Research Brief

No. 2



San Francisco Bay Area onetab Pilot

Results from the first U.S. pilot of onebillion's tablet-based instructional software during COVID-19 school closures

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Summary

This study reports on parent/guardian and child reflections from a home-based education technology pilot. During the 2020-21 school year, 1,000 onetabs were distributed through participating schools in the San Francisco Bay Area. Imagine Worldwide conducted phone interviews with a sample of participating households from nine primary schools to understand whether use of the onetab, previously used primarily in Africa, translated to the U.S. context. The responses were overwhelmingly positive: the majority of parents/quardians recommended the onetab to other families and reported improvements in several academic and social-emotional areas. Most children also expressed positive experiences. This study



suggests the potential for U.S. students in early grades to improve in key areas with use of the onetab and proposes further research.

The Project

The San Francisco Bay Area onetab Initiative was launched in October 2020 to address the demand for remote learning created by the COVID-19 pandemic and inequities in access to technology. Open Up Resources directed the implementation and UK-based onebillion provided the hardware and software. The onetab offers an offline, tablet-based curriculum designed to deliver adaptive reading, writing, and numeracy instruction for young children. Approximately 1,000 onetabs were distributed through participating public and charter schools to children in grades TK-3 for at-home use during the 2020-21 school year. Due to restrictions on in-person contact during the pandemic, the study relied on phone interviews with parents/guardians and children.

Study Purpose

A growing body of research has demonstrated promising effects of education technology interventions in developing contexts (Conn 2017; Glewwe & Muralidharan, 2016; McEwan 2015). Prior research on onebillion's software, conducted in sub-Saharan Africa and the UK, showed that use of the tablet-based literacy and numeracy curriculum produced meaningful impacts on learning in both in-school and out-of-school settings (Pitchford 2015; Pitchford, Hubber, and Chigeda 2017; King et al., 2019; Levesque, Bardack, and Chigeda 2020). The current study sought to understand whether use of the onetab translated to the U.S. context. Specifically, Imagine Worldwide sought to answer the following research questions:

- Q1. What are parents'/guardians' perceptions of the onetab and its impact?
- Q2. Do children adapt to the British accent?
- Q3. Do children find the onetab engaging?
- Q4. What does children's usage look like?
- Q5. Which subgroups seem to benefit most?
- **Q6.** Are there any emerging issues or areas for improvement?

Answers to these questions (A1-A6) are on pages 4-6

Sample and Methods

Five education partners in Oakland, California agreed to participate in the study, representing nine primary schools. A total of 400 households in these school communities received the onetabs. We randomly selected 28% (111) for interviews, which were conducted in either English or Spanish. We asked parents/guardians a series of open– and close–ended questions pertaining to

their child's use of the onetab, level of engagement with the onetab, any suggestions they may have about the onetab, and potential improvements in key academic and social—emotional areas. An optional child interview was offered. Parents/guardians and children were asked to consent/assent to the interview before proceeding.

Respondents

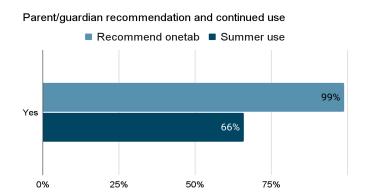
Ultimately, 77% of the sample completed the full interview, 10% declined to be interviewed, and 14% had not used the tablets for a variety of reasons. The completed interviews represented families from primarily English (59%) and Spanish (40%) speaking households. The majority of children in these households were identified as Latinx (49%) or African American (40%), female (63%), age 6 (43%) or 7 (44%), and enrolled in grade K (34%) or 1 (53%).



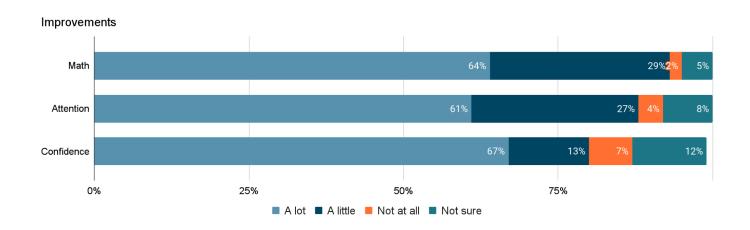
Findings

A1. Parents'/Guardians' perceptions:

Virtually all parents/guardians recommended the onetab to other families, most planned to continue using the onetab over the summer, and many reported improvements in children's math learning, attention, and confidence.



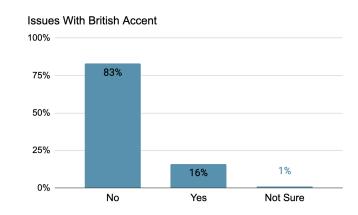
"It works very well. The thing I like about it is that it can be used anywhere, no Wi-Fi, no waiting time, even for homework. I want every child to have one."



A2. British accent:

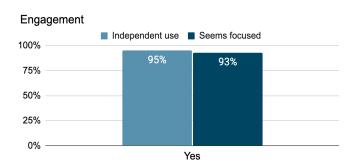
The majority of children did not express any issue with the British accent.

"I think it helps especially for English learners. Two neighbors' children have been using it and they have learned how to speak English from it."

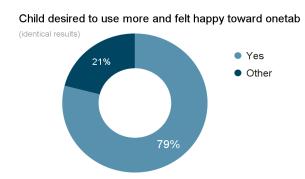


A3. Engagement:

Most children demonstrated independence and focus while using the onetab, wanted to use the onetab more, and were generally happy while using it.



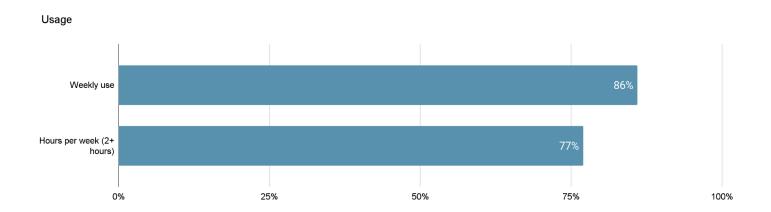
"He is really excited about it. He asks to do the onetab before any other homework."



A4. Usage:

The majority of children used the onetab weekly for 2 or more hours.

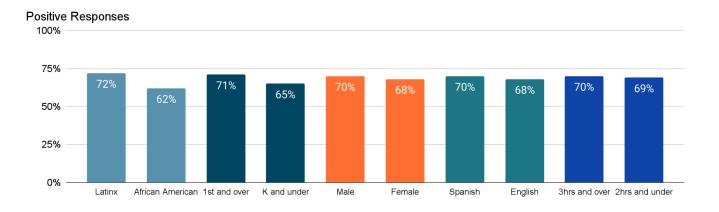
"With onetab, she grabs it on her own and plays by herself. She feels more comfortable and confident with the onetab. Even if she approaches something difficult, she works through it on her own."



A5. Subgroups:

Positive impacts were observed for all subgroups regardless of demographic. Latinx families reported even more positive impacts than African American families.

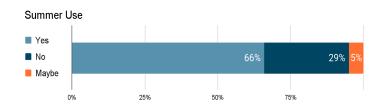
"He participates more in his studies now. He celebrates when he gets something right, which he did not do before. He is more enthusiastic about participating now."



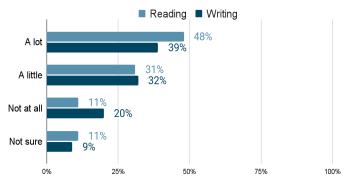
A6. Areas for improvement:

Fewer parents/guardians reported improvements in reading and writing, some did not plan to or had not continued using the onetab over summer, and a portion of the children reported feeling bored at least some of the time.

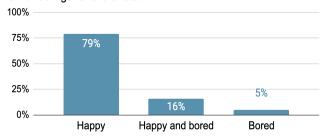
"Some stuff was just too advanced for her. She would still try but it was difficult."



Improvements



Child feelings toward onetab



Conclusion

This study suggests the potential for U.S. students in early grades — particularly grades K and 1 — to improve in key academic and social–emotional areas with use of the onetab, including children's math learning, attention, and confidence. While parents/guardians and children consistently reported positive experiences with the onetab, further research is needed to shed light on the possible areas for improvement mentioned above in A6. Additionally, future research could focus on understanding outcomes for students during in–person learning and for grades that were not the focus of this initiative.

A full technical report will be available on our website at imagine worldwide.org.

ABOUT

<u>Imagine Worldwide</u> empowers children around the globe to build the literacy and numeracy skills needed to achieve their full potential.

<u>Open Up Resources</u> works to increase equity in K-12 education by making excellent, top-rated curricula openly accessible to districts and schools.

onebillion creates comprehensive, scalable educational software for children in and out of school. onetab is a solution to deliver reading, writing and numeracy to unlock every child's potential

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