to school in the fall. We saw that these messages combined with gamification were more effective than just gamification alone, highlighting the crucial role families play in encouraging and supporting students' summer reading activities.

Even with frequent messaging, most students did not use the educational reading app. Future work should consider ways to increase take-up, such as integrating the app into the classroom lessons.