

## Students present research at university symposium Create @ State moves online for its 11th year

TRISTAN BENNETT  
NEWS EDITOR

Students from all disciplines across campus are getting the chance to showcase the research and projects they have worked on all year. The Create @ State Virtual Symposium kicked off on Monday as students began presenting projects they have worked on through the year. Presentations go through today.

This year, due to pandemic precautions, the symposium is taking place online, and presentations take place on YouTube. Abby Antici, a senior communication disorders major from Batesville, took the opportunity to show off the findings from her study. "We had to record our presentations beforehand, and they're doing YouTube Live events each day to present them," Antici said.

While not the traditional way of presenting a research project, the virtual format gave student-participants more flexibility. "I actually missed my presentation on YouTube because it was in the middle of the day, and I was working with a client in the Speech and Hearing Center on campus," Antici said. "I was able to look it up later and watch it though."

Antici has been working on her honors thesis project since the beginning of the school year with her mentor, Dr. Christina Akbari, assistant professor of communication disorders.

She chose to study the effects of music as a way to increase retention of spelling rules within the Barton Reading and Spelling System. She even wrote her own songs to help the participants learn the rules. "For this study, six participants were divided into control and experimental groups," Antici said. "For the experimental group, I wrote lyrics that taught spelling rules to the tune of popular songs. 'I'm a Little Teapot' became 'I'm a Little Vowel.'"

The control group participants were given the same rules but without the musical aspect, and both groups were given pre and post tests to measure growth.

Harrison Cook, a junior communication studies major from Louise, Texas, chose to look at gendered expectations in debate and forensics. "I took old debate ballots and found differences in the descriptive language by judges to reveal explicit and implicit expectations of gender performance in the debate space," he said.

While Cook's research project is still ongoing, he was able to submit his preliminary findings to Create @ State.

2021 Create@State - Day One

**STATE** SPELLING AND SONG: UTILIZING MUSIC AS A MNEMONIC DEVICE TO INCREASE RETENTION OF SPELLING RULES WITHIN THE BARTON READING AND SPELLING SYSTEM

Abby Antici, undergraduate student & Christina Akbari, Ph.D., CCC-SLP, mentor

**INTRODUCTION**

- In addition to literacy deficits, individuals with dyslexia often experience difficulties with retention (Shaw et al., 2012).
- The Barton Reading and Spelling System is a standardized treatment approach for dyslexia and literacy intervention.
- The Barton Reading and Spelling System consists of 52 levels and a number of lessons within each level that cover the following topics: in other classroom awareness; consonants and short vowels; vowel and syllable; multi-syllable words and vowel teams; prefixes and suffixes; and reasons for the silent E; vowel E's; advanced vowel teams; influence of foreign languages; and Latin roots and Greek combining forms (Giles et al., 2012).
- There is a substantial body of research showing that music can have a positive impact on student learning in the areas of folk, retention of the material and student improvement. This has been reported at all levels of education, from the elementary school level (Clemens & Thum, 1997) to the college level (Langley & Sells, 2013; McArthur, 2005).

**PURPOSE AND HYPOTHESIS**

- The purpose of this study was to determine whether utilizing music as a mnemonic device could increase the retention of the spelling rules associated with the Barton Reading and Spelling System.
- It was hypothesized that the use of music as a mnemonic device would lead to greater retention of the spelling rules found in the Barton Reading and Spelling System.

**METHOD**

**Participants**

- The participants included six students enrolled in the Barton Reading and Spelling System conducted through the Speech and Hearing Center at Arkansas State University.
- Each of these participants were enrolled in the Barton Reading and Spelling System based on a diagnosis of dyslexia or past/teacher concerns about reading difficulties.
- The participants were enrolled in grade 3/4 during the fall 2020 semester.
- The participants were divided evenly into an experimental and a control group and matched based upon their grade levels, as well as their levels of completion in the Barton Reading and Spelling System.

**Procedures**

- Pre-test procedure design.
- The experimental group was shown a YouTube video three times total each week in which the primary investigator performed a song based on the spelling rules.
- The control group was shown a YouTube video that taught the spelling rules in a traditional manner.
- The primary investigator delivered the rules to the control group, but the primary investigator did not sing the rules to the control group.

**Analysis**

- A series of independent samples t-tests were conducted to determine the difference between the experimental and control groups in terms of performance on an oral spelling test. A series of words spelled correctly, percent letters in error, letter omissions, letter deletions, and letter substitutions.
- A series of paired samples t-tests were conducted to determine the difference between pre-test and post-test performance within the control group and within the experimental group.

**RESULTS**

**Control vs. Experimental Group Performance**

- In terms of words spelled correctly, the variance between the experimental and control group scores was significant for both the pre-test ( $F(1, 10) = 2.12, p = .17$ ) and the post-test ( $F(1, 10) = 1.6, p = .23$ ).
- Although both pre-test and post-test scores were significantly different, both groups spelled more words accurately in the pre-test.
- The variance between the experimental and control groups in terms of percentage of letters in error was also significant for both the pre-test ( $F(1, 10) = 2.76, p = .11$ ) and post-test ( $F(1, 10) = 2.7, p = .12$ ).
- Both groups exhibited lower percentages of letters in error following treatment.

**Control Group Performance**

- The variance between the pre-test ( $F(1, 10) = 1.12, p = .30$ ) and post-test ( $F(1, 10) = 1.12, p = .30$ ) scores in terms of words spelled correctly was not significant ( $F(1, 10) = 0.73, p = .39$ ).
- Although it was not statistically significant, the participants in the control group spelled more words correctly in the pre-test than the post-test, as average ( $M = 2.13, SD = .41$ ) and scores in error on the pre-test ( $M = 4.49, SD = 1.14$ ) was significant ( $F(1, 10) = 12.1, p = .003$ ).
- The participants in the control group showed a significantly lower percentage of letters in error on the pre-test, as compared to the post-test.

**Experimental Group Performance**

- Variance between pre-test words correct ( $F(1, 10) = 6.67, SD = 1.11$ ) and post-test words correct ( $F(1, 10) = 1.77, p = .19$ ) was not significant ( $F(1, 10) = 0.4, p = .53$ ).
- Although the difference was not significant, the participants in the experimental group did spell more words accurately on the pre-test than the post-test, on average.
- Variance between pre-test letters in error on the pre-test ( $F(1, 10) = 1.42, SD = 1.49$ ) was not significant ( $F(1, 10) = 1.24, p = .30$ ).
- Although the difference was not significant, the participants in the experimental group did spell more words accurately on the pre-test than the post-test, on average.

**DISCUSSION**

- Overall, the results show that both experimental and control groups improved in spelling accuracy over the course of the study.
- The process of improvement in both groups indicates that the use of song did not hinder learning. However, it could not be determined in the study if the results were related to spelling improvement.
- As detailed in the results section, the experimental and control groups were consistently different at the onset of treatment.
- It should be noted that clinicians reported their improvement of the video presented. Several clinicians offered feedback that their classes based forward on the video portion of each session along with other portions of their standard therapy treatment.

**Limitations**

- This study was completed during the height of the COVID-19 pandemic resulting in constant change of hesitations for one participant and occasional songs for others.
- Some songs were longer than others, thus some students were required to watch others the songs than others. However, there is no indication that this affected the results in any manner.

**REFERENCES**

Abby Antici  
Spelling and Song: Utilizing Music as a Mnemonic Device to Increase Retention of Spelling Rules Within The Barton Reading and Spelling System  
Dr. Christina Akbari, mentor

CREATE @ STATE  
A Symposium of Research, Scholarship & Creativity  
ASU-TV  
ARKANSAS STATE UNIVERSITY

Abby Antici, a senior communication disorders major, pre-recorded the presentation of her honors thesis, and it premiered on the Create @ State YouTube and on ASU-TV on Monday.

"My findings are not conclusive," Cook said. "I need to take my preliminary ideas and go through them with Dr. Sarah Scott to better understand what I'm actually looking at."

All students, both traditional and online, are welcome to participate in Create @ State. It gives students a chance to be involved in faculty-mentored research as well as creative

projects with industry, community and alumni leaders. This is the symposium's 11th year. Alumni and industry leaders participate in the symposium as judges as well.

All presentations can be viewed on the "CreateAtState" YouTube channel on demand and live on ASU-TV.

Screenshot by: Tristan Bennett | News Editor

## Senior art students display last projects at BAM



PHOTO COURTESY OF BRADBURY ART MUSEUM  
The senior show is on display until May 8. For more photos, see page 4B.

MORGAN EDWARDS  
STAFF WRITER

A group of graduating students from the Department of Art and Design displayed their final projects in the Bradbury Art Museum. This project was the students last project before graduation, and they said it meant a lot to them. Many of the students said that the project was difficult and time consuming. Senior student Katie Lewis said, "With my other classes and assignments, my job and student teaching, it was really hard to balance everything." Rachel Rowland, Kierra Crenshaw, Madison Landis and Morgan Presley are also featured in the Senior Show. Most of the students in this exhibit said that this project was the hardest thing they have done, but in the end, it was worth it. Morgan Presley said, "I think what made this project

the hardest was choosing what works I wanted to best represent me and my growth throughout my academic career. There's a lot of inherently better works I could've put in, but it wouldn't be cohesive or as dynamic to look at. It wouldn't have the impact we were looking for." While the decisions were hard, Presley said the art was easier. "The easiest part of the entire thing was making the paintings," she said. Lewis struggled with time management on her project. "The hardest part about this project was the time limit," she said. "Although I have worked on these paintings for about a year, I put anywhere from 50 to 150 hours into each painting." She found that the easiest part was picking the photographs she wanted to work from. "I picked out several pictures from photo albums and started with my favorite ones. I looked at the people in

them and what was happening in the photo," Lewis said. Senior Madison Landis said she is proud of her work throughout her college career. "I am very happy with what I have produced for my senior exhibition," she said. "I feel my college career has led up to this, and I haven't let myself down. I am proud to leave knowing I created something special to me and learned so much in the process." The graduates also offered advice to underclassmen. "Underclassmen can expect to put in a lot of work in order to have the show they desire," Landis said. "My advice is take the time and do the hard stuff. When you're able to see all your work pay off, it's an incredible feeling and you will be proud of yourself." Presley advised younger students to make art about what they love. She said, "Also, practice. Lots and lots of practice."

## CAMPUS CRIME

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**April 12 | 2:58 p.m.**  
An officer was dispatched to the Reynolds Center for Health Sciences in reference to threats being made via text message. Than Andros gave the officer several messages, but he said he did not know who was sending them. He said he believed they could have retrieved his cell phone number, name and address from his email. Andros stated he uses his personal email to reach out to clients to start their military benefits. He also said he was reading an article from Fox News about America becoming more immoral since President Biden became president. Then he said he did a Google search for escorts, and his search provided him with information about coins to watch women "do things." Andros said the texts started the next day. The officer kept questioning Andros because his story was not making sense. He then provided a written statement. He also told the officer he was going to stay at a friend's house because he was scared and wanted to protect his family.

**April 15 | 10:44 a.m.**  
An officer was dispatched to the Kays and University Hall parking lot in regards to a theft from a vehicle. Javier Gonzalez said he was missing his Apple AirPods and approximately \$260 in cash that he left in his unlocked vehicle. Another victim, Easton John, said he was missing a pair of black sunglasses and loose change from his center console in his car, which he also left unlocked in the same parking lot. The suspect was caught on camera walking to the McDonald's on East Johnson Avenue. Officers followed up there and found an image of the suspect. Staff members said she was attempting to make a call to a friend and told them she was from out of town and needed a ride. She was last seen on camera walking west bound on the north side of Johnson Avenue. Later on, another officer was dispatched to the same location for a report that Beatrice Zargari found items in her vehicle that did not belong to her, but nothing was missing. They found a pink wallet with a driver's license, an empty black purse, a black mobile charger bank, a key ring with two keys, one dollar bill, lipstick, a pack of gum and loose change. Officers found that Shelby Kirk was

the owner of the pink wallet, and she told them she was missing a pink purse and tan boots from her vehicle. Ryan Featherston also stated he was missing a loose car radio. In total, five vehicles were broken in to. **April 16 | 7:32 p.m.**  
An officer was dispatched to the Alpha Omicron Pi Sorority House in reference to a fire alarm. He spoke with Maggie Aureli, who stated she was cooking bacon in the oven when the alarm started sounding. The Jonesboro Fire Department arrived and cleared the building. **April 17 | 7:27 p.m.**  
A University Police officer was dispatched in response to someone urinating in the pond behind the Alumni Center. He arrived on the scene and observed Idiah Tamble smoking a cigarette. He was asked to put the cigarette out due to the Arkansas Clean Air on Campus Act of 2009. Tramble also verbally admitted to urinating in a bush. He was issued a Persona Non Grata for disorderly conduct and issued a verbal warning for violating the Arkansas Clean Air on Campus Act of 2009.