

STORYWORLD as a Tool for Distance Learning During the COVID-19 Pandemic Research conducted by WestEd

Research Highlights

- Overall, students were highly engaged with the STORYWORLD library, staying focused on activities and requested to use STORYWORLD during "choice" time.
- Even over a short period of time, parents noted specific instances where their child's language development improved while using STORYWORLD.
- Especially for ELs and struggling readers, STORYWORLD provided holistic language practice at home that echoed the kinds of reading skills they typically target in the classroom.
- STORYWORLD offered several features that set it apart from other online tools, and made it a valuable reading resource for students, families, and teachers.
- Benefits were felt by Spanish-speaking, monolingual English-speaking, and bilingual students alike.
- 91% of parents surveyed agreed that they want STORYWORLD access after school ends for their child.

Overall Findings:

At a time when teachers, families, and students around the world were turning to web-based apps and online learning programs to support distance learning, STORYWORLD offered several features that set it apart from other online tools, and made it a valuable reading resource for students, families, and teachers.

STORYWORLD's library of leveled storybooks, its use of multiple language modalities (reading, writing, speaking, listening), its built-in language scaffolding for ELs, and its formative teacher dashboard make STORYWORLD a promising reading resource for distance learning.

STORYWORLD has the potential to reduce the reading resource gap between English-speaking and Spanish-speaking families as well as bridge teacher support with student practice and family reading engagement at home, for both ELs and monolingual English speakers.

Overview of study

The feasibility study took place over four weeks in May and June of 2020, as the school year was in its final months and students were engaged in distance learning due to the school closures caused by the COVID-19 pandemic. Four teachers from different Bay Area elementary schools and 26 parents/guardians of their students participated in the study. Two teachers taught first grade and two taught second grade. All four teachers taught at schools with substantial proportions of ELs, and high proportions of economically disadvantaged students, as indicated by the percentage of students receiving free or reduced lunch (FRL).

76% of parents indicated that their child is Hispanic or Latinx. 24% of participating households spoke only or primarily Spanish at home, and 76% spoke only or primarily English. 33% of reporting households spoke both Spanish and English at home.

Students used STORYWORLD for two weeks.

The study was guided by the following research questions:

- 1. How do teachers use STORYWORLD to support their remote learning curriculum and student evaluations?
- 2. How does STORYWORLD influence students' reading practices and reading experiences at home? How do these practices and experiences differ across users?
- 3. Can STORYWORLD be used as intended in a home environment?

One important basis for the design of this feasibility study is the demonstrated influence of the home environment and available resources on student learning.

Prior literature

Improving academic outcomes for English learners (ELs) is one of the most persistent challenges facing educators in the US.

Multiple systematic reviews of research have found that models focused on simultaneously strengthening students' home language and their English skills have been more effective than models that focus on English alone (Greene, 1998; Rolstad et al., 2005; Slavin & Cheung, 2005; Willig, 1985).

For early elementary students, learning to read is arguably the most critical part of education, and research has shown that the home literacy environment (HLE) influences many aspects of literacy development for young students (Johnson et al., 2008; Mann & Foy, 2003; Sénéchal et al., 1996; Sénéchal & LeFevre, 2002; Van Steensel, 2006).

Parental involvement in children's reading experiences at home has been linked with improved phonemic awareness (Mann & Foy, 2003), as well as word reading and comprehension in the early grades (Sénéchal & LeFevre, 2002).

Summary findings from teachers and parents:

1 - Usability in remote learning environment

Engagement and perceived value for learning were high. Parents reported STORYWORLD was easy for them and their children to navigate and use, and teachers found it to be a valuable reading resource.

Teachers were able to successfully implement STORYWORLD as part of a distance learning curriculum to support their students' learning and to monitor their progress.

STORYWORLD helped provide continuity of skill development from in-person to distance learning.

Teachers found it easy to assign students STORYWORLD tasks.

All teachers found the data in the teacher dashboard useful for evaluating students—not only for providing informal, formative assessments, but also to inform reflections on student progress in the absence of their conventional monitoring and evaluation methods.

Teachers valued the dashboard displays for understanding student progress. Visualizations of student data, including the comprehension bar graphs and the "words I clicked" lists, were useful for monitoring student and class progress.

One teacher reported that she replaced the online ELD component of her English/Language Arts (ELA) curriculum with STORYWORLD because she found the stories to be more usable and engaging for her students.

One teacher found assessing writing remotely to be a challenge and felt STORYWORLD offered a great solution to this problem.

Two other teachers shared that STORYWORLD allowed them to evaluate students in ways that were not possible with their other programs or curricula.

All four teachers either agreed or strongly agreed that STORYWORLD was easy to use as a resource incorporated into their unique distance learning classrooms.

Parents reported STORYWORLD was easy for them and their children to navigate and use, and teachers found it to be a valuable reading resource.

Parents commented that the program was easy for their child to navigate independently.

91% of parents surveyed agreed or strongly agreed that they want STORYWORLD access after school ends for their child.

2 - Influence on student learning at home

Overall, parents and teachers reported high levels of student engagement, frequent parent-student cooperative reading, and noticeable benefits for reading and language development.

Parents and teachers indicated that the multi-modal features of STORYWORLD set it apart from other online reading programs and made it a preferred at-home activity for many students.

Even over a short period of time, parents noted specific instances where their child's language development improved while using STORYWORLD.

Teachers added that, especially for ELs and struggling readers, STORYWORLD provided holistic language practice at home that echoed the kinds of reading skills they typically target in the classroom.

Responses show that parents and children were engaged in cooperative reading practices while using STORYWORLD, and that they utilized the narration feature to listen to the stories together.

3 - Learning Outcomes in different modalities

Parents and teachers reported observing student growth on oral reading fluency, listening, vocabulary, writing, and skills reinforcement as a result of using the STORYWORLD library.

STORYWORLD was especially effective in supporting the reading practices of their English Learners and struggling readers.

One teacher reported that STORYWORLD may have helped one EL with developing his English listening skills; another parent shared her child's writing had improved,

The benefits were felt by Spanish-speaking, monolingual English-speaking, and bilingual students alike.

Overall, about half of parents and teachers noticed students reading more after starting to use STORYWORLD.

4 - Student Engagement

Overall, students were highly engaged with the STORYWORLD library, staying focused on activities while using the program and asking whether they could use STORYWORLD during "choice" time.

Students were excited to use STORYWORLD because the speaking activities allowed them to read aloud to their teacher and demonstrate their knowledge in an interactive way. Students had fun recording themselves and listening to the audio played back; they enjoyed retelling the story, and they liked being able to check their pronunciation and correct it by rerecording

Selected Teacher quotes

"Their reading is making a lot of progress just from listening to their recordings."

"...STORYWORLD was much easier, even as a parent, to maneuver than other reading apps or other reading websites."

"It's like instant support for them. They don't have to come up and wait to talk to me or raise their hand and all that other stuff. They have the instant support on the platform." (referring to EL's)

"A lot of times kids are more concerned with reading things quick and being done with it, but this [STORYWORLD] engages them and really requires them to think about what they're reading."

Your average first grader wants to show off what they know, and wants a chance to have the floor...I think that speaking part was very, very motivating and exciting for them.

I think it was a reinforcement of everything that we had learned the whole year through. The sequential language, the ability to translate a word, having to retell, having to ask further questions, and having to write about it and read it out loud. It was just everything that we had been working on all year long."

Selected Parent quotes

"With STORYWORLD she's able to read the whole story... Before, she was unable to say a couple of words. Now she's getting a lot better at reading what the word actually says, and not trying to rush herself, because that was her issue, she would try to read and rush herself that she wouldn't say the words right."

"Instead of just reading and pressing this button, or pressing that button, we got to hear the story and read the story both together. We had to repeat back the story, which is the part I really like. Also, the fact that he had to write a sentence or two, I feel was super helpful with not only the understanding part, but teaching him how to spell and teaching him how to use a keyboard... He would push himself a little bit in that manner, which he wasn't doing with the other apps."

"She reads more [after using STORYWORLD] because she got a little bit quicker with reading... She's picked up on more words. And before, she would sound like a robot, literally, but with the reading and stuff that she's been doing, it gives her a feel of how she is supposed to read."

For a copy of the complete Research paper, contact: info@storyworld.us

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