My Math Academy® My Reading Academy

**RESEARCH OVERVIEW** AUGUST 2023

## Thai, K. P., Li, L., & Schachner, A. (2018).

My Math Academy™ Significantly Accelerates Early Mathematics Learning (ESSA Tier I Certified).

#### Claims

- With five hours of total usage over a 12- to 14-week period, My Math Academy accelerated pre-K and kindergarten math learning gains by 36% (effect size = .23, p < .05).
- Teachers found that students enjoyed using My Math Academy and that it had a meaningful impact on their interest and self-confidence in learning math.
- The more students who used My Math Academy, the greater their learning gains.
- The greatest impacts were found on the most difficult math skills.
- Teachers recognized the value of My Math Academy for personalizing learning and advocated for continued use.

Sample: 428 students, 100% Title I, 76% Hispanic Year/Location: 2017, Los Angeles USD **Design:** Randomized Controlled Trial

### Usage

Treatment students spent 5.22 hours on average (SD = 2.97hours)—between 28 and 35 minutes per week—on My Math Academy, completing 79 Learning Activities on average (SD = 40.93).







## Bang, H. J., & Lazaroff, L. (2023).

My Reading Academy™ Accelerates Kindergarten and Prekindergarten Students' Achievement of Early Literacy Skills (ESSA Tier II Certified).

#### Claims

- In a large quasi-experimental study, kindergartners who used My Reading Academy significantly outperformed their comparison-group peers on the district-administered end-of-year literacy assessments. with greater gains demonstrated by students who used the program more often.
  - Kindergarteners in one district (n = 369) outperformed their comparison-group peers on literacy overall (effect size = .26, p < .05).
  - Kindergarteners in the study (n = 619, from two districts) outperformed their comparison-group peers on Alphabet Knowledge (effect size = .29, p < .05).
- Using My Reading Academy was especially beneficial for kindergartners who started out with lower baseline literacy skills.
- Among pre-K students (n = 473, 4 districts) who mastered at least half of the Alphabet Knowledge content in My Reading Academy, 95% ended the school year "On Track," in comparison to only 81% of peers who did not have access to the program.
- Teachers found that My Reading Academy had a positive impact on specific literacy skills such as Phonological Awareness. They advocated for the continued use of the user-friendly, personalized learning program in their classrooms.

Sample: 1,092 students, 37% White; 32% Black; 26% Hispanic

Year/Location: 2021-2022, Virginia/Texas **Design:** Quasi-experimental study

### Usage

- Pre-K treatment students used My Reading Academy for an average of 44 minutes per active week (SD = 15.9) over 17 active weeks (SD = 6.4). They spent on average 13 hours (SD = 8.2) using MyReading Academy, completing an average of 98 (SD = 52.8) Learning Activities.
- Kindergarten treatment students used My Reading Academy for an average of 41 minutes per active week (SD = 17.5) over 22 active weeks (SD = 4.1). They spent on average 15 hours (SD = 7.0) using My Reading Academy and completed an average of 146 (SD = 65.8) Learning Activities.







# Bang, H. J., & Li, L. (2020).

My Math Academy™ Significantly Accelerates Early Elementary Children's Math Skills and Fosters Greater Engagement in Math: A Replication of a Randomized Control Trial (ESSA Tier III Certified).

#### Claims

- Kindergarteners, 1st graders, and 2nd graders using *My Math Academy* made significant learning gains in math, replicating the findings of a randomized control trial on an earlier version of the program (effect size = .11, p < .05).
- Teachers reported that in comparison to other educational technology, My Math Academy had a significant positive impact on student learning, indicating that students who used My Math Academy were more engaged, motivated, and confident in learning math.
- The more skills students mastered in *My Math Academy*, the greater the learning gains they experienced.
- The greatest impacts were found where there was more room for growth: (a) among students with lower levels of math knowledge, and (b) on the most difficult skills.
- Teachers found *My Math Academy* easy to use in their classrooms and recognized it as a valuable learning resource for students.

### Usage

• Treatment students spent 14.79 hours on average (SD = 5.05 hours)—between 74 and 81 minutes per week—on My Math Academy, completing 163 Learning Activities on average (SD = 67.12). Overall, students mastered on average 61 skills (SD = 21.4 skills), and 68 students (15%) completed the entire game, demonstrating mastery on all 96 skills in the program.





Sample: 958 students, 100% Title I, 90% Hispanic
Year/Location: 2019, Los Angeles USD / Orange USD
Design: Randomized Controlled Trial

## Bang., H. J., & Thai, K. P. (2022).

My Reading Academy™ Helps Prekindergarten and Kindergarten Students Strengthen Early Reading Skills and Become More Interested in Learning to Read: A Case Study of Implementation During the Pandemic (ESSA Tier III Certified).

#### Claims

- In a school year disrupted by the pandemic, pre-K students nearly tripled and kindergarten students more than doubled their reading skills in *My Reading Academy* by using the program for 6 hours over 10–12 weeks.
- Using My Reading Academy helped pre-K and kindergarten students perform better on their end-of-year literacy assessments.
- Teachers reported that students using *My Reading Academy* were excited about reading and became more confident, interested, and focused on learning to read.
- Teachers found My Reading Academy easy to use for students and easy to implement in classrooms; they expressed their desire to continue using the program.
- Teachers found *My Reading Academy* to be a resource that allowed them to provide individualized, differentiated instruction.

Sample: 157 students, 100% Title I, 90% Hispanic Year/Location: 2021–2022, South Texas Design: Correlational study

## Usage

- Pre-K treatment students used My Reading Academy for 7.8 weeks (SD = 2.4), spending on average 6.4 hours (SD = 2.6) and completing an average of 93.2 (SD = 39.7) Learning Activities.
- Kindergarten treatment students used My Reading Academy for 8.5 weeks (SD = 2.5), spending on average 6.9 hours (SD = 2.7) and completing an average of 101.4 (SD = 44.2) Learning Activities.





## Bang, H. J., & Thai, K. P. (2022).

Prekindergarten Students Using *My Math Academy* Significantly Improved Their School Readiness in Math During a School Year Disrupted by the Pandemic (ESSA Tier II Certified).

#### Claims

- In a school year disrupted by the pandemic, 98% of pre-K students in a Title I school district who used *My Math Academy* regularly ended the school year "On Track" in math on the state-administered assessment.
- Students who used *My Math Academy* were significantly more likely to end the school year "On Track" in math on the state-administered assessment than their peers who did not use the program.
- Mastering skills in My Math Academy was significantly correlated with higher performance on the end-of-year state-administered assessment.
- The study results confirm those of earlier studies in which close to 100% of the teachers reported that *My Math Academy* had a positive impact on students' interest, confidence, and enjoyment in learning math.

### Usage

Over the course of the 2020–2021 school year, pre-K students used *My Math Academy* (n = 976) on average for 35 minutes per active week (SD = 40.6) over 30 active weeks (SD = 7.2).





Sample: 976 students, 100% Title I, 33% < poverty line Year/Location: 2020—2021, Harlingen CISD Design: Quasi-Experimental Study

## Bang, H. J., & Siebert-Evenstone, A. (2023).

Head Start and Pre-K Students Using *My Math Academy* and *My Reading Academy* Make Significant Gains in Math and Reading Skills.

#### Claims

- In a district where the majority of students were identified as being at risk in the fall, 96% of Head Start and pre-K students who used My Math Academy for at least 30 minutes a week ended the school year "On Track" in math on the state-administered standardized assessment.
- Eighty-six percent of Head Start and pre-K students who used *My Reading Academy* for at least 30 minutes a week ended the school year "On Track" on the critical skill of Phonological Awareness on the state-administered standardized assessment.
- Teachers indicated that My Math Academy and My Reading Academy
  helped their students become more engaged and confident about
  learning. They also found the programs to be valuable resources that
  empowered them to provide personalized learning opportunities for
  students with diverse needs.

Sample: 458 students, 85% Title I, 63% at-risk Year/Location: 2021–2022, Tyler ISD, Texas

Design: Correlational study

### Usage

Students used *My Math Academy* on average 18.5 minutes per active week (SD = 9.5), over an average of 13.1 active weeks (SD = 5.3). They spent on average 5.4 hours (SD = 3.6) using *My Math Academy*, completing an average of 10.1 Learning Activities in math (SD = 10.1).

## Thai, K. P., & Bang, H. J. (2022).

My Math Academy Empowers Pre-K and Kindergarten Teachers to Provide Personalized, Equitable Instruction to Accelerate Learning.

#### Claims

- In a school year disrupted by the pandemic, nearly 80 teachers working with more than 1,200 students found the data and resources in *My Math Academy* empowering, enabling them to tailor their instruction and gain a deeper understanding of individual students' math progress.
- Teachers indicated that My Math Academy enabled them to provide every child with an equal chance of success.
- Students who used My Math Academy for 30 minutes per week, on average, experienced a two- to threefold increase in their math knowledge and demonstrated gains beyond their grade level.
- Teachers reported that My Math Academy significantly improved students' interest, enjoyment, and confidence in learning math.

**Sample:** 1,228 students, 100% Title I, 33% < poverty line **Year/Location:** 2020—2021, Harlingen CISD

Design: Correlational Study

### Usage

- On average, pre-K students used My Math Academy for 30.09 weeks (SD = 7.18) over the course of the 2020–2021 school year. They spent, on average, 15.18 hours (SD = 11.19) and completed an average of 201.02 Learning Activities (SD = 142.54).
- Kindergarten students used My Math Academy for 6.64 weeks (SD = 0.66) from April to June 2021. They spent an average of 6.40 hours (SD = 2.86) and completed an average of 76.15 Learning Activities (SD = 34.31).



