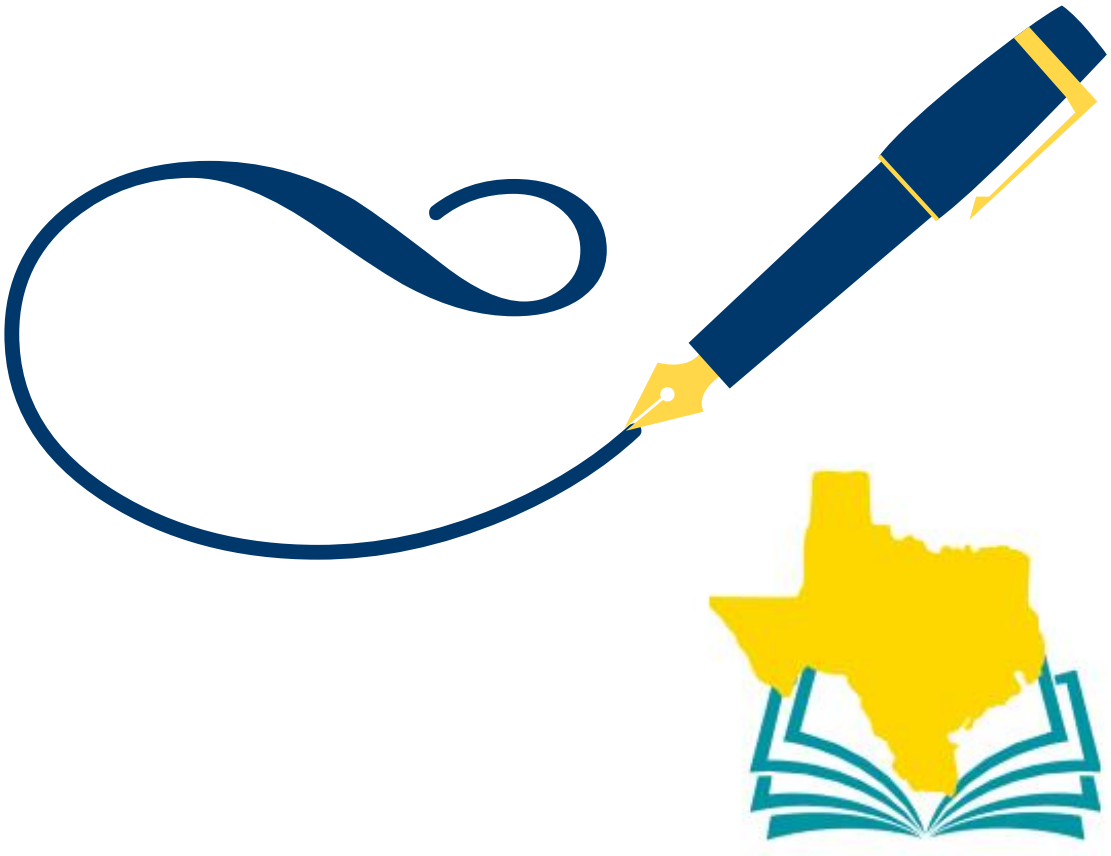
Texas Journal of Literacy Education

A PEER-REVIEWED JOURNAL PUBLISHED BY THE TEXAS ASSOCIATION FOR LITERACY EDUCATION



VOLUME 9, ISSUE 3
WINTER 2022

Texas Journal of Literacy Education

JOURNAL OF THE TEXAS ASSOCIATION FOR LITERACY EDUCATION

Texas Journal of Literacy Education is the official journal of the Texas Association for Literacy Education (TALE), the Texas affiliate of the International Literacy Association. TJLE is a peer-reviewed journal published twice each year, in the Fall and Spring. We seek original research and practitioner articles related to language and literacy practices, from early childhood through adult, inside and outside of the classroom. We welcome all voices from literacy researchers, classroom teachers, and graduate students.

Contents

Introduction **Page # 3**
- TJLE Editorial Team
- Preface/Editor's Introduction
- In This Issue

Paper vs. Online Assessments: A Study of Test-Taking Strategies For STAAR Reading Tests **Page # 6**
Holly Dasher, Jodi Pilgrim

Preparing Preservice Teachers to Work with Diverse Learners **Page # 20**
Jane Elizabeth Casey, Kim Kuklies, Chelsea Herndon-Warner

Differentiation Matters! Six Successful Cross Curricular Strategies That Provide Process Support for African American K-6th Grade Learners **Page # 33**
Tami Morton, Jennifer Dyer

Call for Manuscripts **Page # 43**

TJLE Editorial Team 2022-2025

Juan Araujo, Ph.D. is an associate professor and assistant dean with the College of Education and Human Services at Texas A&M University-Commerce. He holds a Ph.D. from University of North Texas in Reading with a minor in Anthropology and is the faculty mentor with the National Writing Project of Northeast Texas. Dr. Araujo presents and facilitates professional development activities relating to writing and its instruction. He is co-editor of the ALER Yearbook and is on several national review boards.

Kamshia Childs, Ed.D. is an Assistant Professor in the Curriculum and Instruction department at Texas A&M University-Commerce. She obtained an Ed.D. in Curriculum and Instruction at Texas Southern University. Dr. Childs has been an educator for over 20 years and has worked in various urban and rural settings in K-12 and higher education. She is on the Advisory Board for the National Writing Project of Northeast Texas, has published several literacy and multicultural education articles and book chapters, written a self-published book, and presents at state, national, and international conferences on topics related to literacy, digital literacies, educator empowerment, parent involvement, and culturally relevant teaching practices.

Tami Morton, Ph.D., is an Associate Professor of Reading in the Curriculum and Instruction department at Texas A & M University-Commerce. She has taught at the university for ten years and she continues to teach at all levels: Undergraduate, Master's, and Doctoral. Her research interests include reading foundations, preservice teachers, diversity and equity, culturally relevant pedagogy, and multicultural children's and adolescent literature.

Laura Slay, Ph.D. is an assistant professor in the Curriculum and Instruction department at Texas A&M University-Commerce. She holds a Ph.D. from the University of North Texas in Curriculum & Instruction: Language and Literacy Studies. She teaches literacy and ESL methods courses, supervises preservice clinical teachers, and is on the Advisory Board for the National Writing Project of Northeast Texas. Her research interests include writing instruction, culturally sustaining pedagogy, and preservice teachers.

Editors' Introduction

In the Spring of 2022, a new team from The Department of Curriculum and Instruction Reading Faculty at Texas A&M University-Commerce assumed the editorial duties for *The Texas Journal for Literacy Education* (TJLE). We (Drs. Juan Araujo, Tami Morton, Kamshia Childs, and Laura Slay) would like to express our appreciation to the former editors (Drs. Amy Burke, Betsy Kaye, and Mandy Stewart) who left a legacy of inspiring academic scholarship, and especially thank Dr. Amy Burke who ushered us through the process of publishing this inaugural issue under our leadership.

The editorial team comes from a wide array of backgrounds and brings diverse educational experiences from across the spectrum of K-12 public schools and higher education. Our collective expertise includes elementary and secondary literacy teaching and learning, bilingual education, multicultural and children's literature, culturally relevant and sustaining pedagogy, and an enduring affiliation with the National Writing Project, including the newly formed National Writing Project of Northeast Texas.

Recognizing that the landscape of literacy education is continually shifting in response to social, economic, cultural, and legislative challenges, we aim to provide insightful, and useful knowledge and perspectives on relevant topics that our readers can apply to their own practice. In the tradition of excellent scholarship previously featured in this journal, we will continue to seek literacy research and pedagogy from experienced scholars and practitioners. We also encourage early career scholars, graduate students, classroom teachers, and literacy leaders dedicated to providing research-based literacy instruction to submit their manuscripts. Our editorial team aims to provide empathetic editorial support. We will care for the content of your submissions in a way that honors your perspectives and writing objectives.

Although, for this issue, we solicited manuscripts for general submission, future issues will feature important themes relevant to literacy education, including:

- Early Childhood Literacy Education
- Adolescent Literacy
- Children's Literature
- Writing Instruction
- Digital Literacies
- Teacher Education
- Literacy as Social Justice

We plan to publish issues bi-annually, in the Spring and Winter, on or around the first day of April and October respectively. Manuscripts will be accepted on a rolling basis throughout the year. If there are hot topics that require immediate addressing, we will publish special editions featuring hot topics relative to the State of Texas–such as edTPA, process writing, reading comprehension, and the Science of Teaching Reading.

As the official journal of the Texas Association for Literacy Education, we specifically aim to support Texas educators; yet we anticipate that the scope of this journal will also serve literacy educators at large. To this aim, we will from time to time invite key researchers to be guest contributors to this journal, and we welcome your suggestions for themed issues.

In This Issue

As educators attempt to move forward in their practice and continue addressing learning gaps created by disrupted learning during two years of pandemic-related schooling, the authors in this issue write about enduring and relevant topics in literacy instruction, including assessment, service learning, and differentiation. To begin, the first article discusses how teachers addressed the evolving nature of online standardized testing from the traditional paper testing in the elementary grades. The second article features experiential service learning with preservice teachers working with emergent English language learners. The third article in this issue provides differentiation strategies founded in culturally relevant pedagogy for the elementary grades.

In *Paper vs. Online Assessments: A Study of Test-Taking Strategies for STAAR Reading Tests* the authors explore the strategies teachers in grades three through eight use to prepare students to take the paper/online versions of the reading STAAR test in the newly redesigned format which will be administered in the 2022-2023 school year. *In Preparing Preservice Teachers to Work with Emergent Bilingual Students: Highlights From an Exploratory Service-Learning Trip to Central Mexico*, the authors describe how preservice teachers gained self-efficacy and faculty recognized their own bias toward another cultures' fundamental beliefs about education during a field experience working with emergent bilingual students in a remote village of central Mexico. In *Differentiation Matters! Six Successful Cross Curricular Strategies That Provide Process Support for African American K-6th Grade Learners*, the authors offer strategies for differentiating literacy instruction across content areas and skill levels for African American students in the elementary grades.

We hope you will enjoy reading this issue. Please share it across your network of educators and educational literacy leaders. The journal seeks to encourage a variety of authors to submit their work, such young scholars, graduate students, teachers, and other literacy educators dedicated to providing researched-based instruction and practices. We invite you to submit your manuscript for future issues and hope that you will join our team of reviewers as well.

Paper vs. Online Assessments: A Study of Test-Taking Strategies for STAAR Reading Tests

Holly Dasher
Jodi Pilgrim
University of Mary Hardin-Baylor

Abstract

Schools around the nation are increasingly offering online testing options. House Bill (HB) 3906, passed by the 86th Texas Legislature in 2019, resulted in the STAAR redesign, which will be administered in the 2022–2023 school year. The STAAR redesign includes several components including an online test administration for the STAAR. With the change to an online platform comes many concerns related to student familiarity with an online testing platform. The purpose of this qualitative study was to identify and compare the test taking strategies that teachers in grades three through eight teach in preparation for the paper/online versions of the reading STAAR test. A group of Texas teachers participated in focus group sessions. The three primary themes reported in the findings include resources, which teachers suggested were needed to help them prepare students for an online assessment, platforms, which detailed the pros and cons of an online testing environment, and strategies, which support students as they read passages and answer test questions. Overall, the teachers found ways to transfer previously used strategies, such as pen and paper annotations, to online test administration. However, older students have an easier time with this transfer of skills than the younger students.

Introduction

Prior to the coronavirus pandemic's large-scale school disruption in the spring of 2020, over twenty states had begun to offer standardized tests in online platforms for K-12 students (Backes & Cowan, 2019; Terada, 2020). Student performance on these online tests often reflects lower achievement scores than peers who took paper tests (Backes & Cowan, 2019; Harold, 2016; O'Donnell, 2016). In addition, research indicates that some populations, such as children from low-income families, English learners, and students with disabilities, score disproportionately lower on online tests. Performance on English Language Arts test was most affected, with an online test penalty of about 0.25 standard deviations (Backes & Cowan, 2019). Even though the disparities between the scores on these two testing formats seemed to lessen over time (Backes & Cowan, 2019), online testing issues need further investigation.

Currently, Texas students in third through eighth grade take the State of Texas Assessment of Academic Readiness (STAAR) test. Test administration has been paper-based until recently. In 2019, the Legislature passed House Bill 3906, which led to the requirement that all statewide tests be given electronically starting no later than 2022-23. With this change, teachers must consider ways to prepare students for a digital test. The purpose of this qualitative study is to identify and compare the test taking strategies teachers in grades three through eight teach in preparation for the paper version and online version of the reading STAAR test. Insight from participants may help teachers better prepare students for the STAAR.

Theoretical Framework

As digital assessments replace paper assessments, mode equivalence cannot be assumed. Literacy skills required for an online environment often differ from traditional literacy skills (Coiro, 2005; Coiro, 2021; Pilgrim et al., 2018; Lisenbee et al., 2020). In addition, although traditional concepts about print (Clay, 2000) develop in children at a young age, concepts about online text develop at a later age (Pilgrim et al., 2018). Therefore, a transliteracies perspective frames this study. Transliteracy, defined as the ability to read, write, and interact across a range of platforms, tools, and media, reflects the transformational nature of literacy (Vacca et al., 2018). It signifies the transition and transformation from one mode of literacy to another. The complex term is both an idea and a practice and "consists of skills, knowledge, thinking, and acting, which enable a fluid 'movement across' in a way that is defined by situational, social, cultural, and technological contexts" (Sukovic, 2016, para. 5).

Background

Schools are increasingly offering online testing options. In 2014, 65 percent of Ohio schools offered state standardized tests online, and in 2017, 98 percent of Ohio schools offered state standardized tests online. In California, 22 percent of students took statewide standardized online tests in 2019 (Terada, 2020). A feasibility study conducted by the Texas Education Agency (2020), initiated to determine if Texas had the resources to move to online testing, reported that 70 percent of states administer their standardized tests virtually.

State of Texas Assessment of Academic Readiness

In 2012, Texas students began taking the new statewide standardized test called the State of Texas Assessment of Academic Readiness, or the STAAR, which was the successor to the Texas Assessment of Knowledge and Skills. Significant differences marked the transition from one test to the other, and increased rigor is among one of the differences (Weiss, 2012). The STAAR was designed to better assess progress at every grade level toward postsecondary readiness, which has become a national phenomenon as well, with the Common Core. The STAAR, for grades three through eight, evaluates student achievement across content areas, including ELAR, Math, Science, and Social Studies.

House Bill (HB) 3906, passed by the 86th Texas Legislature in 2019, resulted in the STAAR redesign, which will be administered in the 2022–2023 school year. The STAAR redesign includes several components, including Online Testing and Accommodations, New Question Types, Cross-curricular Passages, and Evidence-based Writing. Many schools began using the online platform for accommodations in 2016 (TEA, 2020). With the change to an online platform comes many concerns related to student familiarity with an online testing platform. In a parent resource, TEA (2021) recommended that “campuses help students gain exposure to technological devices and familiarity with the State of Texas Assessments of Academic Readiness (STAAR) online testing platform before test day” (para 6). The report provided a link to online practice tests (https://www.texasassessment.gov/practice-tests.html) so that students would have an opportunity to interact with the test interface while using the available tools. In addition to familiarity with an online platform, there may be other factors that

teachers need to address to prepare students for a new online platform. This qualitative study seeks to provide insight on how to best prepare students for success with these platforms.

Online Assessments

Online test administration has many benefits. When interviewed, Backes commented that

> The items are cheaper to grade. And they're easier to deliver and transmit. And you get results back faster. And there probably are benefits to students being familiar with performing tasks on computers because that's what the workplace is switching to anyway (Future Ed, 2018, para 9).

In addition, TEA (2020), reported that the STAAR online testing platform allows students to receive accommodations like those they get in the classroom, it provides faster test results, it improves test operations, and it allows new non-multiple-choice questions" (TEA, 2020). In their feasibility study, TEA found that other states across the nation initially transitioned to online testing for similar reasons and because online assessments improve test security. They also found "there had been some pressure from states' legislative bodies and education leadership to 'catch up' to other states that were already using online testing" (TEA, 2020, p. 13).

As previously mentioned, researchers who compared performance on paper assessments versus online assessments reported potential issues with online assessments. When the authors of this concerning research were asked what the cause of this difference could be, they speculated that the item format, such as having to scroll when reading passages instead of flip pages could be a difference. They also report that "step one is at least acknowledging that there might be a difference." (Future Ed, 2018, para. 10). Researchers have known for a long time that reading online requires different skills than paper-based reading (Coiro, 2009).

Test-Taking Strategies

Due to item format, one difference between the paper and online testing could be the test-taking strategies students use as they comprehend reading passages and search for answers to questions about passages. Teachers provide strategy instruction to help students master the content and understand the questions asked on the test (Dodeen, 2015). For example, on paper STAAR tests, students are allowed to use highlighters as they read passages and search for answers. Teachers often encouraged students to underline or highlight the text around target vocabulary words, such as the sentence before, with, and after the word, in order to help students use the context of the surrounding text to determine the words meaning. Students were allowed to ask for a dictionary to help them with an unknown word, so teachers would provide instruction as to when and how to use a dictionary. Some teachers encourage students to read test questions prior to reading the passage, and many teachers require students to return to the passage and provide evidence for the answers they choose. Commonly, teachers will have students eliminate answer choices they think are incorrect by marking them with a line or an "x" and mark potential answer choices with a question mark. Some of these test-taking strategies may differ in an online testing platform. Because "test-taking strategies can improve the overall validity of the test scores so that they accurately reflect what students really know" (Dodeen, 2015, p. 109), it is important to investigate the commonalities and differences.

STAAR Online Tools

As previously mentioned, parents, teachers, and students can access STAAR online practice tests. An online reading test was accessed in March 2022 prior to the focus group sessions to gain insight into the testing platform. The platform and the tools for the online STAAR test are described briefly in this section.

After selecting the desired practice test, the platform allows users to choose settings. The "test attributes" that could be adjusted included Zoom, color setting, large mouse pointer, and spelling assistance. The zoom attribute allowed students to select increase the font size. The color setting, defaulted to black and white, could be adjusted to red on white, white on red, light blue, light magenta, light yellow, white on black, or yellow on blue. The large mouse pointer could be set to large black, extra-large black, large green, extra-large green, large red, extra-large red, large while, extra-large white, large yellow, or extra-large yellow. Finally, the spelling help could be set at on or off.

Next, instructions and a help guide are presented. This information can also be accessed at any time during the test by selecting the question mark button. The help guide provides an overview of the test site, test rules, and text-to-speech information. The overview includes a sample test page, which contains labeled information such as the navigation buttons, item drop-down, content menu, and other platform features. It also contains an in-depth guide into context menu tools, which are online tools that parallel pen and paper tools (and more) that students may use to assist them during the assessment. For example, it has instructions on how to use the highlighter tool, the sticky notes, and the "mark for review" flag.

Upon beginning the practice test, the tools must be found by the user. A menu icon, like the one seen in Figure 1, is visible on both the left side (above the reading passage) and right side (above the test questions) of the screen. On the left side, the menu provides the option to highlight. In order to highlight, a text from a passage must be first be selected, and then the highlighter tool can be used. There are four highlighter color options from which students can choose. On the right side of the screen, the menu provides the following options: tutorial, mark for review, sticky note, and strikethrough. The strikethrough can be used to eliminate answer choices.

Figure 1. *Digital Menu Button for the Online STAAR Practice Test*

Above the menu tool located on the right side of the screen, there are five icons which represent tools students can access: a dictionary, a notepad, a line reader, a zoom out button, and a zoom in button. When students access the dictionary, they can type in a word to access a definition and an audio recording of the word. The note pad is a digital version of scratch paper, enabling students to type notes. The "line reader" enables students to mark and read one line at a time in a passage. The Zoom icons enable students to make text larger or smaller.

Method

The STAAR contributes to academic accountability ratings for Texas schools, and both teachers and students are held accountable for academic achievement. As Texas students begin the process of transitioning from a paper to online testing format, educators and stakeholders will be interested how to best help students with this change in the testing platform. This qualitative study used focus groups to gain insight related to the differences between paper and online strategies teachers are promoting. The research question for the study was: *How do paper reading STAAR test-taking strategies compare to online reading STAAR test-taking strategies?*

Data Collection

Qualitative data were collected from Central Texas English Language Arts and Reading (ELAR) teachers during two separate focus group sessions, which were scheduled to accommodate teachers' schedules. A focus group design can put interviewees at ease and encourage the elaboration of ideas in areas that are not sensitive (Creswell, 2018). Criteria for teacher participation was that they taught in 3rd through 8th grade classrooms and had administered both the paper and online STAAR test. A total of five teachers participated in the focus groups. Four of the five participants taught in the same district but in different schools. Table 1 uses pseudonyms to present additional information about the teachers.

Table 1
Teacher characteristics.

Teacher	Grade Level	Subjects Taught	1:1 District
Ellen	3rd	ELA & Social Studies	Yes
Sally	5th	Self-Contained	Yes
Theresa	4th	ELA & Social Studies	Yes
Daisy	7th	ELA	Yes
Suzanne	7th & 8th	ELA	Yes

Data collection occurred during the spring of 2022, and participants in both focus groups were asked the same questions. A focus group protocol was developed for use for this study and is included in the appendix. The focus group occurred virtually to accommodate teachers' schedules, and the researcher used Zoom as a virtual meeting tool. The focus group discussion questions were designed to elicit responses related to the research question. All focus group sessions were audio recorded, and a speech to text software (Google Doc) was used to transcribe the conversation.

Data Analysis

After the sessions were transcribed, qualitative data were analyzed using open coding. In vivo coding is an inductive process that allowed the researcher to make sense of the data generated from participants' discussions (Creswell, 2018). Procedures for coding initially involved reading through transcripts multiple times to find data that stood out, As codes were identified, they were color-coded and labelled. Code checking involved the second researcher coding the transcripts to determine rater agreement. Finally, through the process of collapsing

and disaggregating data, three major themes emerged: resources, platforms (subtheme stamina), and strategies.

Findings

All of the teachers in this study had experience with the STAAR online platform, meaning their students had taken the online STAAR in 2021. In addition, all of the teachers used the "interim" STAAR platform in the fall of 2021 and in the spring of 2022. Although all of the participants in this study acknowledged the benefits of an online testing platform, especially for students with accommodations, all participants expressed some concerns about the online STAAR test, primarily based on their experiences with the STAAR paper test as well as their experiences with the online practice tests available from TEA. The three primary themes that emerged from data analysis related to resources, platforms (with subtheme stamina), and strategies.

Theme 1: *Resources*

TEA has historically provided resources for teachers, parents, and students on their website (https://tea.texas.gov/student-assessment/testing/staar/staar-resources). One of the resources provided in the past has been STAAR released tests and answer keys. Teachers use these released tests, as well as commercial resources which provide practice materials, to help students prepare for the STAAR, which is a high-stakes assessment. Participants in this study expressed a desire for resources that enabled more frequent and consistent practice with the online platform. They shared concerns about a lack of resources to prepare students for the online test. Ellen stated that there are "not enough resources out there to help us prepare the kids to take the online test in the format that's offered." Sally reiterated that teachers "don't really have any resources to support the online test." Because the online requirement for all students is new, Ellen relayed that "education programs are waiting to see what that looks like before they're rolling out a new program…no we do not have specific materials" and "there is not a place to practice those question types." Suzanne agreed that "other than the interim assessment provided by TEA, there is no way to practice daily." Students could practice daily with the paper test, but the lack of resources to do this with the online test is a problem teachers expressed.

One resource all of the participants appreciated was a 1:1 technology initiative at their schools. For Suzanne, it was the first time to be a part of a 1:1 initiative, and she felt the exposure to online environments was helpful in general. She appreciated the consistent exposure with readily available devices as opposed to having to find a computer lab for skills practice. Strategic goal 2 in the Texas Long Range Technology Plan (2018) relates to the implementation of 1:1 initiative in which each student and staff have a connected device. The teachers reported that having a computer to use in class is helpful.

Theme 2: *Platforms*

The STAAR platform, traditionally a pen and paper test, moved online for accommodations reasons in 2015. As of the upcoming 2022-2023 school year, the STAAR platform will be an online testing environment for all students. According to TEA (2021), "Online testing allows for the continued exploration of new question types and assessment

designs that support students and their needs" (para. 3). Examples of the assessment designs that support students include text-to-speech tools and zooming features. Overall, teachers had mixed feelings about the transition to an online platform for all students. For example, Sally commented, "I have some students that truly excel at it because of the format…I have more students with so many issues and distractions." Daisy commented about "very mixed feelings about it being all online."

Teachers shared several positive comments about an online testing platform. Ellen reported a benefit of online testing was "results faster…quicker," which enables schools to "test later." Sally, a fifth-grade teacher, mentioned that her high-achieving students loved the format. In addition, the design features that support students needs were appreciated by the teachers. Theresa commented that the tools for students with accommodations were "incredibly helpful." For example, the ability to have paragraphs read aloud is a benefit of text-to-speech tools. Another feature available for students with accommodations was a tool that allowed students to click a paragraph number in a test question in order to go straight to that part of the passage. This ease of access simplified the search process for some students. Additionally, Theresa mentioned that the online dictionary is much easier and much faster for all students to use. She also liked the audio tool that pronounced unknown words for students.

It's "hard" was used by participants to describe the difficulty of the online testing platform. The most prominent concern about the testing platform for participants was the changing nature of the digital features and tools. According to the teachers in this study, the testing tools have changed from one interim test administration to the next (fall to spring). In other words, the online platform appeared to be undergoing revisions throughout the 2021-22 school year. Theresa commented that "a lot of the tools have changed" and that teachers are not informed about these changes "until we actually go look over their shoulder and all my goodness there's a tool, and it is hidden in a drop-down over here, and they don't even know it's there." Theresa emphasized the same issue with the testing tools on the online platform by commenting ". . . we might not know exactly where those folders are going to be hidden on STAAR day." She summed up the concerns with the statement, "They'll surprise us every time."

Ellen provided an example of a change in testing features that negatively impacted her third graders. At one point, the online testing platform include a "pencil" option in so students could write instead of type. The revised online platform this year did not have the same option. Instead, there was a sticky note options third graders could use to type, but "typing is an issue." She noted, "We are expecting students to type, but we don't even have technology classes on campuses." Another example of a change in testing features Ellen discussed was the elimination tool. In addition to the change in the way it is used, Ellen, considering third grade vocabulary knowledge, was concerned about the "big word to describe it."

Subtheme 1: Stamina

While teachers discussed online platforms, the issue of stamina emerged. "Reading stamina is a child's ability to focus and read independently for long-ish periods of time without being distracted or without distracting others" (Reading Rockets, n.d., para. 2). The ability to maintain one's endurance during a reading exam is a concern for both paper and online assessments. Yet, in this study, participants associated the need to build stamina with the online platform and "screen fatigue." Participants discussed building stamina as a part of a test-taking goal in which teachers trained students by increasing exposure to screen time throughout the year.

Several teachers echoed the issue that reading on a screen with the online version of the test has worsened reading stamina. They felt that students are impacted by "screen fatigue" and see it in the classroom. Ellen emphasized that "it's a real thing." One teacher expressed that "reading on a screen, in general, it's harder for me." To try and combat this issue, one teacher has their students "read more and more... have both online and paper reading so that they can just have that stamina."

Ellen, the third-grade teacher, mentioned that she would have students increase the brightness on their computer device in order to ensure students were alert during testing. She then discovered through personal research that screen brightness may actually increase screen fatigue. As a result, she now has students decrease brightness. According to Ellen, fatigue and stamina are such an issue for third grade students that it is difficult for them to get through the STAAR, which includes five passages. Therefore, she felt that some of the online features, such as the sticky note tool, required a lot more effort for third graders, since they are not proficient at typing. Her concern is that this hinders stamina more than pen and paper task in which they can jot down notes instead of type.

Theme 3: *Strategies*

The participants were asked about both paper-based test-taking strategies and screen-based test-taking strategies. Paper-based strategies discussed by participants included highlighting, underlining, and dictionary searches. Some teachers provided instruction on reading test questions prior to reading the passage. Another strategy mentioned repeatedly was the application of annotations while reading. Annotations reflect a type of note-taking on a test, which can be applied in various ways. Sally referred to her students' annotations as "stop and jot" and "hashtags," which are supposed to be a main idea sentence about a paragraph. Participants mentioned that they require students to provide evidence of where they found answers in a passage, which Sally referred to as "tagging." This strategy often entails students writing down the paragraph number of the text evidence next to the test question.

Screen-based strategies shared by the participants related to ways teachers adapted previously used paper strategies for the online testing platform. Since teachers are allowed to provide scratch paper for students to use during test administration, participants reported that students use the paper for notes or annotations. Students learn to fold the paper in sections of 4 or six, and in each folded section, students are instructed to annotate. For example, instead of summarizing the main idea next to the text as was done with the paper platform, some teachers now instruct their students to write their "hashtag" and take other notes on scratch paper. The exception to this strategy was the third-grade representative. Ellen would prefer her students spend more time rereading rather than trying to take notes on scratch paper or on the sticky note tool.

Even though online tools and features were discussed, test-taking strategies geared specifically to the online test were not shared during the focus group sessions. Instead, participants expressed concerns that students may be distracted by the tools, which could hinder their test taking. The participants indicated that they have provided additional reading time on devices in the hope that exposure to screen-based text will help. Ellen, who was most worried about stamina, during testing mentioned that she encouraged brain break during screen reading, similar to the brain breaks some of her students used on the paper tests.

Discussion

The research question for the study was *How do paper reading STAAR test-taking strategies compare to online reading STAAR test-taking strategies?* Findings indicate that the teachers adapted traditional paper-based strategies for use with online assessments. Participants had limited knowledge about STAAR online tools due to inconsistencies in the platform over time. Overall, the teachers found ways to transfer previously used strategies, such as pen and paper annotations, to online test administration. However, older students have an easier time with this transfer of skills than the younger students.

The three primary themes reported in the findings include *resources*, which teachers suggested were needed to help them prepare students for an online assessment, *platforms,* which detailed the pros and cons of an online testing environment, and *strategies*, which support students as they read passages and answer test questions. Of these themes, strategies and resources seem be related in that until the online STAAR platform becomes more stable, teachers will not have the resources necessary to develop helpful strategies. A change from paper-based to screen-based testing requires traditional literacy skills as well as a new set of skills for online navigation, as transliteracy occurs. Concepts about print develop from exposure to print. The same is true of online text. Students need exposure to digital literacy tools in order to understand online text features and online navigation (Pilgrim et al., 2018). In addition, digital tools frequently change, so it will be important for teachers and students to be notified when the platform tools change.

The findings in this study align with TEA's 2020 feasibility study, which reported similar concerns when they polled Local Education Agencies (LEAs). The LEAs and campuses that participated in STAAR online testing in 2018–19 provide feedback on STAAR online administrations. According to the study, a majority of responding LEAs and campuses recommended more training for teachers and students for successful STAAR online testing. The responses also highlighted the need for teachers to participate in the STAAR online environment in the same manner in which a student would.

Conclusions & Implications

A few things can be concluded, from the input of teachers about online testing and its highs and lows. There is a misalignment between students' daily use and assessment. Students are not using the same materials for the test within their everyday learning, which could be attributed to several factors. Teachers agreed that "if you're not using it in your daily life like how you are with paper and how you're marking that transfer over isn't always as effective, I guess or as natural" and did not think "…there's enough material there to kind of allow them to practice that regularly." Teachers need better training and resources to improve their preparation of students for the online STAAR test. The lack of resources, lack of knowledge of online tools, screen fatigue and low stamina, and teaching test-taking strategies online would likely improve with more training and resources for teachers

References

Backes, B., & Cowan, J. (2019). Is the pen mightier than the keyboard? The effect of online testing on measured student achievement. *Economics of Education Review*, *68*, 89-103.

Clay, M. (2000). *Concepts about print: What have children learned about printed language?* Heinemann.

Coiro, J. (2005). Making sense of online text. *Educational Leadership, 63*(2), 30-35. http://www.ascd.org/publications/educationalleadership/oct05/vol63/num02/MakingSense-of-Online-Text.aspx.

Coiro, J. (2021). Toward a multifaceted heuristic of digital reading to inform assessment, research, practice, and policy. *Reading Research Quarterly*, *56*(1), 9-31. https://doi.org:10.1002/rrq.302

Coiro, J. (2009). Rethinking reading assessment in a digital age: How is reading comprehension different and where do we turn now. *Educational Leadership, 66*, 59-63.

Cresswell, J.W., & Puh, C.N. (2018*). Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE. *Research, 5*(2), 108-113. doi:10.17265/2159-5542/2015.02.003

Dodeen, H. (2015). Teaching test-taking strategies: Importance and techniques. Psychology Research, February 2015, Vol. 5, No. 2, 108-113 doi:10.17265/2159-5542/2015.02.003

FutureEd. (2018). Paper vs. Online Testing: What's the Impact on Test Scores? https://www.future-ed.org/work/paper-vs-online-testing-whats-the-impact-on-test-scores/

Harold, B. (2016). PARCC scores lower for students who took exams on computers. *Education Week*. https://www.edweek.org/teaching-learning/parcc-scores-lower-for-students-who-took-exams-on-computers/2016/02?cmp=SOC-SHR-TW

Lisenbee, P., Pilgrim, J., & Vasinda, S. (2020). Integrating technology in literacy classrooms: Models and frameworks for all learners. Taylor and Francis Publishing.

O'Donnell, P. (2016). School districts got A-grades on paper tests, but F grades online. *Metro.* https://www.cleveland.com/metro/2016/03/school_districts_got_a_grades_on_paper_tests_but_f_grades_online_survey_shows.html

Pilgrim, J., Vasinda, S., Bledsoe, C., & Martinez, E. (2018). Concepts of online text: Examining online literacy tasks of elementary students. Reading Horizons: A Journal of Literacy and Language Arts, 57(3), 68-82.

Reading Rockets (n.d.). Growing readers: Building reading stamina. https://www.readingrockets.org/pdfs/edextras/51787-en.pdf

Sukovic, S. (2016). What exactly is transliteracy? *Elsevier SciTech Connect.* http://scitechconnect.elsevier.com/what-exactly-is-transliteracy/

Swaby, A. (2021, January 5). Texas unveils plan to have all students take STAAR online by 2022. *The Texas Tribune*. https://www.texastribune.org/2021/01/05/texas-staar-online/

Terada, Y. (2020). On standardized tests, students face an 'online penalty.' *Edutopia.* https://www.edutopia.org/article/standardized-tests-students-face-online-penalty

Texas Education Agency. (Sept. 2018). Long-range plan for technology 2018–2023: Building a stronger Texas. https://tea.texas.gov/sites/default/files/Long-Range-Technology-Plan.pdf

Texas Education Agency. (Dec. 1, 2020). State of Texas transition to online assessments feasibility study. https://tea.texas.gov/sites/default/files/HB-3906-Transition-to-Online-Assessments-Feasibility.pdf

Texas Education Agency. (Nov. 2021). What parents should know about STAAR online testing. https://tea.texas.gov/sites/default/files/what-parents-should-know-online-testing-11.2021.pdf

Vacca, J. L., Vacca, R. T., Gove, M. K., Burkey, L. C. Lenhart, L. A., & McKeon, C. A. (2018). *Reading and learning to read.* (10th edition). Pearson.

Weiss, J. (2012). STAAR vs. TAKS: Texas' new standardized tests come to school next week. *The Dallas Morning News.* http://www.dallasnews.com/news/education/headlines/20120319-staar-vs.-taks-texas-new-standardized-tests-come-to-schools-next-week.ece

Appendix
Focus Group Protocol

Time of Focus Group	5:00 pm and 4:15 pm
Date	3/8/2022 and 3/25/2022
Place/Mode	Zoom
Focus Group Facilitator	Holly Dasher
Focus Group Participants	Specifics can be added later but third through eighth grade ELAR teachers in the surrounding area
Current Position of Members	Grade levels that they teach can be added
Introduction	**Introduce self:** *My name is Holly Dasher, and I am an undergraduate student at the University of Mary Hardin-Baylor with an interest in the reading STAAR test taking strategies. Thank you so much for taking time out of your busy schedule for me to ask you questions today.* **Purpose of the study:** *The purpose of this study is to use a focus group to identify and compare the strategies that teachers taught for the paper form and the online form. The presentation of the findings will compare the similarities and differences between them.* **Provide structure of the interview:** *I'd like to give you an idea about what to expect during this focus group. I'll pose a question to the whole group and allow time for everyone to respond. The focus group will take between 45 minutes to an hour. I'll be using two recording devices during the interview, one being Zoom video recording and the other an open Google document for transcription purposes. This will allow me to go back and reflect on the information you have shared.* **Ask if interviewee has questions:** *Do you have any questions?*

Questions	*I will ask these questions to the whole group and allow time for each person to respond.* 1. What test-taking strategies did you teach for the paper STAAR test? 2. What paper taught test-taking strategies did your students use? 3. How many years have your students taken an online STAAR test 4. How has the online test impacted student performance on the STAAR? 5. How has the transition to online changed the way you instruct on what strategies to use? 6. How do your online strategies differ from the paper strategies? a. If teachers did one thing on the paper STAAR test I will ask them, how did they emulate that on the online version. 7. Are students provided with or do they have the technology or materials to do these strategies? No more questions will be asked but some may be omitted if the researcher feels necessary
Closure	**Thank the individual for participating:** *Thank you so much for allowing me the opportunity to ask you all some questions. I greatly appreciate your time.* **Assure individual of confidentiality:** *I want to assure you that the information you shared with me today will be kept confidential. No names will be used in presentation of the findings.*

Authors

Holly Dasher, University of Mary Hardin-Baylor, hollydasher@hotmail.com or hjdasher@mail.umhb.edu, Holly Dasher is a senior undergraduate student in the College of Education at the University of Mary Hardin-Baylor (UMHB). She has been a member of the University's cross-country team since the fall of 2019. In that time, she has received all conference and all conference academic honors each year with a team and individual championship during the 2020-2021 season. Dasher was named to the College Sports Information Directors of America (COSIDA) Division three third team Academic All-American team for the 2020-2021 season as well. She has been a part of UMHB's chapter of FCA and helped put on a women's conference in the spring of 2021. She has been on the Provost's Honor Roll for all six of her semesters at UMHB and has been awarded three scholarships for showing excellence academics and leadership. She has also participated in Scholar's Day in the Spring of 2022 and is the current Vice President of Alpha Chi. At the end of the 2022 spring semester, she was nominated by the college of education for the Texas Association of School Personnel Administrators (TASPA) scholarship. She worked as a substitute in the Belton Independent School District during the 2021-2022 school year.

Jodi Pilgrim is a professor at the College of Education at the University of Mary Hardin-Baylor (UMHB) in Belton, Texas. With over 25 years of experience in literacy education, Jodi's passion is ensuring struggling readers receive the instruction and motimotivation necessary for success in the classroom. Jodi is an active member of the International Literacy Association and the Texas Association of Literacy Educators (TALE), and TALE awarded her the Texas Education Leadership in Literacy Award in 2019. Jodi's teaching and research interests include new/digital literacies, Universal Design for Learning, teacher preparation, and technology integration.

Preparing Preservice Teachers to Work with Emergent Bilingual Students: Highlights From an Exploratory Service-Learning Trip to Central Mexico

J. Elizabeth Casey
Kimberly Kuklies
Chelsea Warner

Texas A&M University Central Texas

Abstract

It is important to build preservice teachers' self-efficacy in working with diverse learners. During summer of 2021, faculty from a mid-sized public university in the southwest took a small group of preservice teachers into central Mexico to provide opportunities in working with diverse learners and/or emergent bilingual students. Although this foray into central Mexico was an exploratory trip to plan for future International Field-Experiences for preservice teachers, the trip involved a lot of service and a lot of learning. Jacoby (2015) defines service-learning as "a form of experiential education in which students engage in activities that address human and community needs" (p.1). While this project to central Mexico was not tied to any coursework, preservice teachers and university faculty engaged in service-learning that was mutually beneficial to all stakeholders. At the same time, preservice teachers gained self-efficacy in their ability to support the needs of emergent bilingual students. Students and faculty from the university worked with approximately 22 children in a remote village in central Mexico, with support from translators. Through this experience, a unique bonding experience took place. For five consecutive days, faculty and preservice teachers worked with emergent bilingual students ranging in age from four to fourteen. Only a few translators assisted with communication, but they were able to support the faculty and preservice teachers during literacy and educational technology instruction. The second author received support for translations as she conducted vision and hearing screenings for students, parents, and community members. The experience was life changing. Faculty, through this experience, recognized their own bias towards another cultures' fundamental beliefs about education and medical needs, a humbling experience. However, it prepared students and faculty to learn and grow from others with differing views.

keywords: service-learning, Ed Tech, vision screenings, hearing screenings

Introduction

During summer of 2021, employees from a major university system in the southwest traveled to Mexico with preservice teachers to engage in literacy instruction, educational technology lessons, and vision/hearing screenings with EC-8 students in a small, remote village in central Mexico. Of the many obstacles facing this venture, the primary obstacle was Covid-19 and the Delta variant, which was hitting parts of the world at the time of travel. Through this experience, faculty and preservice teachers learned about a community of students who faced

struggles that were quite different than their own; but through helpful translators, and mass vision and hearing screenings, students in the village received medical screenings and literacy instruction.

Along with real-life learning lessons that included cultural similarities and differences between the two countries, faculty and preservice teachers also saw first-hand distinctions in educational practices. Preservice teachers instructed emergent bilingual students of varying ages in a one-room schoolhouse. Instruction took place from approximately 8:30 a.m. until noon Monday through Friday. The shortened instructional day during a summer month did not seem odd until it was revealed that a three-to-four-hour school day was typical for these students. The first and third authors are faculty working with preservice teachers in an Educational Preparation Program. State standards and state mandated testing of students and preservice teachers (i.e., certification exams) are constant stressors. The idea of a shortened instructional day was alarming from this stance. However, both authors have mixed views on testing and believe an over-abundance of emphasis is placed on assessments.

The second author is a certified teacher and a registered nurse. Her primary purpose was focused on conducting vision/hearing screenings. Results of screenings were not surprising, but the response from families was surprising and another learning moment for the authors. The experiences and lessons learned during this exploratory service-learning project will be shared for others who may want to venture out into the world for a culturally rich learning experience, while also building capacity in emergent bilingual students and preservice teachers.

Planning and preparation

For the travelers, planning and preparation were critical. The university system partners with a research facility in central Mexico, which had been hosting other faculty and college students to work with emergent bilingual children and adolescents in a nearby small town, covering topics like literacy, agriculture, business, and English language instruction. The research facility is under the direction of a married couple with ties to the university system. Both have dual citizenship. They work closely with the community on access, equity, and inclusion. Some of the towns in the area lack access to paved roads, making travel to and from smaller towns a lengthy ordeal, especially during the rainy season. Likewise, city buses cannot travel down the dirt roads due to foliage, deep ruts in the road, and other natural phenomena. This makes travel difficult. Providing services to persons living in the smaller towns is essential. The facility hosts work closely with townspeople. Every year, a theme is identified by faculty and personnel working at the research facility, along with input from local educators and parents. This builds support for the project and allows all stakeholders to have buy-in and a voice.

All researchers bringing groups of college students to the area incorporate the identified theme into the overall learning experiences and/or desired student learning outcomes (SLOs). During this project, a theme of wellness was developed, due in part to the ongoing pandemic everyone in the world was experiencing. In summers' past, college students and faculty worked in the areas of business, education, and agriculture, depending on students' majors, but there had never been any instruction in educational technology. This occurred to a greater extent than originally planned prior to arriving on site. Using tech was a popular tool for the older elementary and middle school students. The first author has introduced technology across multiple grade levels in the United States and has found students easily learn how to code

through trial-and-error. Students in Mexico just as easily picked up the coding and deftly worked with the technology in a manner like their American counterparts.

Like the technology, outreach for medical screening or assessments had not been proposed by previous researchers. The second author, a registered nurse and educator, worked with community members in the United States to obtain equipment and have permission forms translated into Spanish to ensure parental permission was obtained prior to assessing any students in Mexico. Due to Covid-19 restrictions, more stringent measures for approval were in place for all activities. Once every department provided its required international safety trainings and clearance, the preparation was underway. Faculty and students gathered to further develop lesson plans, assessments, English instruction for emergent bilingual students, and engaging hands-on activities. The theme of wellness and community were incorporated into every facet of the plans to fit into the larger research system theme for the destination.

Cultural Immersion

From the moment the group landed in Mexico one warm summer evening, cultural immersion was in full bloom. With only one translator divided between five people who kept getting separated, things were difficult. Going through customs to enter a foreign country was a new experience for many in the group, and there were difficulties with some of the educational technology brought into the country for use with the students. Fees/taxes to cover the cost of the technology, along with other paperwork was unexpected. All information and directions occurred in Spanish, and there were no additional supervisors to talk to for further explanations or translations. Ultimately, all taxes and fees were paid, documents were filled out, and entering the country was completed.

Despite initial difficulties, faculty and preservice teachers experienced the beauty of the people and colorful landscapes for the duration of the trip. Mannerisms, clothing, and language barriers made it obvious to local inhabitants that a small group of foreigners were traveling through their towns and cities. Nevertheless, people in the communities were welcoming, greeting everyone in a friendly and engaging manner, smiling, waving, and giving directions to various parts of their beautiful country. The community members demonstrated a robust pride in their country's culture and heritage, along with pride in the lives they had built for their families and communities. An overwhelming feeling of welcome pervaded conversations, encounters, and excursions. When traveling to Mexico, or another country, it is critical to immerse students and faculty in a true cultural experience. Although this group of travelers experienced touristy cities, many of the excursions were away from the more popular areas tourists visit. One trip to a local flea market, where bargaining was encouraged, was especially important in building capacity in preservice teachers because all bargaining had to be done in Spanish. This allowed the group to practice honing newfound language skills. The primary purpose of the trip was to work with emergent bilinguals and build capacity in preservice teachers, but the thread of a beautiful new culture wove through the entire experience.

Building Capacity in Preservice Teachers and Emergent Bilinguals

Structured service-learning experiences that provide preservice teachers with opportunities to understand how to tap into the cultural capital (DiMaggio, 1982; Dumais, 2002) emergent bilingual students bring to a learning environment can serve as a powerful pedagogical

tool (Toronyi, 2020). Jacoby (2015) noted that service-learning can augment an undergraduate student's experience through enhanced "moral development, empathy, efficacy, sense of personal and social responsibility, and commitment to service during and after college" (p. 11). Likewise, providing preservice teachers with opportunities to apply culturally and linguistically responsive teaching (Gay, 2002; Hollie, 2015; Ladson-Billings, 1997) in real world settings, through lived-experiences and meaningful interactions, may enhance preservice teachers' self-efficacy in meeting the needs of emergent bilingual students. The primary purpose in traveling to central Mexico was to enhance preservice teachers' awareness and use of pedagogical strategies needed to support students who are emergent bilingual. The overall experience went beyond expectations, and these preservice teachers bonded with each other to support the needs of the students they were there to instruct.

Prior to arriving in Mexico, lesson plans were developed for kinder, first, and second graders. Personnel at the research facility advised faculty to prepare for students in grades K-2. However, within a few minutes on day one at the school, it was apparent that students' ages ranged from early childhood to middle school grades. There was a quick change in plans, a great lesson for preservice teachers, and the older students were pulled outside to work with floor-robots with the first author. The third author took the lead in literacy and English instruction inside the one-room, multi-age schoolhouse, working with preservice teachers to ensure the literacy lessons were modified to be engaging and effective for all students.

Differentiation. Differentiation of instruction was immediate, with preservice teachers adapting lessons to support K-4 student learning, while fifth through eighth graders were instructed in the use of floor-robots outside the school. Although preservice teachers understood the idea of differentiation, they were not expecting it to be the first thing they needed to do to support student learning. This real-world pedagogical practice, put into place while instructing emergent bilingual students, was impactful and beneficial. After the first day of teaching, preservice teachers spent hours revising their lessons to ensure they could meet the needs of all students over the next four days. Their efforts were productive, and the embedded arts activities were a bonus (Figures 1 and 2).

Figure 1. *Rainbow Fish Drawings by Students*

Educational Activities. To ensure that students could make a connection to literacy lessons, preservice teachers carefully selected books that contained text in Spanish and English. Likewise, they tried to select books at an appropriate age level. Initially, during the planning stage in the United States, lesson development and embedded strategies focused on grades K-2; so Spanish/English books like *A Very Hungry Caterpillar* (Carle, 1994) and *The Rainbow Fish*

(Pfister, 1992) were selected. After the first day, preservice teachers scrambled to address the wider range of ages.

Figure 2. *Flags of Mexico accompanying a lesson on compare/contrast flags*

The first author had planned to introduce educational technology in a more limited fashion to the second graders during one day of instruction. However, after the realization that students' ages were wider in range, the first author pulled older students outside on day one and each day afterwards, working with them on coding and programming two different kinds of floor-robots (Figures 3 and 4).

Figure 3 Working with Roamer floor-robot on blue tarp

Preservice teachers and faculty designed literacy lessons embedded with English language acquisition activities and enriching art activities. For example, when teaching *The Rainbow Fish*, preservice teachers chose to focus on vocabulary that included colors in the English language to assist with acquisition. The story was read in English and Spanish, with opportunities for questions and dialogue during readings. Translators assisted in supporting students and preservice teachers as they worked on elements of the story, theme, plot, and characters. An arts embedded activity that promoted colors was developed to enhance learning (Figure 1).

Figure 4 *Working with Thymio floor-robot*

Differentiation is an important aspect of pedagogical practice, but this is usually done in a single grade level. Preservice teachers quickly discovered that teaching multiple ages in a one-room schoolhouse held a host of difficulties. Conversely, they learned that multi-age instruction has many proven benefits for students. The process of grouping and regrouping students for instruction afforded greater opportunities for learning to occur in a supportive classroom environment (Ritland & Eighmy, 2013). Like the United States, Mexican students experienced some level of educational loss during shut down periods of the pandemic. Due to Covid-19, the regular public school was closed, and one family had erected a small school on their property. In previous years, summer-school was held at the local public school, with rooms available for the different grade levels. This was not possible in summer of 2021; but modifications and accommodations were quickly made to support instructional time. Of note, attendance at summer school was voluntary; but every morning, approximately 22 students showed up for instruction. All the K-4 children squeezed inside the one-room schoolhouse for the three hours of literacy and English language instruction. The older students were left working outside in the school yard. For the first two days of instruction, a blue tarp was available to use on the ground. On the third day, the tarp was taken to a construction site, and the first author and older children made do with a wooden door. Although narrow, it was a perfect tool to facilitate instruction with the floor-robots (Figure 5).

Figure 5 *Working with Roamer floor-robot on an old door*

Cognates. Preservice teachers learned the value of cognates for teaching, as well as for their own benefit while in Mexico. They searched for useful cognates during their instructional planning time. Cognates are words that are very similar between the English and Spanish languages, and they can facilitate comprehension of content more quickly. For example, the following words are spelled identically in Spanish and English: chocolate, animal, and regular. Pronunciation is different between the languages. Other near perfect cognates include: celebration/*celebración*, formation/*formación*, and numerous/*numeroso*. Nagy et al. (1993) suggested that "instruction in the use of cognates might help Hispanic bilingual students overcome some of the difficulties that they face with English reading vocabulary" (p. 253).

Similarly, the use of cognates to support English-only preservice teachers' instructional strategies was beneficial during the week. For example, cognates were useful during a compare/contrast lesson that included *The Rainbow Fish*. The Spanish word for fish is *pescado*. One preservice teacher knew that pescatarian was a diet related to fish, and she was able to make a connection between *pescado* and fish. In contrast, the Spanish word for rainbow is *arcoíris*. There is no resemblance to the word in English, but a definition was not needed. Preservice teachers merely needed a translation; likewise, K-4 students listening to the story read in both languages only needed a translation. Everyone was familiar with the concept of a rainbow. Thus, preservice teachers' pedagogical practices were enhanced during the week; and now, all three are familiar with a few more research-based, instructional strategies necessary to support emergent bilingual students in learning language and content.

Like cognates, it is important for preservice teachers to understand the difference between basic intercommunication skills and cognitive academic language proficiency (Cummins, 1979). It takes less time to master basic communication, and much more time to master academic language. Supporting emergent bilingual students as they enter K-12 schools is vital to ensuring their success along the way. During their time in Mexico, preservice teachers experienced what it was like to try and speak a second language to obtain basic information such as directions, the cost of an item at the market, and/or information related to menu items. Through this experience, preservice teachers may have a better understanding of what future emergent bilingual students in their classrooms may face during instruction. Preservice teachers were anxious and nervous when they had to speak Spanish. They rehearsed phrases but were

often unprepared for the quick pace of the Spanish speaker responding to their request for a price, directions, etc. Speaking another language can be a frightening, overwhelming, and intimidating experience. This information may provide preservice teachers with a connection to bilingual students' initial use of the English language.

Non-instructional learning. The American status of the group was hard to hide; but it was especially prevalent during a break from lessons and assessments to interact with children in a game of football, or as we call it, soccer. Within minutes of playing, the children's smiles and excitement faded. When asked, the interpreter relayed that football is played without hands. The second author did not realize that the rules of soccer are mandatory, and no playing around would be tolerated. As soon as the value and integrity of this sport was understood, along with a run-down of the rules for soccer, the smiles and fun returned. It was a part of the cultural immersion that was completely unexpected. Football is a revered sport in Mexico, and pride and integrity in the rules of the game run deep from an early age. Importantly, mutual respect of this sport and their cultural norms was expected.

Community Engagement, Cultural Aspects, and Advocacy

Another strong lesson learned from the host couple who own and operate the research facility was the art of teaching advocacy. It is critical to teach others to advocate for their children, their family, and themselves. Donors come and go, providing necessities such as books to schools and communities; but teaching advocacy can last generations. Education in the public school system in this small rural community lasted approximately three to four hours per day, which included recess, lunch, and breaks. This is quite different than the American educational system. Preservice teachers had difficulty in comprehending how all the standards could be taught with so few teaching hours in a day. However, children had other responsibilities at home, including taking care of siblings, working in a family business, or assisting with more demanding household chores. For the preservice teachers, this was a cultural difference that was vastly different than what they had expected. Children as young as eight and nine were expected to be participating members of the family and community. In spite of this, the parents in the community want the best for their children; and understanding, acknowledging, and respecting this cultural norm was important for preservice teachers and faculty.

Advocating. Parents recognized the opportunities that the summer school provided for their children to: (a) learn English, (b) be exposed to other cultures, (c) engage in literacy learning, and (d) engage in educational activities. The 2021 summer session also provided an opportunity to regain some of the lost education from the school shutdown during the pandemic. Of the approximately 200 students who attend the public school, a mere fraction attended the summer sessions; and many of the parents advocated for their children to attend because they recognized the value of the experience. Although the school day was much shorter, the children engaged in valuable, instructional material.

In addition to shortened educational time, there are other activities and community resources these students do not have access to, and that Americans may take for granted. For example, almost every town in America has a public library that is free for the community to use. In the small, remote village, a library would be a luxury. Currently, one sponsor of the town is looking to start a small library to allow children access to books outside of school. However, the

community must value the idea of a commodity such as a library and view it as an essential part of their children's education. Likewise, someone must teach the community that the books are to be checked-out and returned by a deadline. Teaching parents to advocate for a community library to enhance their children's access to books is an area that is under consideration.

Attendance. Education is considered extremely important. Still, many young children were unable to attend due to home and work obligations. One young girl missed a few days because she was "grounded". Several students were only allowed to attend if they brought their younger, pre-school-aged siblings. This practice continued even though it was discouraged because no one is available to babysit small ones; young siblings would sit beside their older sibling as they participated in literacy or educational technology activities. However, the more important aspect was that a child with a younger sibling was present, engaged, and learning.

Community resources. The preservice teachers did their best to keep everyone engaged in the lessons, and all students in attendance were like sponges, absorbing every learning experience available. They relished in learning a new language, often showing off their newly acquired vocabulary. Still, it was extremely difficult to differentiate instruction. Even with the change in instructional strategies, the outside area was not ideal due to the natural terrain. Nevertheless, it was critical to work with the strengths found within the community, rather than focus on aspects that might appear to be potential barriers. Each community shared their resources to support education and the academic opportunities provided to their children. Throughout the week, the older students delighted in learning how to program the floor-robots to make geometric patterns. This was expected, though, as American fourth and fifth graders had also enjoyed working with the educational technology (Casey et al., 2018)..

Health Screenings. The best lesson plans are useless if the student cannot see the board or hear the teacher. Students looked forward to the instruction, but they were also excited for the vision and hearing screenings (Figure 6); and importantly, all students returned the parental permission forms.

Figure 6 *The second author performing a hearing screening*

Vision and hearing screenings are critical to improve students' educational experience and success (Wang et. al., 2011). As a School Nurse, a primary goal for the second author was to identify children who may need diagnostic examinations, refer children for professional examinations, follow up on referrals to encourage that recommendations are followed, and collaborate with educators to provide students' support in the educational environment (https://www.dshs.texas. gov/vhs/manual.shtm).

The second author experienced some consternation in comparing the health screening process in the United States with the one encountered in Mexico. Typically, a school nurse will have direct contact with resources for referrals, know who to call when there is a financial need, know classroom set-ups for required accommodations, and, most importantly, maintain contact with students for years. The process encountered in Mexico was startlingly different. There were seven days to: (a) get permission slips returned, (b) build relationships to ensure students followed screening instructions, (c) get a translator for screening instructions, (d) provide referral letters, (e) find funding resources, and (f) hope everyone participated. However, the plea for the return of permission slips, along with an explanation provided of the importance of screenings, was a success. Unfortunately, follow-up plans were not successful.

Every student provided a permission slip and participated in the vision and hearing screenings. Out of 22 students, only a few needed a referral for minor impairments in vision. For a few students in particular, vision/hearing screenings showed that glasses were necessary to support eyesight that ranged from moderate vision difficulties to severe deficits. One student significantly failed both vision and hearing screenings. Normal procedures in the United States are to retest in two weeks to make sure there was not a temporary cause in the failure (fluid in the ears, infections, etc). The second author did not have that luxury. There remains one student who needs support for deficits in hearing and vision. However, medical follow-up was refused for a variety of reasons, some cultural, including: (a) personal beliefs of the parents; (b) stigma associated with medical supports such as glasses; and, (c) potential risk of bullying. This experience left all authors with mixed emotions as they grappled with the cultural differences in approaches to medical screenings and what they believed to be medically necessary supports.

Cultural differences in students with exceptionalities. In our discussions with students, parents, and others knowledgeable about cultural practices, it was noted that the majority of students: (a) either do not need glasses, or, (b) have never been evaluated to know if they need them. Of importance, bullying for students who wear glasses is abundant. Likewise, any difference that appears to be a weakness may be kept hidden from community members. Teachers must embrace today's culture of addressing social stigma and bias head-on. It is imperative that teachers acknowledge the differences of the students in their classrooms, although their differences may be hidden (Herndon, 2020).

During the time at the school, a preservice teacher with a similar prescription brought glasses to allow the student in need of glasses to try them on. When the student put on the glasses, she looked in the mirror, and smiled one of the biggest smiles; and it is believed that was the first time she saw herself clearly. The preservice teacher encouraged the student, remarking how beautiful she was while wearing the glasses and how glasses can assist in reading and everything else needed to meet educational dreams of success. The second author found it to be one of the most beautiful moments of her professional career. The translator was so moved by the situation, she agreed to pay for the professional assessment and glasses. However, six months later, it was

discovered that the family refused, not wanting their child to be bullied over glasses. The faculty and preservice teachers found this information difficult to believe. However, respecting traditions and customs of one culture is part of the process, even if it goes against ingrained beliefs of someone from another culture. Facing their own biases while respecting decisions made by parents with differing views was a learning experience; for the second author, it was especially difficult.

Discussion, Recommendations, and Conclusions

Preservice teachers and faculty took notes and wrote reflections throughout the experience to make improvements for the next International Field-Experience opportunity. A nation's culture includes diverse components like language, food, religion, politics, economy, art, archeology, values, education system, heroes, and dangers. All are important in the preparation for cultural immersion. Valuable lessons were learned during this trip. Prior to travel, we met a few times to go over simple Spanish phrases, needed apparel, climate, and other items to prepare for travel to a foreign country. Even though there were a small number of travelers, we realized after the fact that we should have made larger, more expansive plans prior to travel that included: (a) cultural awareness training for all participants; (b) additional preparation and training in teaching multiple grade levels; (c) Spanish language instruction for common phrases, directions, and niceties; and, (d) foreign food awareness. It should be noted that culture competency is a process, not an end product. For the full cultural immersion experience in such a short time, participants needed to start studying the culture in abundance prior to landing in the country. Notably, this trip was exploratory in nature; and there was the understanding that it was unlikely to occur due to the pandemic. Thus, a more robust preparation was not undertaken. Going forward, preparation and training will be a larger part of the preparation process prior to travel.

Another area that the second author wants to focus on is collaboration with optometrists or ophthalmologists. For the vision and hearing screening, it would be optimal to take a digital vision screener that decreases errors due to misunderstandings and communication deficits that can provide further assessment on more precise prescriptions. These instruments will provide further assessment on exact prescriptions needed by students. Screenings could be followed up with a visit from an optometrist in the neighboring community for a more thorough, onsite assessment. Many families cannot take off work or have transportation to leave this rural community for healthcare specialties. Finding ways to bring the healthcare professionals to community members in need is vital (nasn.org). Mass screenings can still be done by volunteers, but immediate referrals can be followed up by a specialist.

A great deal was learned by all stakeholders during this ten-day trip; faculty and college students shared experiences in weeks following travel, and all agreed that the trip was extremely beneficial. It is believed that the elementary and middle schools benefitted based on their actions during our work with them. Summer school is not required, but approximately 20-22 students eagerly gathered and awaited our arrival at the building each morning. Through translators, students stated that they enjoyed all the activities, but they especially enjoyed the embedded art and educational technology activities. The consensus was that students of this small, rural community and the faculty and preservice teachers from a public university mutually benefitted.

There were many wonderful learning experiences during the time spent in Mexico, including: (a) a newfound appreciation for the rules of soccer; (b) an understanding of a parent's right to make medical decisions that they believed were best for a child; (c) an appreciation of

differences in education between cultures and countries; and (d) a newfound respect for beliefs and cultural norms of diverse communities. It was intimidating to speak a language to ask directions; but at the same time, it was heartwarming to listen to a young Mexican child trying to speak English. This common connection, the desire to communicate with someone who speaks a different language, provided a bonding experience for everyone. The primary recommendation is to go and experience new cultures, when possible, and provide supports needed by communities wherever they reside.

References

Carle, E. (1994). *A very hungry caterpillar.* New York, NY: Penguin Random House.

Casey, J.E., Gill, P., Pennington, L. & Mireles, S.V. (2018). Lines, roamers, and squares: Oh my! Enhancing Hispanic students' understanding and use of programming. *Education and Information Technologies, 23*(4), 1531-1546.*https://link.springer.com/article/10.1007%2Fs10639-017-9677-z* .

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism, 19*, 121-129.

DiMaggio, P. (1982). Cultural capital and school success: The impact of status culture participation on the grades of U.S. high school students. *American Sociological Association, 47*(2), 189-201. https://www.jstor.org/stable/2094962

Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *American Sociological Association, 75*(1), 44-68. https://www.jstor.org/stable/3090253

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice.* New York: Teachers College Press.

Herndon, C. (2020). "Can you see me now?": Building bridges with literacy to make hidden disabilities visible through young adult literature. *Association of Literacy Educators and Researchers Yearbook, 42*, 267-279.

Hollie, S. (2015). *Strategies for culturally and linguistically responsive teaching and learning.* Huntington Beach, CA: Shell Education.

Ladson-Billings, G. (1994). *The Dreamkeepers: Successful teachers of African American children.* San Francisco: Jossey-Bass.

Jacoby, B. (2015). *Service-learning essentials: Questions, answers, and lessons learned.* San Francisco, CA: Jossey-Bass.

Nagy, W. E., García, G. E., Durgunoğlu, A. Y., & Hancin-Bhatt, B. (1993). Spanish-English bilingual students' use of cognates in English reading. *Journal of Reading Behavior, 25*(3), 241-259.

National Association of School Nurses. (2021). *Vision and Eye Health*. Retrieved from: https://www.nasn.org/nasn-resources/practice-topics/vision-health

Texas Department of State Health Services. Vision and Hearing Screening. (2021). https://www.dshs.texas.gov/vhs/manual.shtm

Toronyi, A. (2020). Preservice teachers working with English language learners: A meta synthesis of service- learning as an effective pedagogical tool. *Journal of Service-Learning in Higher Education, 11*(Summer).

Pfister, M. (1992). *The rainbow fish*. Zürich, Switzerland: North-South Books.

Ritland, V., & Eighmy, M. (2013). Multiage instruction: An outdated strategy, or a timeless best practice. *The European Journal of Social and Behavioral Sciences*, *2*(2).

Wang, C., Bovaird, S., Ford-Jones, E., Bender, R., Parsonage, C., Yau, M., & Ferguson, B. (2011). Vision and hearing screening in school settings: Reducing barriers to children's achievement. *Pediatric Child Health, 16*(5), 271–272.

Authors:

Dr. J. Elizabeth Casey is an Associate Professor and Chair of the Department of Curriculum & Instruction at Texas A&M University – Central Texas. She graduated from Clemson University with a MA in English and a PhD in Curriculum & Instruction with an emphasis in reading. Her research interests include educational technology, emergent bilingual students, preservice teachers' self-efficacy in using educational technology, and metacognitive strategy instruction in the elementary content classroom. She teaches a range of courses including educational technology and assessment, special education law, and educational foundations.

Kimberly Kuklies is the Director of Educator Certification at Texas A&M University- Central Texas. She graduated from University of Texas Arlington with her Master of Science in Nursing. She has combined two careers of education and nursing. She has worked in public education as a teacher and school nurse administrator, higher education, and medical facilities for over 25 years and served on many professional boards and community service projects.

Dr. Chelsea Warner is an Assistant Professor in the Department of Curriculum and Instruction. Her research interests include reading fluency, content area reading instruction and literacy, the integration of diversity and social justice through children's literature, and teacher education. Dr. Warner earned an M.Ed. and Ph.D. in Reading Education from Auburn University, an Ed.S. in Elementary Education from the University of Alabama at Birmingham, and a M.A. in Early Childhood and Elementary Education from the University of Alabama at Birmingham. She previously taught elementary grades in Birmingham, Alabama and Washington, DC.

Differentiation Matters! Six Successful Cross Curricular Strategies That Provide Process Support for African American K-6th Grade Learners

Tami Morton
Jennifer Dyer
Texas A&M University-Commerce

Abstract

This article provides an in-depth examination of differentiation, instructional strategies that cater to all learners. Differentiation is beneficial when teachers can select content, process, and products that meet student's needs. While teachers incorporate differentiation to modify instruction with struggling students, gifted and talented students, English Language Learners, and culturally diverse learners, this article specifically focuses on African American learners in K-6th grades. Elementary-level African American students can benefit from differentiation that include culturally relevant processes. Teachers of elementary grades must be prepared to teach all curricular areas including English language arts, reading, math, science, social studies, and history. English language arts, history, math, science, and social studies strategies are explored in this article. Recommendations have been made to make them culturally relevant pedagogy. Six strategies are introduced that provide examples of the recommended processes for various curricular areas that can be used with African American students.

Introduction

Teacher educators in today's schools of education are aware of the rising numbers of diverse students in the public classrooms. According to the National Center of Educational Statistics (May 2021), the numbers of students from diverse backgrounds is eye opening:

> Between fall 2009 and fall 2018, the percentage of public-school students who were Hispanic increased from 22 to 27 percent. The percentage of public-school students who were White decreased from 54 to 47 percent, and the percentage of students who were Black decreased from 17 to 15 percent (n.p.).

In addition, this statistic is enlightening since enrollment in public elementary and secondary schools increased from 49.4 million students to 50.7 million students during this same time. Public school classrooms had a much different composite.

As African American professors in a midsize university in Texas, we encounter students preparing to teach in K-6 classrooms. We instinctively have a connection to current students who share in our cultural backgrounds. This connection to African American students is ingrained in our persona, making sure that all Black students are recognized as equals as they should be. Acknowledging the current increase in numbers of children of color in public schools, we were compelled to find more effective procedures to share with preservice teachers at our university, for both the white teachers and the teachers from diverse backgrounds n who will need to know effective teaching processes.

Hispanic and Black students are not residing in the same regions either due to great moves or transitions to new locations. Their families are relocating and creating homes in different areas (Shiffman, 2019). Hence, the schools of today look very different than twenty years ago. Even though classrooms are diverse and inclusive, teachers still need some help selecting strategies that accommodate for all their students.

Accommodation is an action that not only includes providing a welcoming safe space, but it also describes how the teacher must adapt lesson plans to fit each child in the classroom. Each state provides objectives that all districts, schools, and teachers must adhere to for their students' success. In the state of Texas, objectives are created and written by experts in all curricular fields and provide the framework for classroom instruction. Teacher educators prepare student teachers to plan and justify instructional practice, preparing them to learn to select the appropriate standards to match student outcomes. Professors also encourage preservice teachers to anticipate outcomes for their diverse students, understanding that all students are on various academic levels. Teacher educators approach this space in different ways; however, it is most often described to students as providing accommodations for special populations in classrooms, it is called differentiation (Tomlinson, 1999, 2014). For a teacher to be effective, they must provide a more customized way to differentiate instruction.

Customizing Differentiation

Differentiated instruction, which is called simply differentiation, is a process in which teachers enhance learning of the curriculum by keeping in mind their students characteristics and interests. Differentiation allows for students to meet the same state objectives, using various instructional methods. According to Hall, Strangman, & Meyer (2003), differentiation provides teachers with varying entry points, learning tasks, and outcomes that match a student's needs. Differentiation is not a single instructional practice; it is a conglomeration of several strategies that better meet the needs of students. Teachers provide differentiation in three different ways: content, process, or product. Content is the information that a teacher must provide for instruction. This is usually based on the determined objectives of learning as regulated by the state.

The process is the set of effective procedures instructors use to confirm understanding of the key skills required to apply the information. Reading teachers may allow a student to use textbooks that provide illustrations or allow auditory learners to use audio books. Product differentiation is the most common form of differentiation. Teachers also allow choices when students may select a form. Students are also able to select their own designs. It is key that teachers make sure all the various ways to differentiate instruction still align with state standards. Through differentiation practices, teachers can custom fit all content, processes, and products to all students (Tomlinson, 1999, 2014). To initiate the customization for students, teachers must acknowledge students race and ethnicity.

Culturally Responsive Pedagogy is a Process Option

Researchers indicate that pedagogies are not culturally responsive, though need to be (Acosta, 2016). Acosta's (2016) research explains that specifically in literacy education, frameworks need to be challenged and changed from being deficit based. This idea has been the norm since the beginning of educating African Americans and continues. The national reading

scores of fourth grades reflect that there has been little improvement, "according to the National Assessment of Educational Progress standardized reading assessment data, less than 20 percent of African American fourth graders read at or above proficiency levels (U.S. Department of Education, 2014). Literacy is not simply an academic focus practiced in K-12 schools each day, it is the foundation of understanding life and language.

Race and society have been inherently connected to literacy, particularly with African Americans (Ladson-Billings, 2012, Lee & Slaughter-Defoe, 2002). African Americans were denied the right to learn to read and write. There were anti-literacy laws observed in most states forbidding slaves to read or write. It was clear to African Americans that literacy was important because of this denial and learning to read and write became even more desired. After Nat Turner's revolt in 1831, though there were laws still in existence, Black slaves worked even harder to read and write (Coleman, 2020). Though conditions have improved drastically, some African American students still struggle with literacy. Hence, researchers began to inquire to find answers to the questions about the best ways to assist African American students who needed help with reading and writing. Analysis determined that when students who had highly effective teachers also show signs of encouraging student engagement and motivation, reading and writing instruction was successful (Gay, 2000, Ladson-Billings, 1994). Each of those elements of student engagement, high motivation, successful reading and writing instruction are all positive effects of Culturally Responsive Teaching (CRT).

With the knowledge of culturally responsive teaching and its influence on students, it is important to bring additional connections to the authentic elementary classroom in support of African American learners. This is done through differentiation, specifically the differentiation component of process, because it can be a critical way to assist all children. Waterman (2013) recommends that teachers plan literacy instruction that begins before reading and teaching, including ways to activate prior knowledge and grab student attention, which have been found as necessary to aid in comprehension of texts (McCullough, 2013).

While differentiation and culturally relevant teaching are not new terms, we would like to expound on our knowledge of culturally relevant teaching to influence creative strategies for differentiation. Here are six strategies that could be used in cross curricular areas. Specifically, noted below are recommendations of culturally relevant teaching strategies that can be used as different processes for teachers to use. Keep in mind that the process is the instructional techniques used to teach new content.

Six Culturally Relevant Instructional Processes

These six culturally relevant processes are meaningful and relevant for K-6 grade African American students because they foster positive identity development, promote agency and voice, and create conditions that will empower African American children to succeed in school (Wright, 2019):

Learn about Your Learners

*Content area***:** *Social Studies*

The first way to incorporate culturally relevant teaching in your classroom is having a relationship with students (Guido, 2017). A process that will help teachers learn more about their students is interviewing. Teachers interview students to learn their learning styles, interests,

and family experiences. With this knowledge teachers can better tailor individual instruction. It also brings forth an assets mentality by appreciating what students bring to the classroom (Gonzales et al., 2005). Here are some examples of interview questions to include.

1. What languages do you and your family speak at home?
2. What activities do you enjoy doing with your family?
3. What hobbies or pastimes do you do independently when you are at home?
4. What types of lessons do you enjoy?
5. How do you study and learn best?

Another process teachers can utilize to get to know their students are surveys. A survey is a method of gathering information using relative questions about the child, much like the questions asked during an interview. Research (Parsons & Morton, 2022, Walls, 2012) found that Black students would feel more comfortable with surveys and questionnaires if ethnically diverse people are mentioned in the questions and scenarios rather than people in the majority. Therefore, a culturally relevant survey would be an effective way to get personal information from African American students.

Once the procedure of interviewing or surveying students has been completed, teachers will be able to adjust the application and outcome to match students. This recommendation is suited for the social studies curricular area. It is more engaging to African American students when they can verbally discuss and share family stories, pictures, and mementos from their homes. The process of giving interviews and surveys are effective culturally relevant teaching practices tools to support Black students if they include questions and narratives using ethnically diverse people, like the real world.

Incorporate Relevant word problems

Content Area: Math

A culturally relevant teaching process that can also be used when providing instruction in mathematics. An example of a scenario using math concepts is through the use of word problems (Guido, 2017). Word problems are written in a narrative format, and they give students a context to situate their learning. Once it is revealed that differentiation is necessary, the process should include techniques to support cognitive apprenticeship, formative assessment, cognitive apprenticeship, language learning and strategies, relevant content, scientific practices, or non-categorical pedagogical strategies (Brown et al. 2019). See Table 1 for descriptions of each.

Understanding that not only math, but all STEM categories (science, technology, engineering and math) culturally relevant teaching is situated differently. For example, if a teacher assigns word problems using a culturally relevant process, it will include both language learning and strategies and relevant content. (Brown et al., 2019). Examples of word problems:

- What is the distance of (a student's name) long pass in a game of football?
- What is the circumference of your favorite pizza? A doughnut? A pancake? Or a pie?

Table 1. Types of Culturally Responsive Theory and Practice (CRE) in Math and Science

Code Name	Code Description
Cognitive Apprenticeship	These are phases of interaction in which teacher uses one or more of the cognitive apprenticeship strategies, "model, coach, fade."
Formative Assessment	These are phases of interaction in which teacher uses formative assessment strategies to judge or measure student understanding of scientific concepts or vocabulary.
Language Learning & Strategies	These are phases of interaction in which teachers use pedagogical strategies that specifically target student learning of scientific language.
Relevant Content	These are phases of interaction in which teachers relate content to topics that are relevant to students' lives in some way.
Scientific Practices	These are phases of interaction in which teachers and/or students engage in scientific practices or elements of the scientific method.
Non-Categorical Pedagogical Strategies	These are phases of intersection in which teachers use other pedagogical strategies that are not explicitly formative assessment, language learning, cognitive apprenticeship, relevant content, or scientific process.

Deliver Forms of Learning Through Content Stations
Content Area: *Science*

Ullucci (2011) analyzed from her study that African American students perform well in a workshop model. This model is reflected in the time, space, and several tasks. When students are provided with an opportunity to be treated with more independence when identifying the tasks they want to do, and in an order of their choosing students were more productive. Teachers who also allow for more space for active movement, as well as not enforcing a required time for a due date provided in a classroom setting that is culturally responsive to students.

Elementary teachers who can allow for more flexible time, space, and multiple tasks would find great success when allowing students to work in small groups and rotate through stations. Teachers also integrated formative assessment, language learning and strategies,

relevant content, as well as the scientific practices (Brown et al., 2019; Guido, 2017). This provided an opportunity for differentiation of the process as a powerful modification for students who may have struggled with these science concepts.

Elementary Science Stations:

- Exploration Stations: Stations where students can explore objects around them. There is no right or wrong answer.
- Explanation Stations: Stations where students can make sense of what they have explored. They are expanding their initial explanations, reviewing materials, and even clarifying concepts learned. This can be done by watching videos, reading, and note-taking.
- Elaboration Stations: Stations provide an opportunity for students to apply the information learned to real life situations (VanTassel, N. 2022).

Engage in Peer Teaching

Course Area: Social Studies

Another culturally responsive teaching practice teachers can encourage with African American young learners is based on the development of oral language and "talking the talk" (Ullucci, 2011, p. 398). When students can express themselves orally and "talk the talk" in a variety of discourses. In the case of Ullucci's (2011) study, she found evidence of teachers allowing students in a dialect that they believe is most appropriate. For example, young African American students were able to talk appropriately when necessary and more comfortable discourse when talking with friends and family. Having the ability to "talk the talk" in appropriate situations is an acquired, and necessary skill. "Talking the talk" is especially important for young students to practice when studying social studies.

Think-Pair-Share

The Think Pair Share strategy give students the opportunity to think individually and reflect on a topic (Guido, 2017). After they have been given time to think about a topic, they get a partner and take turns sharing their individual ideas. After meeting in pairs, a small group can create a group and share their thoughts.

Debate

In groups of four to six, students can be given a topic such as "the 1980s". Students could be given the opportunity to research the pros of the 1980s. After creating a script, teams can face off in a debate beginning with a four-minute affirmative argument by team one. Team two is allowed a three-minute rebuttal. Team two presents a negative argument. Then team one is allowed a three-minute rebuttal. Team one presents a four minute pro discussion, then team two presents a three minute negative response. This continues until both teams have presented three pros and three cons.

Explore Literature Circles

Content Area: English Language Arts and Reading (ELAR)

Literature circles are another culturally responsive teaching strategy that would be ideal for African American students. Literature circles involve a process that incorporates diverse

literature, engaging in discussions, and immerse thinking into writing. While providing differentiation for students, using this as a process would encourage more understanding for all students. Literature circles is an instructional practice that engages small groups (5-6) of students to read a common book. The book is selected by students, so it of interest to the entire group. Once the group has selected a book, participants are able to respond to the chapters of the book to reassure comprehension of the book for all (Harvey, 2006; Tompkins et al., 2017)

Literature circle books choices that feature African American characters appropriate for upper elementary grades:

Table 2. Examples of 3-6th grade Literature Circle books featuring African American characters

Book Title & Author	Summary
Brown Girl Dreaming by Jaqueline Woodson	A memoir written in verse by the author sharing her life as a child.
Garvey's Choice by Nikki Grimes	Garvey's father always wanted him to be an athlete, but Garvey likes every topic but athletics like astronomy and science. Once Garvey find a love for singing and joins the school choir, be find a talent that he would share with this father.
Ghost by Jason Reynolds	Ghost is Castle's nickname, and he loves running. Though he loves running, it has never been for a track team. He ran for baseball. He begins to run to deal with his anger and finds healing though running and teamwork.
New Kid by Jerry Craft	New Kid is a graphic novel featuring Jordan Banks who is going to a new middle school. The new school is very different, especially since it is not as diverse as his previous school. After a few challenges, he finds his way through his art.
The Boy Who Harnessed the Wind by William Kamwamba and Bryan Mealer	This story tells the tale of a 14-year-old boy who lives in a village that was hit by a drought. When he was not able to go to school, he went to the library. His studies helped him create a way to get electricity back to his village. This was the beginning invention of other elements that would help his community.

Build Relationships with Parents

Content area: History

In line with "talking the talk" and getting to know your students, history class provides a excellent source of stories from not only African American children, but all diverse students.

African American families have a wealth of knowledge about the history of their families and culture. Teachers should capitalize on this information and provide ways to incorporate each individual classes' funds of knowledge (Gonzalez et al., 2005)

Home-School Newsletter

According to Goodman and Hooks (2016) telling stories is another way for teachers to get to know their students. Oral stories from families can be shared in class. This family literacy activity allows parents to share their lived experiences and have voice in the class. Its also a great opportunity for parents and children to bond and create a home-school conversation which is a part of teaching.

Conclusion

The title "Differentiation Matters!" is a play on words from the recently expressed motto of Black Lives Matter that became popular again in 2020. The slogan Black Lives Matter is a reminder that African American or Black lives matter equally to all people in the United States. In that vein, this information is showing that differentiation is process that occurs in classrooms by teachers that provides equal access for all students. Teacher educators teach preservice teachers that it is important to differentiate for struggling students, English Language Learners, gifted and talented students, as well as diverse cultures. To inform preservice teachers as well as inservice teachers, this article presents culturally responsive teaching that is research based and targeted for African American K-6 students.

Six successful strategies have been shared that have been found to be positive for Black students across various curricular areas: learn about your students, use relevant word problems or applications, deliver forms of learning through leaning stations, experiment with peer teaching, explore literature circles, and build relationships with parents. With each of these culturally responsive teaching practices, teachers will be able to create a safe and accepting space for all learners.

References

Acosta, M. (2016). Reauthorizing Excellence in Literacy Teaching for African American Learners. In Scott, L. M., & Purdum-Cassidy, B. (Eds.) Culturally affirming literacy practices for urban elementary students. Rowman & Littlefield Publishers.

Brown, B. A., Boda, P., Lemmi, C., & Monroe, X. (2019). Moving culturally relevant pedagogy from theory to practice: Exploring teachers' application of culturally relevant education in science and mathematics. *Urban Education*, 54(6), 775–803. https://doi.org/10.1177/0042085918794802

Daniels, H. (2006). What's the Next Big Thing with Literature Circles? *Voices from the Middle,* 13(4), 10-15. https://login.proxy.tamuc.edu/login?url=https://www.proquest.com/scholarly-journals/whats-next-big-thing-with-literature-circles/docview/213930702/se-2?accountid=7083

Gay, G. (2000). Culturally responsive teaching: Theory, research, and practice. Teachers College Press.

Gonzalez, Moll, L. C., & Amanti, C. (2005). Funds of knowledge: Theorizing practices in households, communities and classrooms. Erlbaum. https://doi.org/10.4324/9781410613462

Guido, M. (2017). 15 Culturally Responsive Teaching Strategies and Examples +

Downable list https://www.prodigygame.com/in-en/blog/culturally-responsive-teaching/
Hall, T, Strangman, N, & Meyer, A. (2003). Differentiated instruction and implications for UDL implementation. Wakefield, MA: National Center on Accessing the General Curriculum http://aim.cast.org/learn/historyarchive/backgroundpapers/differentiated.
Ladson-Billings, G. (1994). The Dreamkeepers: Successful teachers of African American children. Jossey-Bass.
Ladson-Billings, G. (2012). Through the Glass Darkly: The persistence of race in education. In J. Banks & C.A. Banks (Eds.) Handbook of Multicultural Education (second edition, p. 340-62). Jossey-Bass.
McCullough. (2013). The relationship between reader response and prior knowledge on African American students' reading comprehension performance using multicultural literature. reading psychology, 34(5), 397–435. https://doi.org/10.1080/02702711.2011.643531
National Center for Education Statistics. (2022). Racial/Ethnic Enrollment in Public Schools. Condition of Education. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/cge.
Parsons, & Morton, T. R. (2022). My best science teacher: The views of Black students and implications for science education reform. *Cultural Studies of Science Education*, 17(1), 63–83. https://doi.org/10.1007/s11422-022-10106-7
Tomlinson, C.A. (1999). The differentiated classroom responding to the needs of all learners. Association for Supervision and Curriculum Development.
Tomlinson. (2014). The differentiated classroom: Responding to the needs of all learners (2nd edition.). Association for Supervision and Curriculum Development.
Ullucci. (2011). Culturally relevant pedagogy: Lessons from elementary classrooms. *Action in Teacher Education*, 33(4), 389–405. https://doi.org/10.1080/01626620.2011.620
Van Tassel, N. (2022) https://iexplorescience.com/how-to-science-stations/
Walls. (2012). Third grade African American students' views of the nature of science. *Journal of Research in Science Teaching*, 49(1), 1–37. https://doi.org/10.1002/tea.20450
Waterman. (2013). Handbook on differentiated instruction for middle and high schools. Routledge. https://doi.org/10.4324/9781315856230
Wright, B.L. (2019). Black boys matter: strategies for a culturally responsive classroom. *Teaching Young Children.* NAEYC.org https://www.naeyc.org/resources/pubs/tyc/apr2019/strategies-culturally-responsive-classroom

Children's Books

Craft, J. (2019). *New kid*. Harper Collins.
Grimes. N. (2016). *Garvey's choice*. Wordsong.
Kamwamba, W. & Mealer, B. (2012). *The boy who harnessed the wind: Creating currents of electricity and hope.* William Morrow.
Reynolds, J. (2017). *Ghost.* Athenium Books.
Woodson, J. (2016). *Brown girl dreaming*. Nancy Paulsen Books.

Authors

Tami Morton, Ph.D. is Associate Professor in the Department of Curriculum and Instruction at Texas A&M University-Commerce. Her research interests include reading foundations, preservice teachers, multicultural children's and young adult literature, and culturally relevant pedagogy. She can be reached at Tami.Morton@tamuc.edu.

Jennifer Dyer, Ph.D. is Professor in the Department of Curriculum & Instruction at Texas A & M University in Commerce, Texas. In addition, she currently serves as Interim Assistant Dean for the Graduate School. Her primary research interests are teacher's beliefs and change, equity, and diversity education for preservice and in service teachers, and social justice in teacher education. She can be reached by email, Jennifer.Dyer@tamuc.edu.

Call for Manuscripts

The Texas Journal of Literacy Education is the official journal of the Texas Association for Literacy Education (TALE), the Texas affiliate of the International Literacy Association. TJLE is a peer-reviewed journal published twice each year, in the Spring and Winter. We seek original research and practitioner articles related to language and literacy practices, from early childhood through adult, inside and outside of the classroom. We welcome all voices from literacy researchers, classroom teachers, and graduate students.

We are happy to answer questions about potential submissions. Please email us at tjlejournal@gmail.com. The blind review and editorial decision process typically take about 8-12 weeks. Submit your manuscripts online here: https://talejournal.com/

Submission Guidelines

Please prepare two files: a blinded manuscript and a cover letter.

Blinded manuscripts must:

- include the title of the work;
- follow APA (7th edition) formatting guidelines;
- be between 2,000 and 6,000 words, not including references;
- include an abstract of 250 words or less (research submissions);
- have all references to author(s) removed for blind review;
- tables and figures should be embedded in the manuscript.

Cover letter should include:

- the title of your submission;
- the name and affiliation (as you would have them published) and email of the first author;
- the name, affiliation, contact information, a photograph of each author, and a 100–200-word biography for all co-authors, listed in preferred order.

TJLE is proud to be an open access journal. All copyright remains with the author/s.

Texas Journal of Literacy Education is the official journal of the Texas Association for Literacy Education (TALE), the Texas affiliate of the International Literacy Association