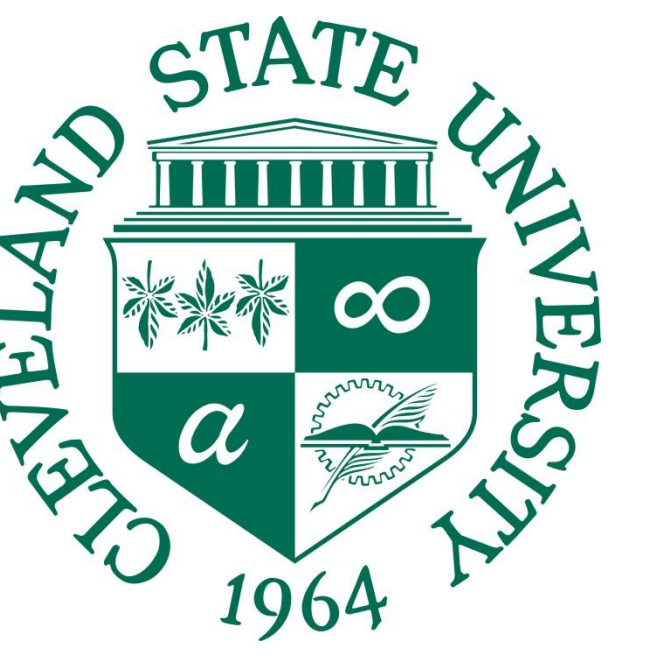


The Effects of Music-infused Explicit Instruction in Decoding and Encoding on Literacy Skills of Typically Developing Children from Low SES Backgrounds.

Morgan Rittenberger and Olivia Adams. Advisor: April M. Yorke, PhD, CCC-SLP

Choose  First



INTRODUCTION

The purpose of this investigation was to evaluate the effects of music-infused explicit instruction in decoding and encoding on the literacy skills for typically developing children from low socioeconomic (SES) backgrounds who are at moderate to severe risk for literacy delays.

PROBLEM

- Children from low SES backgrounds are at high risk for failing to develop literacy skills. This study aims to change these outcomes for a classroom of Kindergarten students.
- At the beginning of this year, kindergarteners from this school were evaluated:
 - 0% of students knew letter sounds (with 80% accuracy or greater)
 - 0% could decode (read) simple consonant-vowel-consonant (CVC) words
 - 0% could encode (write) simple consonant-vowel-consonant (CVC) words

- Students knew an average of 5 letter-sounds (median= 4)
- Students' average decoding scores were only 2% better than chance
- Students encoded CVC words with an average of 0% accuracy (median 0%)
- All but 3 students were at MODERATE or SEVERE RISK for literacy failure.

LETTER SOUND TOOLS AND INTERVENTION

- At the beginning of each session, students were taught letter-sound correspondences (which sounds go with each letter).
- Full details on this portion of the intervention as well as results are provided on our neighbor's poster.

EXPLICIT INSTRUCTION

Intervention in letter-sounds, decoding, and encoding all used explicit instruction containing the following steps:

- **INTRODUCTION & MODEL:** The task is introduced to the class and the steps in completing the task are modeled
- **GUIDED PRACTICE:** In guided practice students are given multiple opportunities to practice the skill *with support* to decrease the likelihood of practicing errors. Cues are faded over time during this phase as students become more successful.
- **INDEPENDENT PRACTICE:** Students practice the skill independently without support
- **POSITIVE OR CORRECTIVE FEEDBACK:** Students are provided with frequent positive or corrective feedback

REFERENCES

National Governors Association Center for Best Practices. "English Language Arts Standards » Reading: Foundational Skills » Kindergarten." *Common Core State Standards Initiative*, 2019, www.corestandards.org/ELA-Literacy/RF/K/.

Weiser, B. L. (2013). Ameliorating Reading Disabilities Early. *Learning Disability Quarterly*, 36(3), 161-177. doi:10.1177/0731948712450017

DECODING INTERVENTION

- **INTRODUCTION via Music:** Sing " Reading, Reading words that I love. Making a new word with fun little sounds. Combining sounds to make a new word. A fun little game that I like to play. LIKE This!"
- **Model decoding using a specific rhythm each time.**
 - Produce each letter-sound x 2 "m" "a" "n"
 - Slowly blend the sounds back together "mmmmaaaaaannn"
 - Quickly blend the sounds back together "mmaann"
- Clinician then models reading the words in sentences. Target words are read using the same rhythm as before
- **GUIDED PRACTICE:** Students read each page in the book in unison with the clinician following the same rhythm as above
 - Over time, prompts are faded with students being provided with opportunities to read the word to undergraduate research assistants alone, but with support as needed
- **INDEPENDENT PRACTICE:** Students practice the skill independently without support
- **POSITIVE OR CORRECTIVE FEEDBACK:** Students are provided with frequent positive or corrective feedback

ENCODING INTERVENTION

- **INTRODUCTION via Music:** Sing " Splitting, splitting, splitting up my sounds. Words can be split into sounds. Just watch me, you'll see!"
- **Model encoding using a specific rhythm each time.**
 - Slowly produce the word x 2 "mmmmaaaaaannn"
 - Produce each letter-sound x 2 "m" "a" "n"
 - Model finding the letter that corresponds to each sound on the QWERTY alphabet board
- **GUIDED PRACTICE:** Students encode each target word in unison with the clinician following the same rhythm as above
 - Over time, prompts are faded with students being provided with opportunities to encode the word with undergraduate research assistants alone, but with support as needed
- **INDEPENDENT PRACTICE:** Students practice the skill independently without support
- **POSITIVE OR CORRECTIVE FEEDBACK:** Students are provided with frequent positive or corrective feedback

ACKNOWLEDGEMENTS

Thank you to April M. Yorke, PhD, CCC-SLP for providing assistance in the creation of this poster and her generous support in fostering our knowledge of music-infused explicit-instruction.

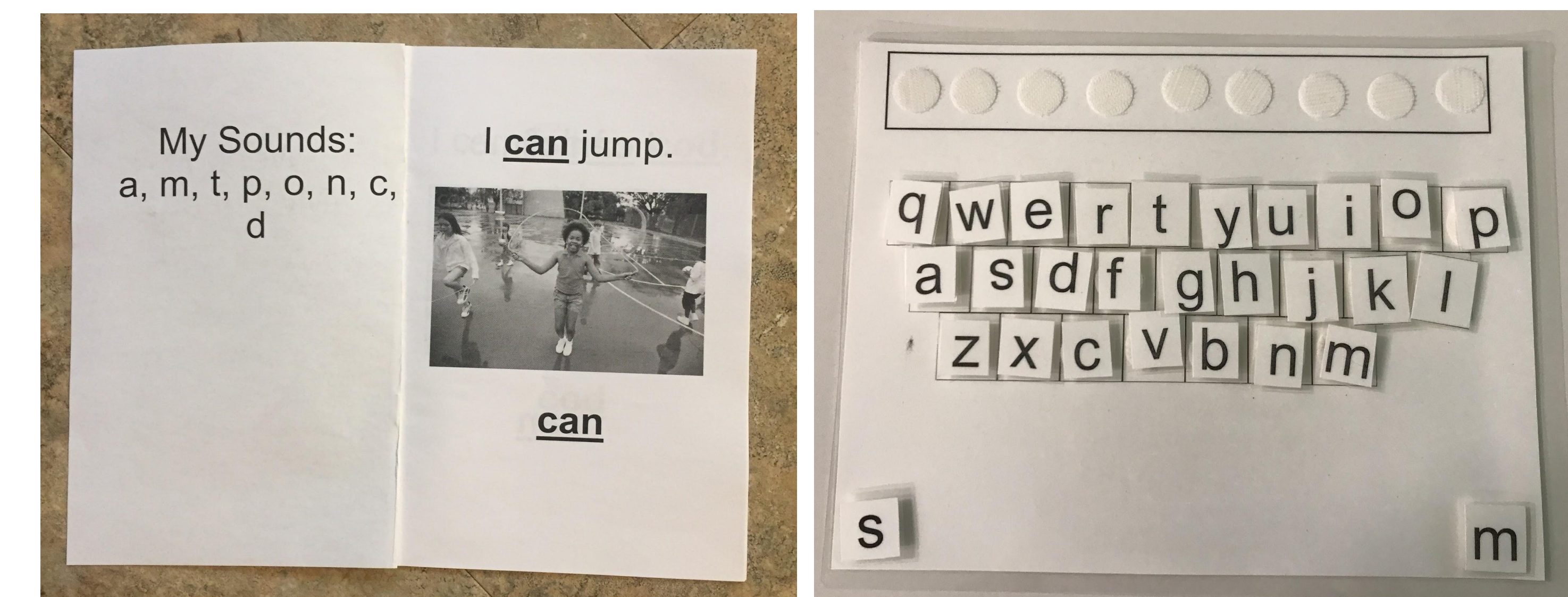


Figure 1. Books for decoding tasks

RESULTS

- Kindergarteners this (2018-2019) school year were at about the same decoding accuracy in March as last year's (2017-2018) Kindergarteners in May (61% vs. 63%).
- However, it should be noted that verbal decoding skills (correctly retrieving each letter-sound in a word) for this year's Kindergarteners were at 94% accuracy in March.

It appears that many of this year's students are still working on the blending component of the decoding task. It is expected that their scores will climb as this component is solidified.

***Unfortunately, due to time constraints, encoding data for March were not obtained, so no comparative data is available.

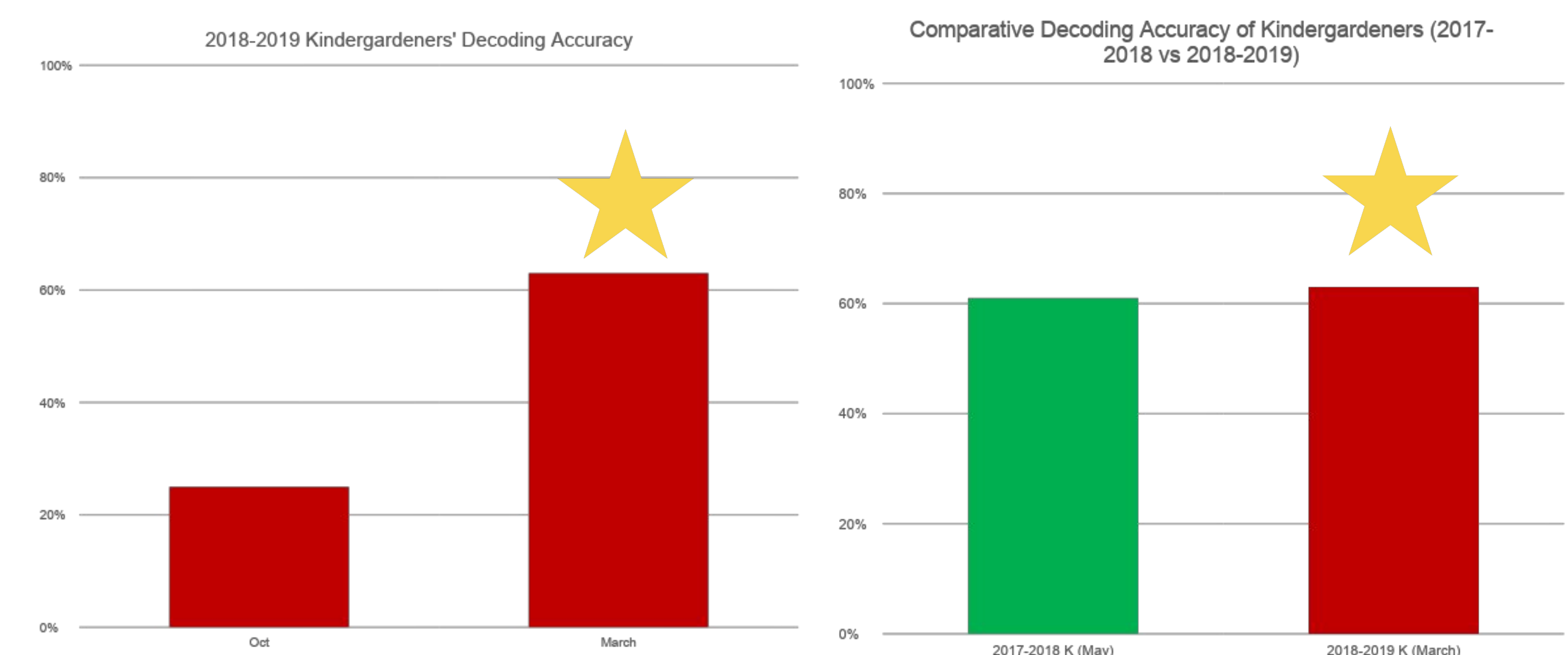


Figure 3. Decoding Accuracy

Figure 4. Decoding Comparative

CONCLUSIONS

- At the end of this year (2018-2019), kindergarteners from this school were evaluated:
 - 63% could decode (read) simple CVC words
 - Decoding accuracy increased from 22% to 63% from October to March

FUTURE DIRECTIONS

- Research performed by Beverly L. Weiser at Hammill Institute on Disabilities found that daily decoding and encoding instruction contributes to an increase in the the posttest scores of children identified with reading disabilities
 - Future studies could include the examination of the effects of exposure to decoding upon children at the preschool level in comparison to the child's ability to encode at the end of their Kindergarten school year