

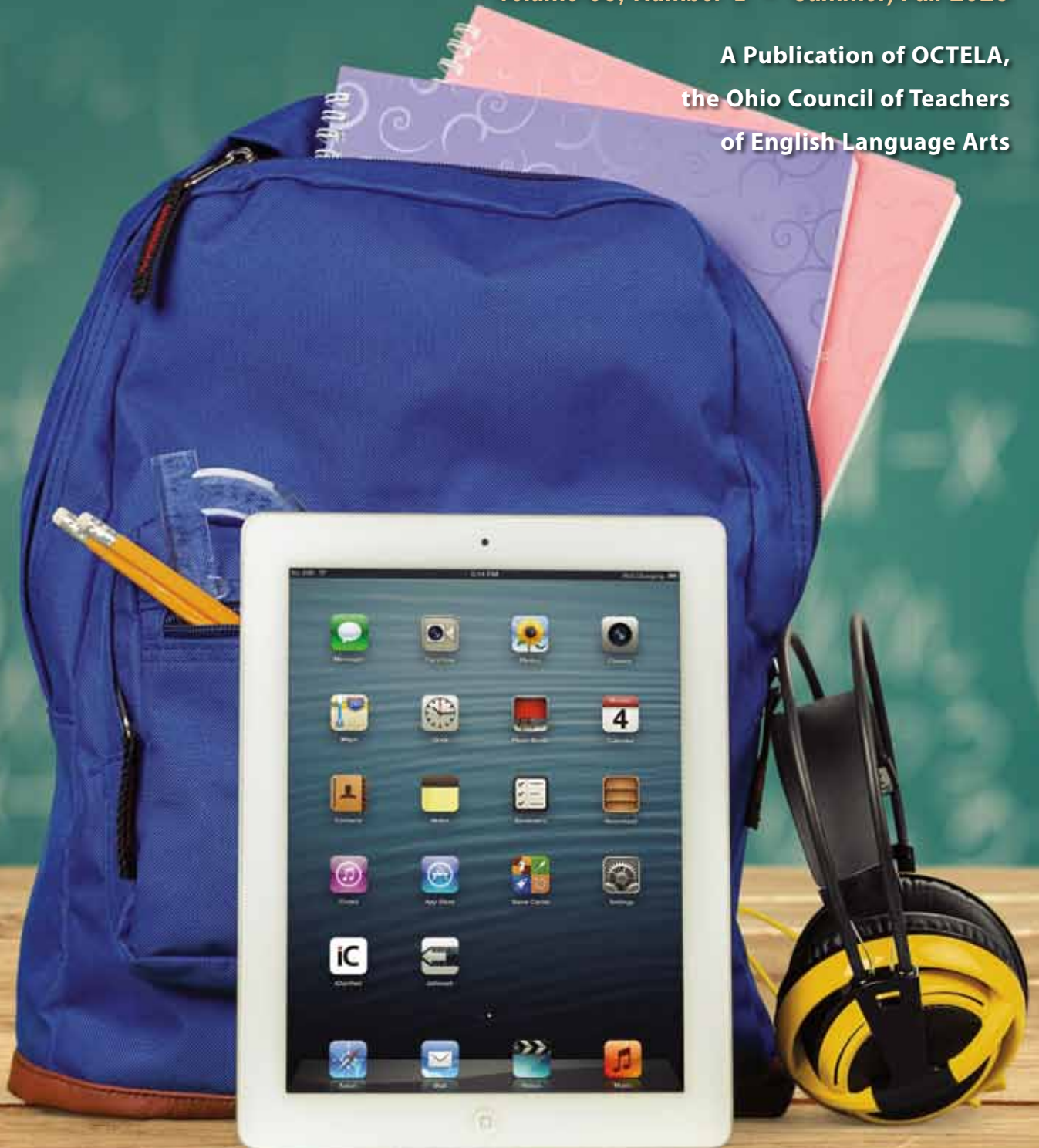


OJELA

Ohio Journal of English Language Arts

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TECHNOLOGY AND THE CLASSROOM



The Ohio Journal of English Language Arts

Editor
Beth Walsh-Moorman
ESC of Western Reserve

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ABOUT OJELA

As the official journal of the Ohio Council of Teachers of English Language Arts, *Ohio Journal of English Language Arts* is published twice per year and circulates to approximately 2,000 language arts teachers of elementary, secondary, and college students. Within its editorial columns, departments, and feature articles, the journal seeks to publish contributions pertaining to all aspects of language arts learning and teaching.

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“It’s not a faith in technology. It’s faith in people.”

— Steve Jobs

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FROM THE Editor

—Beth Walsh-Moorman

We chose the Steve Jobs quote, “It’s not faith in technology. It’s faith in people” because at the heart of education *has* to be people. Education is a human endeavor, and if we learned anything during the pandemic, it is that humans relate differently in digital spaces. In this issue, we explore how our digital tools may foster human relationships, building opportunities for meaningful and authentic learning in our classrooms. This comes at a difficult time for teachers. Since the introduction of ChatGPT-3 in November 2022, we have scrambled to adjust to the reality that our students have access to technology that is historically unprecedented in its ability to disrupt current practices.



Stahl and Delaney Weiffenbach decided to use gamification in print-based activities, they use what digital spaces have taught them to foster authentic learning and student agency.

Other articles explore how the introduction of technology may compel action in our students. Rhonda Hylton shares the power of storytelling as podcasting is introduced into an inquiry into history, race and identity in “Politics, Power, and the Stories that Move Us: How Podcasting can Support Student Inquiry and Create Calls to Action.” Stephanie Moody and Bethany Rice offer an example of how digital avatars could prepare preservice teachers to support real student writers in “Immersion

I recently read Mary Wolf’s book *Reader Come Home*, and I appreciated the nuanced argument Wolf makes, both admitting technology has invited shallow reading while simultaneously exploring the possibilities it affords our students. She calls on teachers to develop “flexible code switchers” who can mediate between print and digital spaces with ease because they have internalized the characteristics of each medium and adjusted as learners to them. I believe the authors in this issue of *Ohio Journal of English Language Arts* offer us opportunities to see what such teaching might look like in preschool through college classrooms.

in Mursion: Using Avatar Rehearsals to Prepare Preservice Teachers for Writing Instruction.” Lisa Madera and William Bintz offer opportunities for teachers to lead students through meaningful inquiry into the role of technology in our lives through the article “Using Cluster Text Of Picture Books to Teach and Learn about Technology.” In her book review, Jennifer McCreight shares how Brett Pierces’ recent book *Expanding Digital Spaces* can support teachers in meaningful digital literacy instruction. In a personal essay, TJ Wilson explores how he has come to understand the threat of academic dishonesty imposed by AI in “What if AI Saved Education.” Finally, in “Shared Impulses, How Art Making Enhances the Writing Classroom,” Alison Covey Taylor shares the importance of creative exploration in the writing classroom, both digital and print.

Several of our manuscripts explore how digital tools can enrich our students’ literacy practices. Angie Beumer Johnson and her Wright State students Kristina Bringman, Jasmin Clark, Lucas Prether and Noor Qutiefan share their exploration into how to offer digital texts in support of the reading of diverse literature in “A Book and Its Kin: Digital Intersections of Diverse Literature, Exptext, Peritext, and Historical Text.” Amy Walker, Kristine E. Pytash and Francisco Torres share how virtual reality helped youth from an Ohio detention center build empathy and connections by pairing virtual reality with the reading of contemporary novels in “Virtual Reality as a Liberatory Practice: Technology for ELA Engagement in Detention Centers and Beyond.” In “What Have We Learned from Early Childhood Teachers’ Read-Alouds in a Digital Space?” Sarah Reid explores the opportunities to amplify the power of shared inquiry through read-alouds. In “Game On! Preservice teachers’ Experience Differentiating Instruction through Gamification,” a group of Ohio Northern educators and students explore the impact of gamification as they support English Language Learners. While Darlene Johnston, Paulina Rodgers, Maya

As the editing process comes to a close with every issue, I step away in awe by the collective power of our educators. Bringing our voices together, sharing our stories, and offering our learnings to one another makes us all stronger. I would be remiss if I did not invite you to bring your teacher’s voice and expertise to a shared conversation by coming to both the NCTE convention in Columbus this November and our OCTELA spring conference May 1 and 2. We are excited to host Kelly Gallagher in March 2, and we are inviting teachers to explore their writer identities in a workshop led by Tom Romano the evening of March 1. We hope to see you at “Raising our Voices: How Place and Space Shape us as Writers and Thinkers,” when we will honor some of the artistic voices from our own communities while also offering opportunities for us to raise our own. Details about the state conference are shared in this issue as well. We hope you save the date!

Beth Walsh-Moorman is a literacy consultant with the ESC of Western Reserve in Concord, OH. She also teaches as an adjunct at local colleges and universities. Her career includes 20 years of secondary English teaching. Beth’s research interests include multimodal composing, disciplinary literacy and digital literacies. She can be reached at Editor:OJELA@gmail.com

Title of Issue:

Teaching for this Moment
Issue 63.2 (Winter/Spring 2024)
Deadline: Nov. 30, 2023.

THE EXECUTIVE BOARD OF THE OHIO
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WOULD LIKE TO ISSUE

*A Special
Thank You*

TO OUR
PEER REVIEWERS
FOR THIS ISSUE

We would like to thank
the following for generously
donating their time as
peer reviewers.

Kathy Batchelor
Lisa Beckelhimer
Julie Bonnaci
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Paulina Rodgers
Kelli Rushek
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Jennifer Swartz-Levine
Meghan Valerio
TJ Wilson
Sarah Ressler Wright

Teaching for this Moment

“Life is ten percent what happens to you and ninety percent how you respond to it.”

—Lou Holtz

Teaching in the moment is difficult to do when the moment itself brings such challenges. Our students, families and teachers face threats across multiple fronts: political, social, emotional, economic, spiritual. Social media is rife with stories, memes and posts that target, divide and unnerve us all. Yet, teachers persevere, often rising to the challenges and helping students find their own truths, building communities of support, love and respect. In this issue, we call on educators to share their own stories and experiences teaching in ways that respond to the time and help our students find ways forward. You might consider:

- How have you welcomed your students to understand the dangers of marginalizing “others,” including their LGBTQ peers, students of color and others whose communities often lack political or social clout in the larger community?
- How can teachers model different ways of discourse and disagreement in a world that is politically and ideologically polarized?
- How have you found yourself responding to local issues, concerns and politics in your classroom?
- How can we build trust when community members don’t trust us as educators?
- How have you designed literacy practices that support your students through the social and emotional challenges so present in today’s society?
- What brings you hope as a literacy educator?
- What have you let go of because you recognized it no longer serves the needs of today’s learners or families? How can we advocate for our students?

Questions about this call for manuscripts can be addressed
to Beth Walsh-Moorman, editor at editor.ojela@gmail.com

The Ohio Journal of English Language Arts (OJELA) is the official journal of the Ohio Council of Teachers of English (OCTELA). Published twice per year, OJELA circulates to approximately 2000 language arts teachers of elementary, secondary, and college students. The journal seeks to publish contributions on all aspects of language arts learning and teaching. We seek a variety of submissions based on the issue theme. Submissions must be original, previously unpublished work.

Feature Articles

Manuscripts concerned with topics related to the issue theme. OJELA editors also welcome articles on any topic concerning language arts teaching at any level.

- 63.2 (Winter/Spring 2024): *Teaching for this Moment*

See the Call for Manuscripts section of this issue for theme descriptions and full calls for submission.

OJELA editors also welcome articles on any topic concerning language arts teaching at any level.

Teaching Matters

Submissions focused on classroom strategies for teaching English language arts at any level, K-college. Submissions must be original teaching ideas. Descriptions of activities, practices, and procedures are welcome, but must be accompanied by rationale, explaining how methods were developed and used and for what purposes.

The Conference Room Table

Submissions to this section capture the way professional development resources in the field are used in classrooms and in professional lives, to convey experiences that illustrate the significance of our professional literature. Submissions should be related to the issue theme.

Conversations

Extended interviews with teachers, researchers, teacher educators, policymakers, advocates, or others involved in the field of English language arts who do interesting work.

Creative Writing

Submissions of short fiction, creative non-fiction, and poetry on any topic, in any genre.

Reviews

Submissions that provide short reviews of any kind of resources for teaching English language arts, such as: books, media, software, websites, workshops, conferences, institutes, or learning communities, classroom materials, or professional development resources.

Reader Forum

To encourage broader participation from readership, this venue is designed as a “letters to the editor” section of the journal—focusing on ideas related to articles published in the journal, featured themes, reader responses, or ideas in the field of English language arts teaching in general.

Submit queries and submissions for OJELA to editor Elizabeth Walsh-Moorman at Editor.OJELA@gmail.com

The following guidelines are intended to answer the most common questions related to preparing and submitting manuscripts to OJELA. More detailed questions and other inquiries should be addressed to the editor: Editor.OJELA@gmail.com. Manuscripts for OJELA should be submitted electronically, and follow these formatting guidelines:

- 12-point font
- Double-spaced
- APA 3,500-5,000 word count

Manuscripts should be submitted as three attachments in Microsoft Word:

1. **Cover sheet** that lists the title of the manuscript, author's name, address, school affiliation, telephone, fax, email address, and a brief author bio
2. **Title of manuscript and manuscript text**, which should be free of any internal references to the author's identity
3. **Letter** that guarantees that the article is your original work and has not been published or submitted elsewhere

Submissions should be sent to Editor.OJELA@gmail.com.

Style Issues

We do not accept the following:

- Term papers
- Other lengthy manuscripts overburdened with references

Manuscripts must adhere to the "Guidelines for Nonsexist Use of language in the NCTE Publications", available from NCTE (1111 W. Kenyon Rd., Urbana, IL 61801-1096)

Accepted manuscripts are edited in consultation with the principal author. Due to deadlines, editors reserve the right to make minor revisions without seeking prior approval from the author.

If you reference work from other authors, follow either **APA** style, as outlined in the current MLA or APA style manuals.

Due to OJELA's readership, we recommend:

- Using conversational style that avoids jargon and highly specialized terms
- The use of "I"

Unless absolutely necessary, we ask that you do not include **tables, graphs, and charts** in your submissions. Photographs and artwork will be accepted with written permission from the photographer and subjects in the photograph (See Permissions Policy). Tables, graphs, charts, or other artwork included in your manuscript must be submitted as separate files. Embedded images will not be accepted. Charts and graphs that are drawn using numerical values must have these values accessible, either as separate line list items or on the art itself.

Art/Photography

We encourage readers to share art and pictures that reflect the learning communities in your school and your classroom.

- All reproduced artwork should be at least 8" x 10" on high quality, opaque paper
- Photography submitted as prints should be printed on at least a 5" x 7" glossy paper
- Digital images must be 3 megapixels or better

Permissions Policy

As author, it is your responsibility to secure permission for copyrighted work that appears in your article. Short excerpts from copyrighted material may be quoted without permission, but any excerpts from poetry and song lyrics almost always require the author's written permission. Any student work requires a signed release from the student, or a parent if the student is a minor. To protect students' identities, it is recommended you use pseudonyms. OJELA can provide forms for permissions and releases, though the author must pay any costs associated with permissions. If you are using student work, please request the Student-Consent-to-Publish Form.

Manuscript Review Process

The editors will acknowledge receipt of your manuscript with an email. We initially read all manuscripts to assure that they are appropriate to the journal. If we think your manuscript does not fit our journal, we contact you and suggest, when possible, other outlets for your work. Inquires about possible manuscripts can be sent to Editor.OJELA@gmail.com.

Upon receiving your manuscript, we send it out to at least two reviewers. Reviewers make recommendations for publication and for revision. Once the editors have received recommendations, we make final decisions about whether to publish or not. If we accept your manuscript for publication, we will contact you while working through the revision/editorial process. This process usually takes three months.

Contacting Editors

Send manuscripts and correspondence to Beth Walsh-Moorman
Editor.OJELA@gmail.com
or call
440-668-9906 (cell).

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A Book and Its Kin: Digital Intersections of Diverse Literature, Epitext, Peritext, and Historical Text

– Angie Beumer Johnson, Kristina Bringman, Jasmin Clark, Lucas Prether and Noor Qutiefan

The digital age has brought us closer to the authors and the books we love. Through social media, we might have the opportunity to connect personally with our favorite authors. We can listen in on author interviews on podcasts to hear juicy backstories of our favorite books. In webinars or on author websites, we can even see photos of the real people who were the inspiration for characters who move us deeply. Let's not forget how we English teachers love (or love to hate) film adaptations of books and often show clips or entire films to teach critical viewing skills or critical literacy skills about representation or the commercialization of literature—or simply for pure enjoyment.

All of these everyday examples fall under the not-so-everyday term of “epitext.” Our goals here are to 1) lay the groundwork for the concepts of epitext, peritext (Genette, 1997), and historical text and their unique strengths; 2) offer a rationale for teaching diverse literature combined with epitext, peritext, and historical text; and 3) provide examples for classroom use or as models for curriculum design from both fiction and creative nonfiction texts.

What's What: Digital Epitext, Peritext, and Historical Text

When Angie saw that the December 2020 issue of *Voices from the Middle* was dedicated to practical

application of the theory of *epitext* and *peritext*, little did she know that podcasts and film adaptations are excellent examples of *epitext*. She learned that *epitext* is any connection to the book that is *outside* of the book—such as author interviews, book reviews and literary criticism, performances, marketing materials (Genette, 1997), and yes, all those digital modes mentioned above. In our current digital age, we have seen an explosion of epitexts (i.e., works connected to but *outside* of the book) in the form of social media, fan fiction, and artistic responses to literature. These epitextual links shape our reading of the book but are not the book itself. *Peritext*, on the other hand, includes anything that *is* a part of the book, but is not the main text (Genette, 1997). Think of blurbs on a back cover, a table of contents, an index, or maps of fantastical worlds—those are examples of *peritext*. Together, *epitext* and *peritext* are called *paratext* (Genette, 1997). Much ado about nothing?

Admittedly, Angie wondered what all the hype was about when teachers had always brought *paratext* into their classrooms: *peritext* (such as interpretations of book covers) and *epitext* (such as film adaptations). Then she realized that maybe she didn't incorporate the theory of epitext and peritext to its fullest extent. After all, isn't that the point of theory—to help us see things differently, even those things that may have

Angie Beumer Johnson is a professor of English and Teacher Education at Wright State University, focuses on diverse YA literature, critical literacies, and process approaches to learning. She enjoys writing, researching, and presenting alongside inservice and preservice teachers. In 2020, she founded WORDBridge Now to connect teachers, educators, and authors to collaborate against hatred.

Kristina Bringman is a graduate research assistant in the School of Humanities and Cultural Studies at Wright State University. A Wright Fellow, she is concurrently pursuing graduate degrees in English literature and humanities. Focusing on narrative, agency, vilification, erasure, and resistance, her research interests include: folklore and oral tradition, particularly *La Llorona*; the witch in literature, particularly Shakespeare's *Scorax* and, both, Euripides' and Ovid's *Medea*; fairy tales; witchcraft at the intersection of race, gender, and colonial practice; and critical race theory. She enjoys diverse literature, literary theory, and folklore.

Jasmin Clark is a teacher for grades 8-9 in the Newcomer Program in the Mad River Local School District. She enjoys diverse literature, technology, and exploring interdisciplinary connections.

Lucas Prether is a teacher for grades 7-8 in Springfield City Schools. He enjoys diverse literature, film, and connecting pop culture in the classroom.

Noor Qutiefan is a secondary English language arts preservice teacher candidate at Wright State University. She enjoys diverse literature, artistic responses to literature, and writing poetry.

been under our noses the whole time? With that idea in mind, she invited some of her college students to investigate the epitext of a self-selected diverse young adult book.

Below we, an English education professor and her students, share our thinking about the concepts of diverse literature, epitext, peritext, and historical text as we plan to implement them in our classes. Angie has always begun the teaching of small-group texts with a peritextual analysis of book covers, resulting in students offering solid insights and predictions. Similarly, she has witnessed students' interests piqued when sharing epitext, such as Jason Reynolds' performance of his poem-book *For Every One*. We have enjoyed diving into this research and are eager to implement it further in our future classes.

Our digging unearthed fascinating digital texts—some of which relate directly to our books themselves (*epitext*), and other digital texts that flesh out aspects of our books through historical texts. Rather than dismiss the historical gems we found that did not *directly* relate to our chosen books, we share both: digital epitexts and peritexts, as well as digital historical texts for five young adult books in order to enhance students' reading experiences by meeting the books and their "kin"—those texts *related* to the books, be they close or distant "relatives."

Back to the Book: Unique Strengths of Epitext, Peritext, and Historical Text

In education, we tend to use similar terms that can have different meanings. For example, *multimodal text sets*—teaching a variety of texts, including digital texts, alongside one another—is one way for students to explore a *concept* in thematic units with essential questions. Dávila and Epstein (2020) use multimodal text sets to help students think about the ways different groups of people experience events in history, WWII in particular. The focus of the multimodal text set is the *topic*, as experienced through multimodal texts, rather than a focus on a *specific book*. While some multimodal text sets might focus upon a core text — often called an anchor text, the main goal is the growth of knowledge about the *topic or question*.

In addition, multimodal text sets do not necessarily include *epitextual*, *peritextual*, or *historical links*. We see the key difference here as the spotlight on a *deep focus* of readers' experiences with *a particular book* through the inclusion of epitext, peritext, or historical texts. With this model, the diverse, digital texts primarily support the experience of readers as

they are afforded the time to focus on *one particular book*, adding in epitext, peritext, and historical texts throughout the reading process. This is not to say that whole-class novels are the only way we should teach literature; choice is, of course, an incredibly important factor in students' English language arts education. Also, depending on a teacher's goals, a multimodal text set with a focus on a topic is an excellent choice. However, here we offer a way to nourish students' experiences with *a particular diverse novel or work of creative nonfiction* through those links to the book that are outside the book, on the peripheries of the book, or support the reading of the book via its historical context.

Why Diverse Lit?

We might like to think that the question, "Why diverse lit?" should not even need to be asked. Yet, we find ourselves as teachers in a moment when such rationales are necessary. Rudine Sims Bishop, professor emerita of The Ohio State University and specialist in multicultural children's literature, explains it best in terms of the necessity of students seeing themselves in literature (as if reflected in mirrors) and learning about others in literature (as if looking out of windows) (1990). We must remember that "[l]iterature transforms human experience and reflects it back to us, and in that reflection we can see our own lives and experiences as part of the larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books" (Bishop, 1990, para. 1). A lack of such reflection of oneself can take a harsh toll. For example, author Paula Yoo, nominated for the National Book Award, poignantly describes her childhood drawings of herself as an Asian American girl *prior* to learning to read, but as a blond, blue-eyed princess *after* reading the only books available to her—those with white characters (personal communication, Sept. 11, 2021). The necessity of representation for all readers cannot be overstated. Reading and learning about the experiences of another has significant ramifications for our everyday interactions, our images of others, and the choices we make to create a more just world.

Why Digital Epitext, Peritext, and Historical Text?

Literature can transform our views of those who are outwardly unlike us. Bishop (1990) reminds us that "books may be one of the few places where children who are socially isolated and insulated from the larger world may meet people unlike themselves" (para. 5). We completely agree that expanding our views of the world is a tremendous benefit of reading diverse

literature. Sometimes, however, teachers hear student comments about the inability to relate to characters who are different from them. As they are reading and learning about the uniqueness of different groups, as well as the differences among the *individual members* of those groups, students may miss the aspects of the universal human condition. Here we see eye-opening possibilities of epitext, peritext, and historical text throughout the reading process—especially for those students who have had somewhat homogenous life experiences.

Along with opportunities for students to broaden their horizons through epitext, peritext, or historical text linked to a particular book, these “way-in texts” (Ciecierski & Smith, 2020) can also serve as comprehension aids. According to Ciecierski and Smith (2020), “Many readers are guilty of not taking advantage of features beyond the main text of a book that can facilitate and enunciate understanding and learning” (p. 44). While students may not pay attention to peritext, sometimes we, the teachers, urge students away from epitext as learning tools. Kristina remembers struggling with certain texts in high school, particularly Shakespeare, yet teachers explicitly told students to read the material *before* engaging with anything else involving the book. From conversations with her classmates, she quickly noticed she was not the only one struggling. Yet, if she sought a film adaptation or read Cliff Notes, she felt like she was approaching the material from a more informed place, despite difficulties with understanding the syntax of Shakespearean language. Now that Kristina is in graduate school for literature, her professors encourage students to seek outside material—more pointedly, epitext—to aid in their understanding of the work. Paradoxically, engaging with digital texts *outside* the book can be a powerful way to help students get *into* a book.

Linda Christensen (1999) has long advocated for a “variety of texts, ranging from novels to *historical documents*, to first-person narratives, [and] to movies” (p. 212, emphasis added) to be taught in the classroom. More recently, in *Cultivating Genius: An Equity Framework for Historically and Culturally Responsive Literacy*, Gholdy Muhammad (2020) specifically promotes including historical texts to further students’ learning. Teachers can effectively incorporate these historical pieces for minilessons on the traits Muhammad (2020) describes in her Historically Responsive Literacy framework: critical thinking, skills acquisition, content knowledge, and understanding of oneself and others.

Each book we teach need not focus on all of these traits, nor include mountains of epitext, peritext, or historical texts. With digital epitext and historical texts, though, we can move beyond teacher-focused lectures on historical and author background and encourage students to engage with, explore, and even create their own digital epitext to bring information to life and expand the horizons of the reading experience. Students’ lives are immersed in digital worlds; connecting to those modes can offer a sense of ownership over their learning. Providing space in the classroom for exploration of digital epitext, peritext, or historical texts—whether in the pre-reading, during-reading, or post-reading phases—can draw students into (or back into) the text. Multimedia pieces in particular can offer moments of deep emotion, reflection, and joy. We now turn to some of our favorite books and the rich digital texts that move readers both beyond and back into the book in deeper ways. While our examples stem from texts geared toward secondary classrooms, the inclusion of epitext, peritext, and historical texts in tandem with the teaching of any book can be incorporated at all grade levels.

Our selections span a range of books and their epitextual, peritextual, or historical links. First, we explore epitext and peritext through fiction with the novel *Firekeeper’s Daughter*, followed by the free-verse novel *The Poet X*; and then a collection of vignettes, *The House on Mango Street*. Second, we explore the impact of epitext, peritext, as well as historical texts through creative nonfiction: the documentary free-verse novel *Loving vs. Virginia*, and the verse novel *October Mourning: A Song for Matthew Shepard*. We offer examples of digital texts for educators to consider alongside and returning back to their favorite books. We believe adding epitext, peritext, or historical texts can enliven the teaching of longer whole-class texts, particularly those works students (and possibly their teachers) might rather skip. The key here is to move along the periphery and just outside a specific text in order to further enhance the experience of reading that same text.

Epitext and Peritext in Fiction: *Firekeeper’s Daughter*, *The Poet X*, *The House on Mango Street*

Our first example of ways to incorporate epitext and peritext with fiction comes from the novel *Firekeeper’s Daughter* by Angeline Boulley. The story follows a strong biracial young Ojibwe woman named Daunis who is trying to come to terms with her identity while discovering buried truths and uncovering her

Technology and the Classroom

own future. Daunis is brave and resilient. She proves repeatedly that giving up is not an option for her and reflects on her character and bravery. She also exemplifies that strength is built from the scars on one's shoulders, and resolve is found from within. Daunis demonstrates that acceptance and belonging as well as identity are more about oneself and how they find themselves despite those surrounding them. The text gives readers a chance to learn more about the Ojibwe and their culture, and it provides insight into life on one reservation, which can be eye-opening as well as educational. Exploring the richness of the Ojibwe language and culture through epitext from internet research can touch the heart and enlighten readers of the world outside of their own bubble. (See Additional Resources below.)

Through activities seeking digital epitext, teachers can also teach and assess students' abilities to research and collect their own information. By researching epitext, readers may appreciate learning that goes beyond the text and find joy in materials that enhance the reading experience. Epitext can be used as motivation for learning the material at hand, and students can keep a record of what they are learning in a journal. Activities can include internet scavenger hunts to learn more about the book. Students can be encouraged to find several new facts that they unearthed about the book and share the information. For example, information about the artwork and artist, Moses Lunham from the Kettle and Stony Point First Nation, is traced back to a news site called *Anishinabek News*. The news site shares more about the artist and reveals facts regarding the culture that encompasses the art as well as insights that might help readers and students understand the artist behind the scenes, such as "the tradition of men as fire keepers and the importance of being honest, clean-living, and sincere in order to have the honour of being a fire keeper" (Graf). Upon learning these interesting facts, students can find deeper links to the text and understand more about the culture surrounding *Firekeeper's Daughter*. While the cover itself offers a beautiful example of peritext, the information about the tradition of fire keepers is also tremendously valuable for this novel. Students may also want to try their hand at creating their own epitext for the book by illustrating a favorite scene, or filling in a gap in the text, in the style of Lunham's art.

The artwork on the cover of *Firekeeper's Daughter* is peritext, and by having students take a closer look at the art, they can make inferences about the book. The colorful cover has two images in one—

from appearing to be butterflies or two faces facing one another. This cover is particularly intriguing as peritext because it provides teachers with the opportunity to informally assess their students. Teachers can assess the students' critical thinking skills by having them analyze the artwork, and by having them provide textual evidence to back up their claims. Ciecierski and Smith (2020) remind us that "[p]eritextual features can provide readers the opportunity to think critically about what they are reading and strengthen students' visual literacy skills" (p.44). These higher-level skills are necessary for students to understand and connect with the text.

Epitext can also help students make connections about the book with other readers. This connection helps in creating a community *within* the classroom which may also be extended *beyond* the classroom. Students can be encouraged to find quotes and reflect on what they find. Social media sites such as Goodreads can provide just that—a space to be digitally "social" about the book, gleaning context before reading, and pondering others' responses to the book as well as "like" others' quotes during and post-reading. Students could pull a quote from the author's information page on Goodreads to see what people all over have found most powerful from the book, or from the author's comments. This quote from *Firekeeper's Daughter* received several "likes": "It's hard to let people down, and harder still when your expectations for yourself are even higher" (Goodreads). Themes of the book emerge from these quotes, to which many students might relate. Quotes could then become prompts for discussion, lessons on citing, or lessons on accuracy of citations (as Goodreads notes that quotes attributed to the book or the author are not "verified"). The suspense and intrigue of this Printz award-winning novel may spark an interest for readers to continue the conversation with readers across the internet, and to enjoy exploring the publisher's website (Macmillan) to hear about plans for further epitext—a television adaptation.

Our next example of epitext with a fictional work also focuses on the impact of the social aspects of reading and social media. In our technologically-driven world, it only seems fitting to consider social networking platforms, such as goodreads mentioned above, as another form of epitext that can be used to develop more genuine connections with a text and its writer. Popular amongst young people, making use of social media as an educational resource can help students perceive the authors as authentic humans, and more closely relate to textual characters. Through this lens, readers can learn about the author

of the free-verse novel *The Poet X*. Afro-Hispana poet Elizabeth Acevedo shares about her life, as well as the influences for her work, from her Instagram account (acevedowrites). The text *The Poet X* centers on the life of an Afro-Latina adolescent girl, Xiomara, growing up in New York. Xiomara has grown up in a strict religious family along with her twin brother and struggles to feel heard in her own home. It is not until she is encouraged by her English teacher and fellow classmates to present her writing skills at local poetry slams that she finds her voice and is truly seen by her parents at home.

From her media platform, Acevedo shares tour information and promotes her past work, as well as introduces her followers to her debut adult novel, *Family Lore*. Engaging with her fans and in the honor of the fifth anniversary of *The Poet X*, the 2018 winner of the National Book Award for Young People's Literature hosted a fan art contest with the chance to win a signed copy of the book.

Through her Instagram platform, Acevedo highlights connections to her readers by sharing facets of her life: the birth of her daughter, the struggles she faced in teaching herself how to write in a new form with her novel, celebrating her husband as a partner and father, speaking out for social justice, and the Poetry Foundation naming her the Young People's Poet Laureate for 2022-2024. Utilizing an author's social media, like Acevedo's, again we see potential for student creation of epitext: students can craft author micro-biographies, and create literary scavenger hunts, enhancing their grasp of the author's work, particularly those facets that are autobiographical in nature. With students bitten by the social media bug, why not use that bug to the advantage of helping readers connect with their favorite—or perhaps soon-to-be-favorite authors?

Our examples of social media epitext are (understandably) from contemporary authors, but what about the books that we must teach, those which may not have been our first choice of books? The good news is that even canonical authors long gone accrue social media epitext. A quick search found groups and posts for Nathaniel Hawthorne, including celebratory messages for his July 4 birthday. (As always, read carefully, or you may wind up joining the alumni group for Nathaniel Hawthorne Middle School 74 in Queens instead!) Instagram hosts @h7gables, the *House of the Seven Gables* historic tour site in Salem. Dead white men, fear not—it seems any text can be rejuvenated through epitext, peritext, and historical texts.

One of the joys of epitext is its wide variety—from casual, everyday social media to formal academic writing. Our next example of epitext with a fictional text joins the powerful vignettes of *The House on Mango Street* with a different kind of digital epitext: literary criticism. Kristina shares this vignette of her own as she ponders connections with Cisneros upon reading epitext on the author's life.

The importance of the examples set by parents and educators in the early life of a reader cannot be overstated. Sandra Cisneros writes, "I don't know when I first said to myself that I am going to be a writer. Perhaps that first day my mother took me to the public library when I was five, or perhaps again when I was in high school and my English teacher forced me to read a poem out loud and I became entranced with the sounds, or perhaps when..." (Jago, 2002, p. 3). Like Cisneros, my mother's act of habitually taking me to the library as soon as I blew through our recent library haul, and the dedication and support of my junior high and high school English teachers serve as just two examples of the numerous positive effects on my—and Cisneros'—literary engagement.

Reading authors' thoughts when they were young can offer surprising information or spark a connection between reader and writer that brings the text to life.

Cisneros' *The House on Mango Street*, hereafter called *Mango Street*, is the coming-of-age tale of Esperanza Cordero, a young Chicana living in Chicago with her family. Through first-person narration, Esperanza introduces readers to her community, culture, family, and friends through a series of vignettes as she navigates early adolescence. A literary option in some school curriculums, Cisneros' literary gem *Mango Street* can play a role in a diverse curriculum, as well as highlight the role that literary criticism as epitext can play in a deeper understanding of a literary work.

While teachers often ask students to take a critical stance on a work of literature, Carol Jago (2002) argues, "[W]e rarely ... offer students samples of professional literary criticism," and she suggests students "read what others have said about a writer's work ... [to] help refine their own thinking" and to aid in a thorough comprehension of a text (p. 63). Scholarship on what others are saying about the work

is a source for epitextual learning that offers students opportunities to engage critically with a text. There is a wide array of accessible literary criticism on and for teaching *Mango Street* that introduces diverse literature and critical analysis to students.

Scholarship on *Mango Street* focuses on themes of identity, voice, and resistance. Janet Sarbanes evaluates Cisneros' *Mango Street* as a Chicana bildungsroman (a coming of age novel) that differs from "traditional Chicana [coming-of-age tales,] in which the girl must give up her freedom...to join the community as a wife and mother" (as cited in Jago, 2002, p. 63-64). Esperanza, in contrast, is boldly searching for her independence, her freedom to choose her life's path, and for "[a] house all [her] own" (Cisneros, 2009, p. 108). Dianne Klein examines the social and cultural influences and painful rites of passage that shape and define the character of Esperanza. Klein asserts *Mango Street's* protagonist Esperanza's growth as, not only resistance to the confines of gender mandates in her culture, but also as a "political act," due to the American literature canon's focus on "the coming-of-age stories of white, heterosexual males" (as cited in Jago, 2002, pp. 67). Thomas Matchie offers a critical comparison of *Mango Street* with Mark Twain's *Huckleberry Finn* and J. D. Salinger's *The Catcher in the Rye*, and further posits Esperanza's house on Mango Street as the lens through which she "examine[s] her society and the cultural shibboleths that weigh on her as a young Chicana woman," instead of Twain's Mississippi River or Salinger's Manhattan (as cited in Jago, 2002, pp. 65). Matchie also argues that, unlike Twain and Salinger, Cisneros structures her novel with various genres, like poetry, short stories, and essays to show Esperanza's evolution (Jago, 2002). By finding articles like Matchie's that position the text with critical comparisons, students can learn to analyze and differentiate the readings and learn to articulate their arguments through textual evidence while also learning to talk about literature with their peers.

While *Mango Street* was published nearly forty years ago, this bildungsroman remains relevant, and in Esperanza's story, readers are exposed to works outside the canon of English literature that, historically, prioritize white stories, particularly those of white males. Through considering scholarship as epitext, critical conversations will allow students to further develop through analysis and engagement with their peers, the text, and the world outside of it, while exploring more inclusive literature. We

now move from our fictional pieces into creative nonfiction, with a focus on epitext, peritext, as well as historical text to engage readers with the book.

Epitext, Peritext, and Historical Text for Creative Nonfiction: *Loving vs. Virginia* and *October Mourning: A Song for Matthew Shepard*¹

As we researched epitext for our nonfiction books, we encountered fascinating historical texts that, as mentioned above, although they are not *directly* related to the *individual* books, they serve to greatly enrich the reading of that individual book. Our first nonfiction selection teaches an important lesson in U.S. history for future generations to learn from. Patricia Hruby Powell and illustrator Shadra Strickland's free-verse novel *Loving vs. Virginia: A Documentary Novel of the Landmark Civil Rights Case* touches readers through an imaginative insider perspective along with significant peritext (elements within the book that are not the core text). As a pre-reading curiosity-builder, students can connect with the book's creators through epitext from the author and illustrator websites. From Powell's site, we learn that she is a former "dancer, storyteller, and librarian" (Powell). It is not surprising that one who loves dance, stories, and books would craft a beautifully rhythmic free-verse novel. Powell has won numerous awards for her writing, including a Junior Library Guild listing for *Loving vs. Virginia*.

From illustrator Shadra Strickland's website, we learn that she is passionate about promoting positivity through her artwork. She has won several awards for her illustration work, including the Coretta Scott King Award for African American excellence in writing or illustration, the Ezra Jack Keats Award promoting diverse children's literature, as well as the John Steptoe New Talent Award (Strickland). Strickland is also a writer, and her books "have received recognition from the American Library Association and Junior Library Guild" (Strickland). In addition, she teaches illustration at the Maryland Institute College of Art in Baltimore. With her talent and commitment to positivity through her art, it is not surprising that Strickland was selected as the illustrator for Powell's moving text. On their own,

¹ While some debate that the decade of the 1990s counts as "historical," Lesléa Newman expressed that she wrote *October Mourning* (2012) to keep Matthew Shepard's memory alive, because often her audiences did not know who he was (Johnson, 2023). Newman's next book, *Always Matt*, will be released September 26, 2023, the 25th anniversary of the Matthew Shepard Foundation, and will highlight Matthew's life, rather than his death

students can actively explore information about the real human beings who have created the book they are about to read, and (unless set in the future) to learn about the historical events that took place in the time of the book's setting. Such activities can support students' engagement as we approach reading as a process (Gallagher, 2004).

Loving vs. Virginia: A Documentary Novel of the Landmark Civil Rights Case explains the Supreme Court case of *Loving v. Virginia* in a way that allows younger people to better understand and relate to the material, particularly by frontloading of historical context. Historical materials for this powerful book, discussed below, spanned digital access of archives of newspaper articles, news magazines, broadcast news, and the open access website Project Muse. The history of the Loving family is well documented, and greatly adds to the experience of reading Powell and Strickland's book.

Before the 1970s, Jim Crow laws plagued the country, "Separate but Equal" was a common practice, and hatred and discrimination clouded the thoughts and ideals of citizens. The belief that people of color were inferior to white people was instilled for many generations. Also during this era, many states outlawed miscegenation. Miscegenation is defined as "marriage, cohabitation, or sexual intercourse between a white person and a member of another race" (Merriam-Webster, n.d.). The practice was especially enforced in the southern United States.

In 1924, one of the most segregated states in the country was the state of Virginia. In the state, miscegenation was made illegal as a result of the Racial Integrity Act of 1924—and the book includes a peritextual image of the document. The goal of this law was to "prohibit intermarriage between whites and non-whites to protect the 'whiteness' of the race" (Endo, 2014, p. 10). With the passing of this law, Virginians participating in miscegenation could be arrested for breaking the law. During the 1950s, Richard and Mildred Loving learned about this law the hard way.

The Lovings were an interracial couple that lived in pre-Civil-Rights-Movement Virginia. Students would be intrigued by the poignant television interview with ABC News when the Loving family talked about how they grew up together, fell in love, and married one another in June 1958 (Ryden, 1967). After receiving an anonymous tip, the sheriff from their hometown arrested the Lovings, resulting in them being convicted of violating the Racial

Integrity Act of 1924. The Lovings were eventually banned from the state of Virginia, which forced them to move to Washington, D.C. (Ryden, 1967).

A *New York Times* piece from 1967 gives readers insight into the Lovings' process to battle the unjust law that made their marriage illegal. After writing a letter to Robert F. Kennedy, the Lovings were put into contact with the American Civil Liberties Union (ACLU), which took their case and appealed it to the United States Supreme Court (Graham, 1967). The attorneys representing the ACLU argued that "Virginia's laws denied Negroes the equal protection of the laws guaranteed by the 14th Amendment" (Graham, 1967, para. 3). After hearing about the plight that the Lovings were going through, many different people and organizations expressed support for the Loving family. Examples of people and organizations include the NAACP, Dr. Martin Luther King Jr., Robert F. Kennedy, and the Bishops of the Roman Catholic Church (*State Miscegenation Laws*, 1967, para. 1). Digging into the news media of the Lovings of this historical moment can link with lessons in framing of news stories as well as the background for the book.

After hearing the case of *Loving v. Virginia*, the Supreme Court unanimously ruled in favor of the Lovings, which resulted in anti-miscegenation laws throughout the United States being ruled unconstitutional, and in people of color and white people being allowed to marry. According to Justice Earl Warren, the Racial Integrity Act of 1924 "rests solely upon distinctions drawn according to race" (Bauman, 1967, para. 3). Over 15 states were affected as a result of this court case, which included the following: Virginia, Texas, Kentucky, Missouri, and Indiana. Supplemental material at the end of Powell and Strickland's (2017) book includes peritext of a timeline of these events, and two paragraphs set apart on a page with a gold background: the reader learns that in spite of the 1967 ruling, it was not until the year 2000 that the last state, Alabama, had its miscegenation law struck down.

After many years of living away from the state of Virginia, the Loving family was able to move back home and raise their children around their loved ones. It cannot be stressed enough how important the case of *Loving v. Virginia* was for the Civil Rights Movement, and digital historical texts help to extend the world of the book. Not long ago, due to the importance and impact of this court case, a biographical movie was released called *Loving* (2016). The movie received various award nominations,

including an Academy Award nomination for actress Ruth Negga. Learning about the Lovings and the plights they experienced can help individuals understand what life was like in the past and try to improve things for the future. Mildred Loving said it best when she stated: “I support the freedom to marry for all. That’s what Loving, and loving are all about” (Dish, 2013, para. 11).

From the South in the mid-20th century to the West in the last years of the 20th century, our second example of epitext and historical text requires a warning for intensely disturbing events. In Laramie, Wyoming, in 1998, University of Wyoming college student Matthew Shepard, who was gay, was horrifically beaten, tied to a buck rail fence, and left to die by two men who pretended to be gay after meeting Matthew in a bar. Such atrocities scream for a way to process the terror. One way to process such terror is through artistic representation, which can eventually become historical artifacts. Responses that function as epitext or historical text can allow us to share the story, to remember and honor the target of hate, and to influence us toward a better world.

Lesléa Newman’s poetry collection *October Mourning: A Song for Matthew Shepard* powerfully portrays not only the factual events of Matthew’s murder, but also imagines the perspectives of those affected that night, including the fence that held him until he was found by a mountain biker who mistakenly thought Matthew’s beaten body was a scarecrow. In the epitext of a podcast, Newman explains,

Matthew died five days later with his family by his side in a hospital, and that is the day I arrived in Laramie to give my talk...for their Gay Awareness Week. And I also made a promise to Matt’s friends...that I would start all my talks from that point on by talking about him, to keep his name alive.... As time went on, ... people had no idea who he was.... That didn’t sit well with me, so then I wrote this book, *October Mourning: A Song for Matthew Shepard*. And so this book bears witness to this terrible hate crime through a myriad of voices. (Johnson, 2023)

Newman’s range of voices, poetic styles, and emotional intensity draws readers not only to the text itself, but also to learn more about Matthew and the brutality that shook the world. Taking time to engage with digital epitext for *October Mourning* and artistic representation from the time of Matthew’s

murder enriches our teaching of ELA skills, but more importantly draws us deeper into a shared sense of humanity, in both its heinous and healing forms.

Professional book trailers can kickstart students’ readings when done well. The multimedia elements of sound and accompanying visuals can spark a deeply emotional reaction, and *We Love Children’s Books* offers an incredibly poignant, professional book trailer for *October Mourning*. A haunting piano refrain and the voice of Newman reading two poems are the sole soundtrack for the trailer, with carefully selected images all set over a black background.

Newman’s performance of her two-voice-style poem “Raising Awareness” contrasts perspectives of Matthew and the two killers, highlighting parallel structure and the power of juxtaposition in the poem. This shot maintains an unchanging background image of only the fence to draw attention to the verbal contrasts with individual lines appearing on the screen in parallel lines—repeating that the killers (“they”) were aware, and Matthew (“he”) was unaware of circumstances leading up to the crime. Newman’s poignant reading and the digital display of the growing parallel lines of the poem draw the reader even further into the vulnerability of Matthew that night.

Upon hearing Newman’s reading of “Outnumbered”² alongside the graphics that include the poem’s text, writers can learn the impact of the structure of a text. Here, the poem reinforces a pattern of decreasing population. Along with accompanying graphics (the world in outer space, a map of the U.S., a landscape of Wyoming, a population of Laramie sign), we hear and see the world gradually whittled down to the torture of *one* single human being. The opening stanza reads, “There were about/ 6 billion people/ in the world/ that night” (Newman, 2012, p. 3). The last two stanzas read, “There were precisely/ 3 people/ in that Ford pickup/ that night/ 2 triumphant/ 1 terrified” (Newman, 2012, p. 3). The contrast—and the reality—is a gut punch. Newman’s choice of this structure reminds us that human beings are far more than a number, the message reinforced with the visuals for this digital epitext.

After such a tragic event, some (like Newman herself did) turn to creating art as a response—to attempt to make some sense of the senselessness. These works of art—songs, videos—in turn become historical artifacts documenting the grief of many

2 OCTOBER MOURNING: A SONG FOR MATTHEW SHEPARD. Copyright © 2012 by Lesléa Newman. Reproduced by permission of the publisher, Candlewick Press, Somerville, MA.

during that time. Further searches on Matthew Shepard brought to light student Janelle Jeter's 2010 heartrending multimedia video with Grammy-award-winning singer Melissa Etheridge's song "Scarecrow"—the description by the cyclist who found Matthew.³ Etheridge's song underscores the inhumane treatment of Matthew by personifying a scarecrow sobbing and dying, a clear allusion to Matthew. Jeter (2010) made a powerful rhetorical choice of opening the video with an image of Matthew as a toddler, text scrolling over his image stating his birth and death dates, and that he died "because he was gay." Immediately the viewer, even if they had not heard of Matthew's death, becomes invested in the atrocity of the murder of this child, this 21-year-old whose life was stolen. Jeter continues to meaningfully match lyrics to images, with a lyric referring to hatred of closed-minded people as the viewer sees a photo of a member of the Westboro Baptist Church with hate speech signs outside Matthew's funeral. Once Matthew's friends learned of the church's plans to also "protest" at the trial of Matthew's killers, they created Angel Action—wearing white costumes including immense angel wings that blocked the view of the hate-speech signs (Sheerin, 2018).

The video continues with photos of Matthew throughout his life, and a photo of the two killers—one bowing his head, and one eerily staring directly into the camera. At this point Etheridge's lyrics describe the incomprehensible, yet true, idea that such brutal killers are the same people who populate our towns. The bridge of the song later describes the speaker's search for forgiveness, attempting to understand that the killers, too, were human beings who, though choosing to commit inexcusable, heinous acts, might have been targets of violence during their own lives. (*October Mourning* sheds further light on the backgrounds of the murderers.) The song and the video end on a note that human beings could choose love over hate, remembering Matthew's life and martyrdom.

Teachers could provide this poignant multimedia piece as pre-reading for *October Mourning*. Additionally, as the National Council of Teachers of English recommends, students can compose in multiple modes (2005) by creating their own epitexts, with Jeter's video as a model for a literary response project either as students read or after they have completed *October Mourning*. With a meaningful context for learning about effective techniques to

3 Elton John's 2001 "American Triangle" is another powerful song alluding to Matthew Shepard and his two killers.

incorporate sound, image, and text overlays, students might select a song and graphics to represent one of the poems in *October Mourning*. Regarding her video composition, Jeter's (2010) YouTube comment states, "Matthew Shepard did not die in vain and his legacy still lives today. I created this video for class to show people that hatred has no place in society."

Concluding Thoughts: Epitext for a Book on Epitext

As we continue to think about the role of epitext, peritext, and historical texts in the classroom, we consider the original French title for Genette's 1987 theory of paratext. He titled his book about epitext and peritext *Seuils*—"thresholds" (Genette, 1997). The concept that epitext and peritext—as well as historical text—can be the doorway, the way into a book—is one that we English language arts teachers can apply to our benefit, and more importantly, to the benefit of our students. Whether these related links be first-cousins (epitext or peritext) or second (historical texts), the point is to help students experience the book in ever more powerful ways, and to grow in knowledge, in understanding of self and others, in skills, and in critical thinking (Muhammad, 2020).

The role of digital epitext is receiving increased attention, as evidenced by the publication of *Post-Postmodernist Fiction and the Rise of Digital Epitexts* by Virginia Pignagnoli (March 2023). In fact, digital epitext by way of a synopsis from The Ohio State University Press website (meta-epitext!) has intrigued us with the appealing focus on "sincerity, relationality, and intersubjectivity." We are heartened by the focus on the importance of sincerity, connection, and relationships as key to the experience of reading, and the acknowledgement of the rich variety of ways we can connect with an author and a book beyond the book itself. Whether preparing to teach a long work of literature to the whole class or when recommending books for independent reading, allow yourself the gift of time to seek out epitexts, to attend to peritext, to experience historical texts. Encourage students to step across those thresholds—to explore epitext for their favorite books or authors. This is the joy of the arts and humanities, of our English language arts: connecting with one another through, and beyond, the life of the book.

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Additional Resources

Title of Resource, Creator	Type of Resource	Book
<i>Loving</i> , Jeff Nichols, dir.	Motion picture	<i>Loving vs. Virginia</i>
“Native South,” Project Muse	Background article https://muse.jhu.edu/article/549740	<i>Loving vs. Virginia</i>
“The Poet X” National Book Foundation	Book award website https://www.nationalbook.org/books/the-poet-x/	<i>The Poet X</i>
“Firekeeper’s Daughter,” Ojibwe.net	Cultural background https://ojibwe.net/firekeepers-daughter/	<i>Firekeeper’s Daughter</i>
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Goodreads, site users	Social media author highlight https://www.goodreads.com/author/show/19633027.Angeline_Boulley	<i>Firekeeper’s Daughter</i>
Author website, Sandra Cisneros	Author background https://www.sandracisneros.com/	<i>The House on Mango Street</i>
“Scarecrow,” Melissa Etheridge	Song https://www.youtube.com/watch?v=Kdr7Ot00n2E	<i>October Mourning</i>
“American Triangle,” Elton John	Song https://www.youtube.com/watch?v=j3-cpQb-95A	<i>October Mourning</i>
<i>October Mourning: A Song for Matthew Shepard</i> , WeLoveChildren’sBooks	YouTube professional book trailer https://www.youtube.com/watch?v=2XFdG3Id9Sg	<i>October Mourning</i>



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Virtual Reality as a liberatory practice: Technology for ELA engagement in detention centers and beyond

– Amy Walker, Kristine E. Pytash and Francisco L. Torres

Introduction

We know now more than ever that youth deserve opportunities to be engaged with the world in our classroom spaces. We recognize the critical nature of students being exposed to new ways of knowing the world, its people, cultures, events, stories, imaginings, and hopes, and, more importantly, knowing and finding their place in the world. Our work over the past several years and our own experiences during the pandemic, has shown us that technology allows new, expansive learning possibilities. In this article, we share a project that took place at a local juvenile detention facility incorporating Virtual Reality (VR) technology during a literature unit on George Takei's *They Called Us Enemy*.

As educators, we believe that we have a responsibility to advocate for all students' educational experiences. We advocate for educational justice - a critical, rigorous, and robust pedagogy for all students - especially for those who have been pushed into the juvenile justice system. Kristy has built a significant relationship with the detention center, facilitating writing workshops and classroom projects over the past 10 years. Amy and Francisco have done significant work with youth who often experience marginalization in schools. This project extended those commitments to marginalized voices by providing an opportunity to collaborate with a detention center teacher who wanted to create a unit for her students using the book, *They Called Us Enemy*.

The goal was to engage youth in the use of VR technology to venture beyond the four walls of the detention facility and to explore a storytelling space that melded the real and imagined together.

Additionally, we wanted youth in the detention center to have opportunities to look inward to explore how their beliefs about the world and the empathetic stances they take towards others are shaped by the various realities they experience. When students are using Virtual Reality (VR) headsets, they are connecting to a story through their bodies and space; movement is necessary to experience the story. Therefore, in this article, we begin with an overview of the theories supporting spatial literacies. We connect the theoretical framing surrounding spatial literacies to the emerging research exploring VR technology in classrooms. While VR technology is the focus of this article, we did engage youth in art-based pedagogies as they responded to the novel and the character's experiences (Parsons, 2004; Stewart & Walker, 2005S). This provided youth another avenue to articulate their reflections and responses to the different perspectives featured in the novel, while processing their own life circumstances. We deliberately invited youth to use multiple tools, including VR and art, for responding to *They Called Us Enemy*, as they explored their feelings about the novel and examined who they were in relation to the characters.

Space and Literacy

Just as critical literacy centers power relationships, spatial literacies place importance on the power relations that are produced within the social constructions of space as one way to understand identity and culture (Leander, 2004; Lefebvre, 1991). Space has a traditional relationship with disciplines like geography and urban planning, but recent attention on space in educational research has led to new ways of thinking about space and literacy (Leander &

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Sheehy, 2004). The dynamic relationships involved with space and literacy consider how people both shape and are shaped by space and history (Leander, 2004; Soja, 2010).

Spatial literacy research is grounded in the idea that space and literacy practices are socially constructed. This is a combination of two key principles: space is socially produced (Lefebvre, 1991) and literacy serves as a social practice (Barton, Hamilton & Ivanic, 2000; Street, 1995). Spatial literacies see space not as a geographic location or somewhere people gather, but as socially produced, and, therefore, as historical, active, and relational (Leander, 2004; Lefebvre, 1991). Comber and Nixon (2008) argue, “Focusing on the spatial and the socially produced nature of space is very much in alignment with critical literacy’s insistence on the constructedness of texts” (p. 222). Recognizing that spaces are socially constructed calls attention to new ways of understanding literacy and learning (Soja, 2010). Moll (2000) argues,

The key point is that human beings and their social and cultural worlds are inseparable; they are embedded in each other. Thus, human thinking is not reducible to individual properties or traits. Instead, it is always mediated, distributed among persons, artifacts, activities, and settings. (p. 265)

Space is complex and co-constructed, and it calls attention to the intersections of relationships, power, and literacy practices. Vasquez, Janks, and Comber (2019) urgently call for new directions in the field of critical literacy, including research that engages with multimodalities and spatiality. As former teachers, we were interested in examining how youths’ engagement with virtual reality technology in a detention center classroom space offers potential to understand students’ meaning-making through new, immersive, multimodal literacy practices.

Virtual Reality

When VR was being initially introduced in education as a pedagogical tool, Psotka (1995) extensively researched the psychological and cognitive benefits of immersive VR. He referred to VR as a mode of communication between “symbolic form and mental representation, and between collaborators in conceptual worlds” (p. 410). Further definitions of VR environments include computer-generated simulations that are “immersive, multisensory, artificial, three-dimensional virtual spaces... that enable users to interact with virtual objects while the physical world is blocked from view (Mills, et al., 2022, 336-337). With VR, there can be

limited boundaries or structures to navigate, as well as a lack of framework to influence a path dependency (Orasi & Sameshima, 2022). Virtual reality is an immersive space that presents risk taking--moving into an unknown space--as an essential literacy practice. VR expands the literacy and concepts of space and presents new pedagogies for thinking, analyzing, and generating meaning (Orasi & Sameshima, 2022). Spatially, it requires agential reasoning for making movement. It provides students with immersive and interactive learning experiences that simulate real-life scenarios or historical events, allowing students to connect to others’ stories and also to their own in autonomous ways.

Educators have explored how VR technologies can be incorporated in creative and pedagogically appropriate ways as students are engaged with “audio, visual, and tactile texts in ways that encourage experimentation, exploration, and discovery with others” (Hutchison, 2018, p. 343). Educational researchers have pointed to the “unique and powerful potentials” of VR technologies to increase student engagement in learning, creativity, and problem-solving skills (Mills et al., 2022, p. 337). VR continues to emerge as leading classroom technology as it offers a fully immersive learning environment.

Context and Instruction

The Detention Center

This project took place in a detention center located in an urban area of Ohio. The detention center is considered a short-term pre-post adjudication facility, with ages typically ranging from 11-17. According to the detention center records, the majority of youth identify as Black males, followed by white males. At the time of our project, approximately 32 students resided at the detention center. During our project, we worked with three classes of students divided by gender and age ranges. Class 1 included youth who identified as Black and white males between the ages of 16 and 17, and Class 2 included youth who identified as Black and white males and were approximately between the ages of 13 and 16. Class 3 included two youth who identified as biracial females; both students were 17 years old.

In a space like a detention center classroom, youth are acutely aware of the power dynamics within the room. Students are escorted in single file, and they go directly to their seats. At least one guard sits at the door and faces them throughout the class. The small tables are bolted to the floor, and the plastic chairs are not to be moved without permission. Students cannot

move freely in the room; for every move, they must ask permission. Materials are dispersed to students only when they are needed. Pencils must be requested, and they are carefully counted when dispersed and collected. The environment is restrictive, and students have very limited rights within a space. The way they co-construct the space is by behaving or “misbehaving” as expected: following the rules, sitting without disrupting, obeying orders and if they disobey or disrupt, by talking too loud, moving without permission or worse, they can be removed from the classroom.

Instructional Goals

As teachers working in this space, we are also acutely aware of the limitations and affordances the detention center classroom provides and our roles within this space. However, we operate from the belief that youth in juvenile detention centers deserve English language arts instruction that is research-based, empowering youth as readers and writers and encouraging them, through literacy practices, to imagine beyond the confines of the space they are in. This guides our instructional approaches as we create opportunities for youth to engage in reading and writing to explore interconnected perspectives so that they can learn about, critique, and imagine beyond the local world around them to the global. Through our instructional strategies, we position literacy as a culturally responsive network of texts, which we leverage in the English language arts classroom to co-construct with students a space of rigor and opportunities for growth. To accomplish this, we rely on pedagogical approaches that center creative meaning-making, including arts-based pedagogies and virtual reality experiences (Silverstein & Layne, 2010; Stewart & Walker, 2005; Hutchison, 2018; Mills et al., 2022).

These principles guided our project centered around the book, *They Called Us Enemy* by George Takei, which chronicles George and his family’s experience with the Japanese internment camps during World War II. Students had been learning about World War II and *They Called Us Enemy* helped us widen the curriculum students were already engaging with by highlighting the oftentimes hidden story of Japanese internment during World War II in the US. Throughout the project, youth were asked to take empathetic stances as they engaged in discussion and art-based responses to consider the notion of home, being forced to leave home, and finding one’s place in the world. At the end of *They Called Us Enemy*, George Takei notes that his experience in the Japanese internment camps called him to engage in

action surrounding social and political issues, such as immigration and refugees. Therefore, as we explored the themes of the novel, we also called youth to reflect on how life experiences shape our perception of the social issues that need attention.

During instruction, youth were reading a section in the graphic novel in which Takei and his family learn that they can return to their home in Los Angeles, California. George’s father went before the family to find them a place to live since their home had been taken from them because of Executive Order 9066. This is a key moment in the book since it is filled with both the joy of being able to finally leave the internment camps and the turmoil of remembering all that was taken away by the US government, and George’s father had to leave the family to find that new home. Since one of our guiding principles is to view literacy as critical action, we wanted youth to consider the experiences of people who are forced to leave their home by war or political action, refugees, as part of their understanding of *They Called Us Enemy*.

As a way of extending our conversation about refugees, we decided to have youth participate in an interactive experience using VR headsets and the app, *The Key*. *The Key* is an interactive experience narrated by Anna, who dreams of her past even though she does not remember it. Participants experience Anna’s dreams, specifically focused on a key. During the experience, participants are asked to do specific tasks related to Anna’s dreams. By the end of the experience, users realize that Anna’s home was destroyed, and she is a refugee with only the key to her home left to remind her of the past. In the final minutes, participants are standing in a home that has clearly been destroyed by war. Images of refugees and audio recordings are incorporated to provide statistics and information about people who have been displaced from their homes because of war, famine, or natural disasters. The themes of *The Key* - home, loss, and hope - are intricately tied to the themes of *They Called Us Enemy*.

The Instruction

The detention center has 10 VR headsets as part of a previous project supported by the Martha Holden Jennings Foundation. During the implementation of VR technologies, youth were divided into two groups. The first group used the VR headsets to be immersed in *The Key*. After we asked youth to reflect on their experience and responded to a series of questions related to *The Key*, the interconnected themes of *The Key* and *They Called Us Enemy*, and their experiences

Technology and the Classroom

using the VR headsets (Figure 1). Specifically, we asked the following questions:

1. Tell us about your experience with VR
2. How did this make you feel? What happened during the VR experience that made you feel that way?
3. How can you connect the feelings you experienced in VR to George Takei's story?
4. Are there any other situations in your life that made you feel this way?

Youth used sticky notes to write reflections and then posted their ideas to a response board.

Because the focus of *The Key* was losing one's home and becoming a refugee, we asked the second group to participate in art-based responses to *They Called Us Enemy* focused on notions of home. In addition to reading the section of George's story when he returns home, youth read lyrics from *A House is Not A Home* by Luther Vandross. Youth then reflected on the book, the lyrics, and their own experiences by creating a drawing in response to the following questions:

1. What does a home look like?
2. What is inside the home that actually makes it home?

After the groups finished, we switched activities and Group Two used the headsets to be immersed in *The Key* and Group One participated in art-based responses to *They Called Us Enemy*. We repeated this instruction for all three classes of youth at the detention center.

What We Learned

During *The Key*, youth experienced a narrative sense of place by being immersed in Anna's dreams (Miask, 2018). Youth were transported to Anna's world as they shared that the VR experience "felt real" and made comments such as, "It made me feel like I was there." When youth recalled what Anna's bombed house looked like, they took empathetic stances with comments such as: "When I saw her home, it made me feel like she was treated poorly." Multiple youths stated they "felt bad." One youth stated, "I feel bad for people who go through this – because her house was destroyed." Similarly, another stated, "I felt angry and sad for their house being destroyed." While many youths focused on the physical destruction of Anna's home, one of the girls noted the emotional and mental toll that being a refugee might take on someone. She said, "it made me feel sad. It reminded me about what people's minds go through when they go through these things."

Youth noted that their responses stemmed from the feelings they experienced with VR. They felt like they were "in Anna's visions." And that the interactive experience "made me feel like I was there." One youth noted, "you feel a lot of the same emotions as Anna." And for many of the youth, the experience was a reflective experience. One youth noted, "It made me think about all these emotions." Another noted, "There were times I have felt similar to Anna in my own life and so it was relatable."

Specific connections to *The Key* and *They Called Us Enemy* were centered mainly around when George returns to his home to see it vandalized and dilapidated. A youth shared, "George's situation was similar because he got taken from his home and in the app there was a home and it was bombed. And when George came home, his home wasn't the same." Another saw George as a "refugee" who was taken from his home." And that "both Anna and George got put in messed up environments."

Furthermore, youth made connections across their own lives, *The Key*, and *They Called Us Enemy*. One youth mentioned "having to move around a lot," as a similar connection to both George and Anna. Similarly, a youth also connected to both George and Anna stating he understood how they felt since he had experienced, "being in jail and losing people that I couldn't save." Finally, a youth shared, "Every day when I walk in a line and say my number, it reminds me that someone has power over me."

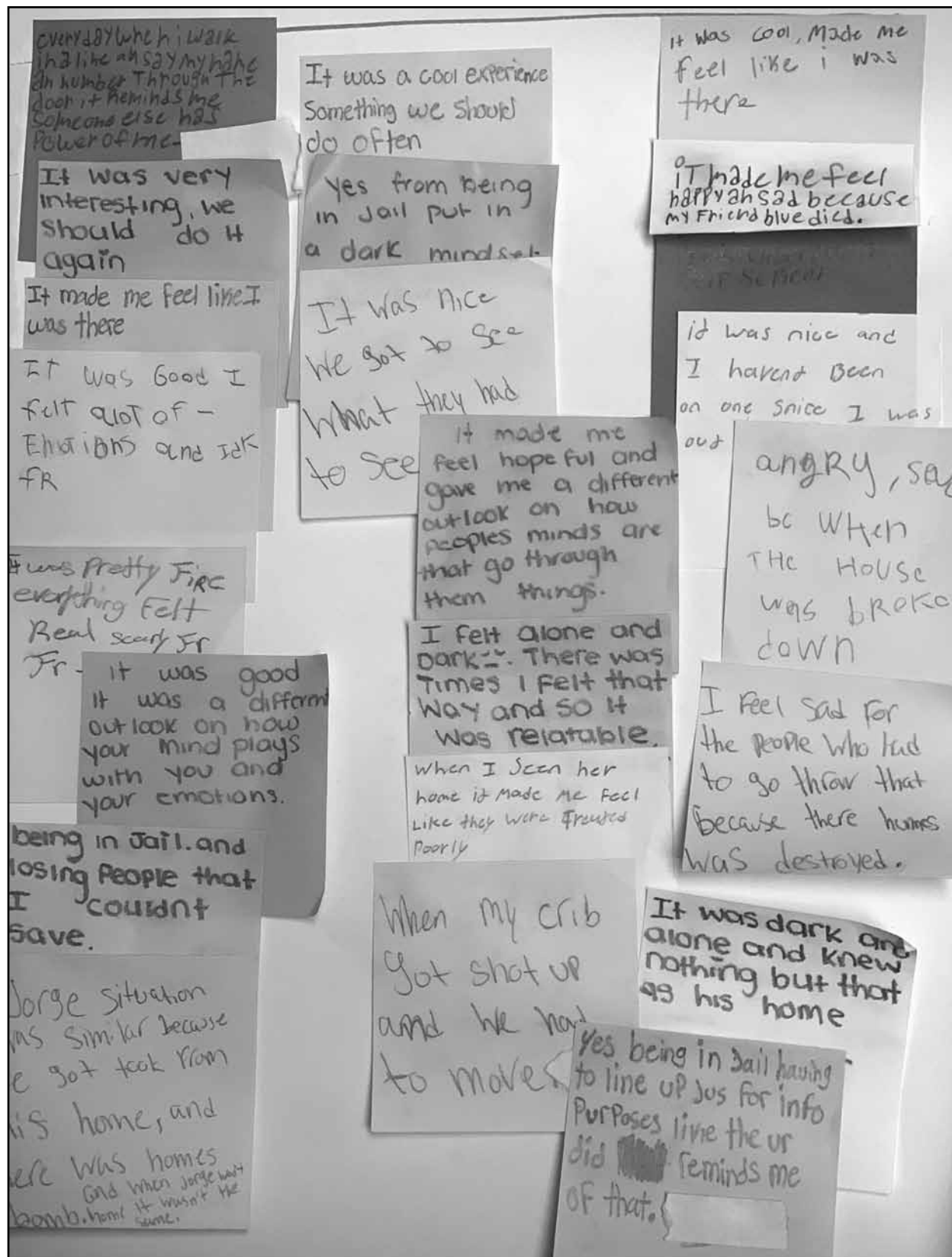
Despite the seriousness of the VR experience, youth noted that it was "fun" and "cool" and something they "should do more often." They felt that the VR experience provided both feelings of escape from their own situations, but also a way to learn about others. They recognized that the VR experience was a story and that through technology they were immersed in and participated in Anna's story. These comments are a reminder that VR has the potential to engage students in learning that centers on taking empathetic stances and critical reflection of self and the world.

Discussion and Implications

Reclaiming Space

Virtual reality disrupts the expected discourses in a classroom. Once students receive a VR set from the teacher, youth are allowed to stand up and move as directed. In this way, they were still following orders, but instead of navigating within the confines of a detention center classroom, they took their cues from what they saw in their headset. Technology transported them out of their restrictive space and into a digital

Figure 1



Technology and the Classroom

literacy space that required free movement from them. They do not have to ask permission to move their bodies; they move their bodies in response to the story that they are experiencing in their headsets. For youth in a juvenile detention facility, the sensorimotor processes related to learning are often neglected. And yet, the VR experience allowed youth to be physically, mentally, and emotionally immersed in Anna's story. Through this experience, we suggest that VR connects students to the outside world through bodies and space. It practices autonomy-as-literacy: students moving according to the virtual reality program's instructions to make sense of the story and experience. In this sense, students use VR to co-construct space in new ways. The detention center classroom does not change, and boundaries are still upheld; for example the guard is still at the door, and the desks are still bolted to the floor. But when given a VR headset, students co-construct space in ways that are unknown to those in the room who are not wearing a headset. In these ways, detained youth reclaim space in a small but provocative way—still within the confines of the detention center, but with autonomy over their movement in learning.

Furthermore, VR headsets invited youth to access a multimedia text that then became part of a new network of stories and experiences connected to *They Called Us Enemy*. They not only understood but were able to experience the connections between *They Called Us Enemy*, *The Key*, and their own lives. This interconnectedness deepened their own awareness of the world, allowing them the opportunity to learn more about a social issue through being immersed in the experience of someone else. When considering the benefits of virtual reality as a pedagogical tool, our experience demonstrates how virtual reality can immerse students in a story that connects them to other events and times and provides access to information in ways that deepen and enrich the learning experience, promoting connection and critical consciousness.

Technology as Possibility

Technological tools have the potential to provide youth in juvenile detention facilities opportunities to fully engage in their education while detained. And yet, when technology is used in detention centers, it is typically prescriptive online academic programs. Technology in detention centers is rarely used in ways that allow students to be imaginative, creative meaning makers. With VR, youth become interactive participants in an imaginary place. VR allows students to engage in ideas, places, and events that they might not otherwise have access to and it broadens the scope of knowledge that they are exposed to.

While there are benefits to using technology in the detention center, there are also implications in order to seamlessly integrate VR into instruction. We realize that traditional schools might also have similar considerations, therefore, we offer practical tips for integrating VR into classrooms.

Number of technological devices. Many classrooms in traditional schools may not have enough technology for each student to have individual use during the class period. This is a similar issue at the detention center since we only had 10 VR headsets. Dividing students into groups with tasks related to the technology experience allowed us to have the entire class working towards the same learning objectives while they took turns using technology. The goal is to give both groups of students instructional tasks that are parallel and aid each other in students' understanding of the instructional goals. For example, the whole class read and discussed the section of *They Called Us Enemy* focused on George Takei's return home. Group one then participated in *The Key's* immersive experience, while Group two focused on other texts related to concepts of home. In this sense, both groups were meeting the learning objectives even when participating in different activities.

Internet Connection Issues. Inconsistent internet connection does not have to be a barrier to implementing VR. While many virtual reality apps require the Internet, there is a significant number of educational apps that can be downloaded before instruction begins. Since access to the Internet is strictly prohibited at the detention center, we are only able to use apps that can be downloaded in advance and do not require Internet connection during use.

Movement. Classroom space is an important consideration. VR headsets can be used sitting or standing. If students are standing while using the VR headsets, teachers will want to make sure they have ample space to safely participate in the experience. Since the headsets were purchased as part of a grant from the Martha Holden Jennings Foundation and used during a Summer Learning Institute, the guards had already received professional development so that they could understand how the VR headsets worked. We worked with the guards to measure the space in the classrooms and to consider how students would move in designated areas when they were using the headsets. Being proactive and thinking through the challenges of using technology in the detention center allowed us to successfully implement the integration of the VR headsets during the project.

Conclusion

This project calls attention to the intersections of space, literacy, and virtual reality environments and the need for further education research. While there is much potential for VR technologies to immerse students in learning, there is relatively little research that focuses on the practical applications for integrating VR in English language arts classrooms, specifically juvenile detention facilities. And yet, our work indicates that VR technology can create liberatory imaginative spaces and facilitate text to text connections between the written and virtual worlds. By fostering creative literacy learning spaces, students become immersed “in multimodal and sensorial ways of interacting with sophisticated, three-dimensional virtual environments and objects, orchestrating vision, sound, haptics (touch to interact with the environment), and head and body movements” (Mills et al., 2022, p. 337). VR in the English language arts classroom allows for the exploration of stories, places, events, and time periods that are typically inaccessible. Finally, our research shows how VR disrupts power dynamics in a detention center classroom, if only for ten minutes at a time, allowing students to reclaim some space and autonomy over their restricted movement in a classroom space. While this project took place in a juvenile detention center, VR also has potential to address issues of equity if applied in educational spaces for students who are in other types of learning environments.

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What Have We Learned from Early Childhood Teachers' Read-Alouds in a Digital Space?

– Sarah D. Reid

Introduction

In early spring of 2020, many early childhood teachers (ECTs) began to experience the impact of the novel coronavirus disease 2019 (COVID-19). In-person learning abruptly ceased and ECTs had to shift from a physical to a virtual classroom, often with little preparation or supports. Additionally, many students in the primary grades (K-3) had few, if any, experiences with digital learning spaces and technology, as historically, they participate in hands-on and interactive learning (Dotan et al., 2021), particularly for literacy learning (Demirci et al., 2022). Unsurprisingly, ECTs frequently felt overwhelmed when they began their ELA instruction in their virtual classroom. Jessyca (all names are pseudonyms), recalled, “It was insane ... I didn’t know what I was doing.” Because they felt ill-equipped to teach online, many ECTs tried to replicate what they had been doing in their in-person classroom in their virtual classroom (Wang et al., 2021).

One such interactive literacy event that the ECTs continued in their virtual classroom was interactive read-alouds (IRAs). Since the early childhood grades are considered the most critical stage for literacy and language development (Crosson & Silverman, 2021), there is a tradition of ECTs reading aloud as a means to foster students’ interest in reading (Barrentine, 1996). Wynter-Hoyte et al. (2022) state, “Read-alouds help children make sense of the world. They promote the joy of reading, increase language development, and enhance students’ abilities to think and talk about reading” (p. 103). But most of the benefits that Wynter-Hoyte and colleagues mention transpire only if students are active participants during the read-aloud (Anderson et al., 1985).

An IRA addresses this matter by inviting students to participate *across* an IRA, and the ECT builds upon students’ ideas and questions to cultivate meaning-making (Sipe, 2008). Furthermore, IRAs often have an instructional component where

teachers teach content and curriculum (Barrentine, 1996). Borrowing May et al.’s (2014) analogy, IRAs are like a “Swiss Army knife” (p. 210), because they are an instructional tool that can be utilized in any academic area and across grade levels, not just in the early childhood grades. For instance, IRAs are advantageous for teaching content-area specific learning, such as social studies and science, as well as language and literacy skills and practices, including print and phonological awareness (Lennox, 2013), vocabulary (Beck & McKeown, 2001), and comprehension (Sipe, 2008). Thus, an IRA is a literacy event where ECTs can provide scaffolded instruction for all five areas of reading instruction: phonological/phonemic awareness, phonics, fluency, vocabulary, and comprehension (Shanahan, 2005).

In this article, I share the experiences of four ECTs who continued to implement IRAs as part of their ELA instruction when they were required to teach in a virtual classroom due to the COVID-19 pandemic. In addition to being fully online in the spring of 2020, each of these ECTs had a period when they taught online at least once during the 2020-2021 school year. Desiree, Greta, and Imani were kindergarten teachers at different public elementary schools, while Jessyca taught a mixed-age K-3 class at an urban private school. In their physical classrooms, these ECTs discovered that IRAs were valuable in engaging their students in literacy and language learning, particularly in meaning-making. Thus, in their online classrooms, all the teachers wanted their students, as Greta articulated, “to still have exposure to as much literature as possible” despite the pandemic. Drawing from their lived experiences, I discuss the changes the ECTs made in response to conducting IRAs in a digital space, including their students’ needs, as well as sharing how the teachers adapted their IRAs through technological tools. I conclude with significant takeaways for educators working with our youngest learners in both physical and digital learning spaces.

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IRAs in a Digital Learning Space

Before March 2020, none of the ECTs had conducted IRAs in a digital space. Thus, when they began to do so in their virtual classroom, the ECTs were unfamiliar with the parameters of that space. Their initial strategy was to maintain their in-person format when they did an IRA—what Desiree, a kindergarten teacher, termed the “old-fashioned way.” The ECTs held up the book and read it aloud, just as they did when they were face-to-face with their students. Almost immediately, the teachers discovered they weren’t able to conduct their IRAs in the same ways they had before. First, seeing the book became an unexpected issue; the students weren’t seeing and experiencing the book in the same manner they did when they were gathered around their teacher in the physical classroom. Imani explained,

I don’t always know how [students] are seeing the books. I know they hear me, but different kids have different views of me. So for some of them, when I’m talking it is just me and then other times they may see people at the top, and then sometimes the whole class.

She suspected that these varying perspectives were distracting for her students.

Additionally, participating in an IRA through a device (e.g., iPad) brought other challenges. The clarity of the pictures in the book suffered when the teachers held the book up as they read it. Students had difficulty discerning subtle visual details, which led to students incorrectly identifying what they saw or answering a question. Imani was never confident that her students could even see the pictures at all.

Second, the ECTs noticed that their virtual IRAs didn’t have the same feel. In their physical classroom, reading and sharing the book felt more natural because the students were gathered close around the teacher and the book. With each student participating on their own device, there seemed to be a disconnect between the teachers and their students. Desiree described this phenomenon:

[In] this format, there’s like a wall. ... There’s just something that’s really keeping [the students] from fully being immersed and enveloped. There’s something about a classroom when everyone’s in there, the door’s closed, we’re all here, and we’re all in it. And that did not transfer to the virtual [classroom].

The interactive nature and interpersonal relationships of a traditional early childhood classroom, where the teachers and students were actively involved in learning together, was missing in the virtual classroom. The virtual learning space didn’t have the same qualities as a physical classroom, and the ECTs’ old-fashioned read-aloud approach no longer captured students’ interest and participation. Desiree shared, “It makes me sad ... But I have stopped physically holding a copy of a book and reading it.” As such, the teachers began to experiment with other approaches for reading aloud in a digital space.

Third, IRAs in the virtual classroom also didn’t have the same feel because the ECTs’ students were participating in new contexts (e.g., their homes, daycare) themselves. Each context had external distractions, such as the television being on or pets, which were not found in the teachers’ physical classroom space. Desiree described how her IRAs in the virtual classroom meant that students were “paying attention to 12 different things at once.” The teachers realized that students’ decrease in attention was not intentional, but instead was the result of being in places that did not replicate the qualities of an early childhood classroom read-aloud space.

Turning to Technology to Develop a New Read-Aloud Approach

After abandoning their in-person style of read-alouds, the ECTs turned to technology to figure out what was most effective for IRAs in the virtual classroom. They experimented with conducting read-alouds with premade read-alouds, a document camera, and digital presentations (e.g., *PowerPoint* or *Google Slides*).

Premade Read-Alouds

Premade read-alouds—read-alouds that were prepared beforehand, either by the teacher or another individual—enabled the ECTs to present the read-aloud to their students like a video or movie. For a while, Jessyca and Greta both created their own premade read-alouds by video recording themselves reading the book aloud. Jessyca discovered that her students were more engaged with premade read-alouds than when she was holding up the book and reading. Additionally, she utilized her premade read-alouds as a supplemental learning activity. However, since she wasn’t facilitating these read-alouds, the premade read-alouds didn’t have the same intentionality or effect as when she guided students’ meaning-making in her IRAs.

When Imani discontinued the old-fashioned way of doing read-alouds in her virtual classroom, she also moved to utilizing premade read-alouds, like Jessyca and Greta. Rather than creating her own or finding premade read-alouds on *YouTube*, Imani turned to the *Epic!* app. She praised the ability she had to share her screen and have the book's image completely fill her computer screen. She found that her students regained their interest in her IRAs because the visibility of the book had increased. She shared:

[Students will] listen a little longer, I've noticed. But when I'm holding the book, and trying to read it ... they're like, "No, girl. No thanks." They get kind of antsy. But if they can see it clearly, like when I'm sharing the screen, then they're more engaged, because they can really see the pictures.

The premade read-alouds on *Epic!* became Imani's new, and preferred, approach, and she welcomed digital texts as a practical alternative to holding up the book.

Document Camera

Although premade read-alouds could boost their students' interest in a read-aloud, Greta and Jessyca ultimately elected to use a document camera for their virtual classroom IRAs. Largely, this was so that they could sustain their position as a guide (Peterson & Chamberlain, 2015) in their read-alouds. Greta knew she could find websites with videos of other people reading books aloud, but she firmly believed that "it was best" if she was the person reading the book aloud to her students. She wanted her students to see the book in her read-alouds, so she decided to use a document camera when sharing a book in her virtual classroom. This approach closely mirrored her in-person approach: She still read the book aloud and her students could easily see the pictures and the words. However, both Greta and Jessyca admitted that there was a learning curve where they had to figure out the technological aspects of conducting IRAs with the document camera. For instance, Jessyca described her initial read-alouds as "a hot mess." However, after she purchased a claw to hold her phone so it could act as the document camera and she learned how to mirror her screen so the students didn't see the book backward, Jessyca acknowledged, "That's when I got smart."

Digital Presentations

Desiree opted for digital presentations as her new approach for IRAs in her virtual classroom. Utilizing digital presentation software, such as *Google*

Slides, she put pictures of the book's illustrations on individual slides to share on her screen and then read the book in her own voice. Similar to Jessyca and Greta, Desiree didn't want to relinquish her position as the guide of her read-alouds. She experienced heartbreak when her students watched someone else or an app present the book. Furthermore, she objected to digital library apps like *Epic!* because, "It's not really books." Rather she thought of *Epic!* as digital reading. She found with digital presentations she could facilitate her IRAs the way she did in her physical classroom; she retained the ability to pause the reading and explore the books with her students. The digital presentations gave her the opportunity to make her IRAs even more interactive than her in-person ones. She now had the ability to hide things within them as a way to foster students' interest. This capability, and the fact that the digital presentations had the feel of a movie, made her virtual IRAs more enjoyable for students.

Fostering Students' Interactions in Virtual Interactive Read-Alouds

After trying new approaches, all the ECTs established a new format for conducting their read-alouds based around a particular technological tool (e.g., document camera, digital presentation software, digital library app). While they saw increased student engagement with their new read-aloud format, the ECTs found they also had to tailor their process for maintaining the quality of students' extra-textual talk (Wright, 2018-2019) around the books they shared. The teachers described changes to their book selections to boost students' transactions (Rosenblatt, 1995), as well how they facilitated collaborative discussions about the book.

Text Considerations for Virtual Interactive Read-Alouds

As they shared books in their virtual IRAs, the ECTs realized they had to attend to certain book characteristics that weren't of concern with their in-person IRAs. The length of the book was one of these features, as students' interest and engagement seemed to dwindle in IRAs with books that took longer to share. For instance, Imani recalled when she read aloud the book *Separate is Never Equal: Sylvia Mendez and Her Family's Fight for Desegregation* (Tonatiuh, 2014) that:

[*Separate is Never Equal*] took longer to read, because not only is it a longer book, I've read books in my [physical] classroom that are longer. We just chop it up into days.

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But I feel like I had to read some pages more than once. We had to keep revisiting, because I felt like they were kind of missing things.

In the digital learning space, lengthy books required more time to read aloud because students needed additional time to hear what Imani was saying and to see the pictures, or she had to reread parts of the book.

The challenges that Imani encountered in her IRA mirrored the other ECTs' experiences as they shared content-rich books. Although the ECTs sought out content-rich books to teach subject matter, such as math, or about sociocultural identities or issues, such as school segregation in *Separate is Never Equal* (Tonatiuh, 2014), the teachers found that students often needed more time to reflect and to build meaning and understanding. For example, Imani described how sometimes she was met with silence in her virtual classroom when she shared content-rich books. She would pause the reading and ask her students, "What are you thinking?" This was different from her face-to-face IRAs, where she could read the book and her students seemed to naturally connect with and ask questions about the book. Sometimes when she shared lengthier or content-rich picturebooks, Imani had her students "read" the illustrations instead of her reading the written text aloud. She asked her students to look at the illustrations and the pictures and then to talk about what they were seeing in the images.

To pique her students' interest and engagement, Greta varied the type of book she read aloud. Instead of always reading informational or content-rich books, she rotated in rhyming and song books, such as *Down by the Bay* (Raffi, 1999). Another adjustment Greta made with her book selection process was deciding if she would revisit (i.e., reread) a book she had previously shared in a read-aloud. In her physical classroom, Greta thought it was valuable to reread a book more than once. However, when she revisited a book in her virtual IRAs, she found that she had lost her students' interest.

Encouraging Extra-Textual Talk in Virtual Interactive Read-Alouds

When the ECTs invited their students into conversation during an IRA in the digital learning space, they decided to concentrate on whole-group interactions. During their initial forays with facilitating extra-textual talk, some of the teachers encountered challenges when they asked students to participate in small-group or partner discussion

activities, such as a turn-and-talk. Greta and Jessyca attempted to conduct turn-and-talks with the breakout room tool on the video conferencing platform but felt that those attempts weren't successful with their young students. Greta shared, "I tried. I couldn't manage all the breakout rooms, where in the classroom I can manage four groups all talking about the same book more easily." Jessyca had challenges with pacing and how long students should talk to each other. It wasn't until she committed to learning the breakout room feature and practicing turn-and-talks with her students in the rooms, that she felt that students' partner discussions were more effective.

Software, apps, and visual resources became beneficial tools for the teachers to increase students' participation and talk in virtual IRAs. Imani noticed that she had some students who rarely participated in her read-alouds. Using the sticky note feature in *Google Jamboard*, a digital whiteboard app, Imani would add a sticky note, often with the student's name on it, that encapsulated a student's comment or idea to a displayed book spread. This was a subtle and unobtrusive way to cue her students that if they shared something, Imani would record it. Frequently, students who had yet to contribute to the group's meaning-making would want to add something and tell Imani, "Oh, wait! I want my name up there." Similar to what she did with *Google Jamboard*, Imani found that creating response charts with her students' thinking also motivated them to talk and discuss the book more. She paused her reading, solicited students' responses and wrote them down on the chart, and then read students' responses back to them. She stated, "[The students] would unmute and tell you about a book or their thoughts—the same way in the [physical] classroom."

Trying to implement traditional pen-and-paper after-reading response activities in their virtual early childhood classroom was tricky for the teachers. They couldn't see their students' writing product unless there was a photograph of it. However, with *Seesaw*, a digital platform where students have access to multiple media formats (e.g., drawing, photographs, videos), teachers could create response activities for their read-alouds. Rather than having students write in response to a book, students could audio record their ideas or complete a graphic organizer on *Seesaw*.

Welcoming New Members to Virtual IRAs

In their physical classroom space, the ECTs typically hadn't included outside participants in their IRAs. But in their virtual classroom, the teachers had new

members: students' family members and caretakers. Many families were working and learning from home, and as such, "We had no choice but to really be in each other's personal space. ... [So,] if your little brother sits down during Zoom, he can stay and he can do the work with us," explained Desiree. The teachers dissolved conventional classroom boundaries and opened their virtual IRAs to whomever was present at the moment. There were unexpected benefits to this new arrangement. Greta shared, "I learned about [my students] at an exponential rate ... being on the computer and seeing them outside of the classroom setting." Desiree observed, "Most of my kids now recognize each other's parents and siblings, just because it is such an open space."

Instead of minimizing families' attendance and contributions, the ECTs embraced them as capable and collaborative learning partners. When Desiree saw family members trying not to appear on the screen, she reassured them that it was acceptable for them to be a part of her IRAs. She told them,

If your kids need to sit on your lap to focus, that's fine. If you're whispering an answer in the background, that's fine. That does not have to be a secret. The minute you invited me into your living room virtually, this became an "us" thing.

Family members became an unanticipated support for the teachers and their IRAs. Desiree gave her families the opportunity to teach the class, such as chiming in with the answer to a question that she couldn't answer. She stated, "We all have things to learn from each other. ... [And] if you know the answer, that's what we really wanted, right?" Imani enjoyed the assistance her parents provided with typing and spelling when her students were completing a written response activity after a read-aloud.

Desiree, Greta, and Imani also had "live" read-aloud opportunities for their students and their families, either through a mystery reader read-aloud or holding one on *Facebook Live*. Greta and Imani asked families to sign up to read a book aloud to the class. To build anticipation for it, they asked family members to provide clues about themselves ahead of time and read the clues to their students as hints about the identity of the upcoming mystery reader. Imani enjoyed watching her students' facial expressions when she shared a clue and her students thought, "That sounds like somebody I know." At the appointed time, the mystery reader would log on and the class got to discover whose family

member was reading to them. Greta loved seeing the books that her families chose for these read-alouds. Desiree held a weekly read-aloud on *Facebook Live* on Wednesday nights during the first few months of virtual learning. She loved being able to say "good-night" to her students after sharing a book with them and their families.

What Have We Learned

Prior to the pandemic, many ECTs didn't frequently utilize technology in their literacy instruction (Demirci et al., 2022). As they taught online, teachers found that some aspects of language and literacy instruction, such as reading comprehension and writing, were more challenging to teach through technology (Crosson & Silverman, 2021; Dotan et al., 2021). The four ECTs' transitions to conducting IRAs in a digital space shared here support such assertions. While it may seem that these teachers' experiences may have little significance now that many early childhood educators have returned to in-person teaching environments, there is still much we can glean about technology and the digital world for literacy instruction with young students in both physical and digital learning spaces.

First, ECTs need continued experiences and exposure to technology that can facilitate literacy learning. Some in-person literacy practices and events, such as IRAs, are not directly transferrable from face-to-face to digital learning spaces. From Greta and Jessyca's use of a document camera, we learned that implementing a new technological tool in any learning space can take time and can be a trial-and-reflection process. Teachers should expect to devote time to familiarizing themselves and students with any tool, app, or software prior to its initial use in the classroom. When teaching online, teachers need to familiarize themselves with the affordances and limitations of their learning platform (Stoetzel & Shedrow, 2021). For example, one hallmark of an in-person read-aloud is sharing a book in a space without external distractions or added members. However, this is not the circumstance in synchronous learning in digital spaces. Before conducting an IRA, teachers will want to consider how they will address these aspects. This could include altering personal notions of how a literacy activity has been previously executed to how it *could be* accomplished, such as when the ECTs welcomed family members into their read-alouds as additional participants and supports.

Second, Jessyca's experience with premade read-alouds gives us insight into the role of motive and

purpose when we engage early childhood students with technology. Teachers should carefully plan for technology, including considering what the anticipated learning outcome will be when students engage with it. When premade read-alouds were an auxiliary or independent learning activity, Jessyca's students were not as involved in meaning-making as when Jessyca was there to encourage and shape students' thinking and responses. Asynchronous learning activities with technology may not provide young students with the opportunities to talk and collaborate with their peers. For example, Desiree chose to have her students interact with the *Epic!* app during independent reading, when her instructional focus was on students exploring books or listening to a read-aloud on their own. Synchronous or "live" IRAs and literacy events have more openings for student-centered discussions. However, spontaneous conversations may not happen as naturally as they do in the physical classroom. Therefore, purposeful planning of how teachers can invite students to contribute their thinking and responses in a synchronous literacy event is needed. The teacher's role as a guide (Peterson & Chamberlain, 2015) is critical in both in-person and virtual IRAs.

Although they can offer up-close and clearer images than a teacher holding up a book, premade read-alouds are affected by the creator's design choices. When someone makes a premade read-aloud, they decide what parts of the book will be featured, such as only one page of a two-page spread, how long an illustration or the written text is displayed, and if the entire illustration and written text is shown or a certain part is highlighted. Each of these design decisions has implications for both in-person and virtual IRAs. Students may not have sufficient time to appreciate the illustration, be able to see the written text, or analyze the text. Thus, as with any text included in the classroom for independent reading or instruction, teachers should preview premade read-alouds created by someone else. Similar to the in-person read-aloud format, teachers should plan for places to pause the read-aloud to do think-alouds and turn-and-talks, and to engage in whole-group collaborative meaning-making.

Third, the physical book held a prominent position in the ECT's read-alouds, despite the fact that they were reading aloud in a digital space. The teachers seemed to "hang onto" the book (Dotan et al., 2021; Morphis, 2021), preferring to conduct IRAs with the semblance of the print text, even if they were only translating it into a different

presentation format (e.g., digital images, video recording). This suggests that we, as educators, still have much work to do about including digital texts in our physical and virtual classrooms. We need to become more comfortable with reimagining our literacy instruction through the inclusion of digital and multimodal texts.

The ECTs' online IRAs give us new ideas about how we might do this. Premade read-alouds, websites such as *Storyline Online*, and digital library apps could be advantageous for independent reading, multiple rereads of a text, or inquiry project research. When teachers use read-alouds or texts that are available on the Internet or through apps, they can invite students' families to (re)visit a text. Additionally, Imani's strategy of creating visual and multimodal texts to document students' thinking and contributions during an IRA is relevant here. Her idea of sharing a spread from a picturebook on *Google Jamboard* could be paired with the three question prompts utilized in the visual thinking strategies framework (Yenawine, 2013). These class-created multimodal texts could be shared and explored during an in-person or online IRA.

Finally, these ECTs restructured their IRAs to include students' family members and their funds of knowledge (Moll et al., 1992). Greta and Imani's mystery reader read-aloud can be implemented in both physical and virtual classrooms. Video conferencing is now a widely available technology tool that makes it possible for family and community members to participate in IRAs. Guest readers could read books aloud around their areas of expertise or their sociocultural identities and histories. They could also share texts that are important to a student's family. For instance, a guest reader could read as they demonstrated a family-favorite recipe. Teachers might also consider having a standing invitation for families to join their read-alouds, either in-person or through technology, similar to how Desiree welcomed parents to support their student in her virtual classroom.

Concluding Thoughts

Although many of us have returned to in-person teaching, the experiences of the four ECTs conducting IRAs in a virtual classroom contribute to our growing understanding of the role of technology and digital learning spaces in fostering early childhood students' literacy development. There are several continuing lessons that we, as literacy educators, can take away.

First, we learned that we must remain committed to learning about technological tools and purposefully

including them in our classrooms. We will need to continue to carefully plan for IRAs and literacy events with technology, focusing on how we can further invite students to communicate and collaborate with each other. A key part of this is thinking through our text selection processes, making sure we find texts that are relevant for students but also engaging. Instead of beginning with a print text for an IRA, what if we searched for relevant multimodal and digital texts first? Showcasing a variety of text formats (e.g., print, multimodal, digital) demonstrates for our students how we “read” and learn from a variety of texts, which mirrors students’ out-of-school lives and experiences.

Second, we learned that we need to persist in our reimagining of the IRA format. That is, while many of us cherish our “old-fashioned way” of reading aloud, how might technology and digital tools expand our IRA practices? Could a stop-and-jot during an IRA now involve students adding a sticky note to or annotating on a part of a text or a spread from a picturebook with their device? Could an IRA be paired with a digital presentation so that teachers could click a hyperlink that would transport the class to an image or video that might illustrate a vocabulary word or concept being discussed?

Finally, we learned that IRAs in digital spaces provide us the opportunity to connect our IRAs to the world. Technology now offers us the capability to invite students’ families and members of the community to be included and involved in real time in their literacy instruction. This gives a wide range of individuals with unique histories and funds of knowledge to be the guide of our read-alouds and share their expertise. Drawing from the ideas underlying events such as *World Read Aloud Day* (LitWorld, n.d.), we can see how IRAs can invite global possibilities to expand our literacy and content-area instruction.

To conclude, I return to the question threaded throughout this article: What have we learned from early childhood teachers’ read-alouds in a digital space? Before the COVID-19 pandemic, we utilized the “Swiss Army knife” (May et al., 2014) capabilities of the IRA to create a dialogic literacy event to foster students’ language and literacy development and to build a love for reading. For some ECTs, the use of technological tools was minimal in their IRAs. Reflecting on our own and these ECTs’ lived experiences, we continue to grow our understandings about how working with technology creates new ways of thinking about literacy instruction, in both face-to-face and digital learning spaces. The ECTs

explored new approaches and teaching practices for digital space IRAs, and their insights revealed how closely we need to be attending to the way we ask students to learn with digital tools and to our reliance on print texts in our IRAs. Now we have an enriched vision of what an IRA could be in *all* types of learning spaces, a vision that expands conventional IRA practices and margins and that is shaped for 21st century learning and lives.

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Game On!: Preservice Teachers' Experience Using High Tech and Low Tech Gamification with Diverse Learners

– Darlene Johnston, Paulina Rodgers, Maya Stahl and Delaney Weiffenbach

Preparing future teachers for the demands of the dynamic teaching profession post-pandemic is a challenge faced by many education preparation programs (EPPs). As faculty at a small midwestern liberal arts university, we offer a variety of methods for engaging students in the learning process and examine the benefits of gamification in differentiating literacy instruction for diverse learners. This article shares the perspectives of a TESOL (Teaching English to Speakers of Other Languages) professor in higher education, a professor in the Educator Preparation Program (EPP) with K-12 teaching experience, and two preservice teachers majoring in Early Childhood Education with a dual license in Special Education and a minor in TESOL.

Our TESOL classes offer a variety of methods and approaches to help speakers of other languages (L2 learners) succeed academically. One approach discussed was gamification. Kim, Song, Lockee, and Burton (2017) define gamification in the classroom as:

a set of activities and processes to solve problems by using or applying the characteristics of game elements. The above definition is quite important to understand the exact meaning of gamification for the

following reasons: Gamification is not a single activity but a set of relevant activities and systematic processes. Gamification should have a purpose to solve specific problems.

When done correctly, gamification in the classroom can increase student motivation, encourage the recursive nature of learning, and build L2 learners' confidence while lowering their affective filter. Krashen (1986) cites "motivation, self-confidence, and anxiety in the Affective Filter Hypothesis as three categories of variables that play a role in second language acquisition." Gamification helps reduce affective filter in students because it allows for failure and encourages multiple attempts which promotes resilience and builds confidence. After learning about gamification in their four semesters of TESOL minor coursework, our preservice teachers incorporated gamification methods when teaching students in their K-12 field experience as well as with university L2 speakers.

This article is a reflection of best practices examining the value of both high tech and low tech gamification in the classroom, including the research and experiences of two preservice teachers. Although research states that gamification is an effective way

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to use technology in the classroom, the lesson plans had to reflect the specific needs of their students and their access to technology. We found that the key concepts of gamification were transferable to a low-tech environment that better fit the students' needs.

TESOL Perspective

As the professor in the TESOL program, I first introduced gamification to my Grammar in Context class using Flores' (2015) work on "Using Gamification to Enhance Second Language Learning." Flores (2015) utilized Prensky's (2001) definition of Digital Natives to illustrate that L2 students are already fluent in the language of technology, specifically video games. Flores (2015) shows how gamification not only helps increase L2 learners' language acquisition, but it also helps with motivation, self-esteem, and risk-taking. I introduced the definition of gamification to the class and together, we explored creating and using digital escape rooms as a method of teaching and assessment. The students were then given a chance to create their own digital escape room to teach a grammar concept. The use of digital escape rooms helped to illustrate creative ways to use technology in the classroom while incorporating the pedagogical theories of gamification. Students learned that creating digital escape rooms for the classroom would enable them to motivate and engage learners as well as facilitate learning across a wide range of language levels and abilities (Gentry et al., 2019).

As we continued the sequence of TESOL courses, gamification continued to inspire my preservice teachers. The students were given a research project that required the following: a literature review of a self-selected topic; a study or product; a qualitative or quantitative analysis of the study or product; a discussion of the significance of the findings; and a presentation of the project. Aside from these parameters, students were able to select a focus from any area of linguistics and type of project on which they wanted to work. Our preservice teachers decided to continue their studies in gamification and created language-based games that met the specific needs of their students, which they will discuss later in this article. While in the classroom we worked with high tech gamification options, our preservice teachers found that due to limited technological availability and student burnout, it was often more beneficial to transfer the concepts of gamification to low-tech tactile activities and board games and still produce similar results.

Gamification as a method for language learning was further discussed in our next semester's TESOL classes. We had the opportunity to work with a first-year writing course for international students and met with them to learn about their experiences learning English, the types of instruction that worked well for them, and what demotivated them. We also asked their instructor what common language issues they may be struggling with. Their instructor gave us a few grammar goals that he wanted them to achieve based on their previous written class work, and our preservice teachers created a board game to help teach those grammar concepts.

As part of their field experience, our preservice teachers also worked with K-12 students in an after-school setting and a self-contained middle school classroom with students who received special education services in order to meet specific goals spelled out in their IEPs, or Individualized Education Plans. To address these goals, our preservice teachers offered the students targeted support and literacy instruction in a small group setting.

Several instructional goals were identified by our preservice teachers prior to working with the students. The need for engaging their students in hands-on activities that did not involve technology emerged as an unexpected finding in our preservice teachers' experience. Their middle school students seemed to lack motivation with virtual games they had previously used in the classroom, so it was necessary to be responsive to their needs in order for learning to occur. Our preservice teachers identified the goal of incorporating collaboration with peers in a small group setting when utilizing gamification because it could lead to greater learner autonomy and increased learner confidence. Finally, differentiating instruction for the students with language and learning differences was an essential requirement. This experience allowed our preservice teachers to identify the efficacy of gamification in the educational setting by observing the changes in student motivation when incorporating gamification with a broad range of student ages, academic abilities, and demographics.

Gamification in Practice

In this section, our preservice teachers will share their experience and perceptions of differentiating instruction through gamification.

Delaney : The Burger Game

The first game, the Burger game, was designed and implemented in an afterschool program when

working with four first grade students, all of varying ability levels. I quickly noticed that these students were burnt out and extremely fatigued after working in the classroom all day long. They were completely drained of motivation and engagement - they were tired. My students were uninterested in completing homework and lacked the ability to hold their attention on learning.

Even when I tried to implement technology programs (like the extremely popular GoNoodle program), the students simply did not want to engage (Ofgang, 2022). For the first few weeks, I tried to use everything in my teacher toolkit. I kept an enthusiastic attitude, got to know them and their interests, and encouraged them to make mistakes and grow in their learning. This was to no avail, however, and the students remained unmotivated and unhappy with my efforts to encourage them to complete homework and assignments this late in the day. I decided to try gamification, a strategy learned in my Linguistics course, to create an individualized game for this specific group of students with the goal of increasing their engagement and motivation to learn.

Based on needs expressed by their teacher, this game was designed to focus on first grade literacy standards such as the Ohio's English Language Arts standard RF. 1.3 A, to know and apply grade-level phonics and word analysis skills in decoding words, and to know the spelling-sound correspondences for common consonant digraphs. To practice specific phonemes and phonetic patterns, the objective of the game was that the students collect ingredients based on letters they need to create full words on their vocabulary sheet. They would use the ingredients to create words, and then use the words to create the largest hamburger. The game included cardboard burger ingredients, with letters on each one. For example, consonant digraphs such as "ch" and "sh" were on one burger ingredient together, to emphasize the singular sound made by the letters. The vocabulary sheet was available for students to refer to throughout the game. At the end of the game, the student with the most hamburger ingredients, or words, won. The instructions are as follows:

1. Every student gets the bottom of a hamburger bun to begin.
2. They each are given a word to spell from their vocabulary list that I read to them.
3. If they spell it correctly, they have the chance to pick any ingredient (letter) they would like.

4. If they spell it incorrectly, they correct the word and do not get an ingredient (letter).
5. This is repeated for each student until one reaches the end.
6. Once one student selects the last ingredient, or no more words can be formed with the ingredients left over, the game is over.
7. Everyone counts their ingredients and the student with the most ingredients wins!

This game was extremely engaging for my first-grade students. Even though they were tired after a long day at school, my students were motivated to collaborate and spell their words correctly to collect all of the burger ingredients. It allowed for tactile engagement when practicing phonemic patterns in a game-like manner that did not even feel like learning.

Maya: S'mores Game

Another game created was the S'mores game. The game was created for a group of students who were in a fifth-grade self-contained resource room and a few sixth-grade students in need of extra support. Using a spelling list provided by the classroom teacher, we incorporated the S'mores game with the students as practice for the test on Friday. The specific learning outcomes focused on Ohio's English Language Arts standard RF 5.3, which encompasses applying grade-level phonics and word analysis skills to decode words in a variety of contexts. To incorporate a more developmentally appropriate, systematic approach to teaching spelling patterns to our middle school students, we focused on morphology, specifically on the Latin roots *photo*, *terra*, and *geo*.

The first challenge we faced was that students required differentiated instruction as spelled out in their IEPs. Most frequently, that was accomplished in the classroom by working with online games independently; but with us, students displayed a lack of motivation to spell each word for practice on their Chromebooks. Most of the students expressed that they wanted to work with partners to practice but they rarely were given the option. As a solution to these issues, we incorporated the game into the regular small group instruction. To make sure that both groups could participate, the needs of all students were embedded into the game, including the need to reduce the use of technology, incorporate differentiated instruction, and facilitate student interaction with the material and each other.

The theme of s'mores allowed us to connect to the students in a fun, engaging way and make

them more comfortable with the teacher. The game consisted of three stacks of cards that included sentences with a fill-in-the-blank line and a picture of an ingredient (marshmallow, chocolate, graham cracker, s'more, cookie, and a burnt marshmallow). Students used their knowledge of the three Latin roots to fill in the blanks with the spelling words on their marker boards. The second stack had different types of combinations of s'mores with their ingredients. There was also a list of the sentences with the correct spelling words in them and a stack of note cards with multiple choice questions for the spelling words to give students agency and variety in their own learning. The instructions of the game are the following:

1. Each group of students chooses if they would like to spell the words on the marker board or to participate in multiple choice.
2. The first stack of cards is placed in the middle of the group, with second beside it. Next, the leader/teacher of the game takes the third stack and separates the different ingredients into piles.
3. All the students draw a card from the second stack of cards and keep it for the whole game. This card is considered their Mission card.
4. They will then draw a card from the first stack of cards. Next, the teacher will give them the correct word to either write on the whiteboard or pick the correct spelling from the multiple choice.
5. Once they give their answer, the students with the correct answers will receive a card with the ingredient at the bottom of the card with the sentence. This will continue until a student has all of the ingredients on their Mission card.
6. The twist - if a student receives a burnt marshmallow card, they are able to take away a marshmallow from another student and it goes back to the teacher.

Overall, this game encouraged student engagement and learning throughout the entire process. Students seemed to enjoy it so much that afterward, they provided feedback on the game in hopes to play it in the future. They suggested that this game could be adapted for other content areas and recommended using other themes that connect to their interests.

Delaney and Maya: The K-pop Board Game

We created the third game for international students who were taking a course at our university designed to improve their college-level writing skills. We worked with four students who came from unique cultural and linguistic backgrounds. Guided by Ohio's Whole Child framework of addressing the individual needs of each student, it was important that we got to know them during our first meeting (Ohio Department of Education, 2020). We met with them to discuss their personal experiences with their native language, their proficiency with the English language, and their goals for improving their speaking and writing. We took the time to get to know what they liked to tailor our game to their interests. We discovered that the students had an interest in music, specifically Korean popular music, and we made the decision to use this as our theme. K-pop allows for a unique approach to linguistics. It is common for artists to switch between languages in the middle of songs and verses, which allows for them to approach their meanings and messages in multiple ways. Additionally, we identified the students' need for extra practice with specific English grammar content: adverbial clauses, noun clauses, and modifiers.

Next, we used gamification methods to create the game. To give the students extra motivation, we created a colorful music-themed board and cards with grammar questions that incorporated K-pop lyrics. After a mini grammar lesson using Google slides (students could access those slides as a scaffold during game play), we played the game to practice each of the three grammar content components. The instructions of the game are the following:

1. Pick a colored marble to be your game piece.
2. Take turns rolling the dice and move the game piece accordingly.
3. Whatever colored spot the game piece lands on will correspond with the color of the question card that needs to be drawn: yellow (noun clause), pink (modifiers), and purple (adverbial clause).
4. Continue until a player reaches the end of the board.

Throughout the game, the players were extremely engaged because they recognized the lyrics which, in turn, motivated them to win, reaching the content objectives of the game naturally. The

game provided the students with practice in a low-stakes environment. There was no risk of failure or embarrassment, only the opportunity to try again on the next roll. After the game was finished, the students seemed to apply the grammar objectives with automaticity in their critical analysis writing assignment, identifying and correcting modifiers, adverbial clauses, and noun clauses in their own writing with ease.

Key Takeaways and Recommendations for Preservice Teachers

As a professor in the education program, I was invited to the TESOL classroom to discuss the preservice teachers' unique experiences with both high-tech and low-tech gamification strategies across a variety of learners. We identified three key takeaways for teachers that inspired this article: gamification with low-tech lessons can be effective; the learning games supported the development of the students' social and emotional skills; and lessons were differentiated for the specific student needs by using a multisensory approach to build literacy skills. This experience adds to the growing body of research about the validity of gamification and its effects on student motivation in educational settings (Flores, 2015; Gentry et al., 2019; Lester et al., 2023; Lopez-Jiménez et al., 2021; Kim et al., 2018).

Combating technology fatigue with low-tech games

When talking about gamification, one expects that technology is inherently involved in the learning process, but sometimes that is not the case. Our preservice teachers' experience as volunteers in the after-school program is worthy of sharing with practitioners and those who work with children. Many Ohio school districts have utilized federal funds to implement summer and afterschool learning opportunities to address post-pandemic learning loss (Ohio Department of Education, 2022b). As a goal to address the "academic needs and overall well-being of students" outside of the traditional classroom, our preservice teachers were excited to plan creative ways to enrich their students (p. 3). However, they were surprised to meet tired students who seemed not only physically exhausted after a full day of school, but also mentally unable to focus on more schoolwork. Any attempt to engage the students with an activity that involved "learning" was met with resistance. Instead of discouraging our preservice teachers, this challenged them to think outside of the box about student-centered instruction. They came up with a

set of goals: 1. Motivate their students to get involved in learning through authentic engagement, 2. Build autonomy in mastering key academic standards, and 3. Do this in a relaxed environment where learning happened naturally and students did not feel pressured to perform for a 'grade'.

By applying game-design to their learning, they hoped to motivate students to collaborate in a fun environment that did not feel like learning. The school district often uses an interactive web-based program called GoNoodle that allows for short bursts of physical exercise in the classroom to help with concentration; however, the students did not seem to engage. Furthermore, students and teachers have reported experiencing boredom, headaches, and exhaustion after spending too much time in front of screens, most notably after the reliance on remote learning during the Covid-19 pandemic (Jones, 2020; Fernández-Batanero et al., 2021). While technology is often offered to increase student engagement, it was apparent that these students needed more collaboration with peers and less screen time. The decision was made to completely step away from technology but keep the elements of gamification. Being able to recognize their burnout with technology as well as the traditional textbook and worksheet model, our preservice teachers made the decision to modify the learning experience by incorporating kinesthetic and tactile activities in their learning games.

Preservice teachers reported that their students were visibly excited to play games that seemingly did not have any traditional "learning" components associated with them. In the environment of after-school learning, students require engagement that is different from the strategies used within the traditional classroom. Gamifying content allowed for an outlet that engaged beyond the use of technology; yet, had the same effect on students. The preservice teachers noted that students were eager to learn to play and requested to play the game multiple times.

When students were provided with an exciting way to demonstrate their knowledge, they were not pushed to perform under pressure or penalized for making mistakes; rather, they were encouraged to try multiple times until they understood the content and showed their true potential. These concepts are essential elements of gamification. Our preservice teachers' experiences allowed them to incorporate gamification elements for all types of learning without the varying levels of technology.

Supporting social and emotional development

An essential aspect of preparing our preservice teachers for the real-world classroom is building their content and pedagogical knowledge while simultaneously prioritizing training in the aspects of their students' social and emotional development. Teachers integrate standards for social and emotional development in K-12 classrooms across disciplines with the goal to develop students' skills to "successfully interact with each other, establish and maintain positive relationships, feel and show empathy, understand and manage their emotions." (Ohio Department of Education, 2019, p. 3). Gamification plays a vital role in encouraging social interactions and natural creativity within the curriculum by increasing peer collaboration, learner autonomy, and managing one's emotions in competitive situations (Naderiheshi, 2022). The implementation of game elements such as rewards increases students' motivation to learn without putting students in high-stakes situations where they are fearful to speak up or make mistakes. What is more, gamification as an instructional strategy has the potential to boost students' confidence as they take calculated risks with confidence because they know that their peers and teachers will not ridicule but support them in the learning process (Flores, 2015; López-Jiménez et al., 2021).

Establishing a sense of belonging and mutual respect were cardinal elements of our preservice teachers' instructional approach. Their goal was to establish a standard for a safe learning environment where students felt encouraged to show emotional support for teammates and felt safe to make mistakes - an integral part of the learning process. In our discussions after the game-based lessons, our preservice teachers reported that their students did not seem bothered when they made mistakes, and they provided answers with confidence as the games progressed. Surprisingly, they also found that at times rather than competing, students supported and helped their peers during the games. Interlacing social and emotional skills within the learning process through gamification will allow students to continue to be successful learners throughout their life.

Differentiating instruction for English language learners

Students who graduate from our EPP are required to complete hundreds of field experience hours in various K-12 school districts. To enrich their experience in teaching students from diverse

backgrounds, our two preservice teachers took on the rare opportunity to practice gamification techniques with undergraduate L2 students in our university. English language learners bring a rich cultural diversity to our communities; however, quite often, schools and educators have inadequate resources and training to support the educational needs of this underserved population (National Education Association, 2015). Our preservice teachers designed literacy activities using gamification strategies by differentiating instruction to fit the specific needs of the L2 students. Tomlinson (2014) defines differentiation as a method designed to ensure that children receive appropriate classroom experiences by changing what students learn (content), how they receive information (process), how they demonstrate knowledge (product), and with whom or where learning happens (learning environment). The National Education Association's (2015) guide for advocating for L2 learners recommends that their teachers must possess the skills to engage students in meaningful learning experiences and hold the right dispositions to embrace the students' native languages and cultures as assets rather than deficits. Learning through hands-on, play-based activities that are responsive to the learner's interests, encouraging back-and-forth conversations to build language and vocabulary skills, and engaging L2 learners in a supportive environment were the strategies utilized when playing the interactive game (López & Páez, 2021).

Reflecting upon their teaching experience, our preservice teachers recognized that finding what motivates a student to learn starts by creating a connection with their students: they interviewed them about their culture, hobbies, and interests while simultaneously gathering data about their conversational skills in English. Based on these findings they created the K-pop interactive game. In our discussions, our preservice teachers admitted that this strategy of differentiating a learning game to each student's unique interests may not be sustainable in the real-world classroom; nonetheless, it provided an equitable learning opportunity for their L2 students who expressed excitement about incorporating aspects of their home culture into the lesson. The engaging theme and the interactive structure of the literacy game helped the students improve their skills each time they answered a question. Even if they made a mistake, they took it in stride and seemed to embrace the playful learning. Furthermore, the preservice teachers were impressed that no matter how difficult the grammar questions

got, during gameplay their students verbally stated their motivation to win, highlighting competition as an essential component of engagement through gamification (Flores, 2015). Differentiating the ways students are presented with classroom content may increase motivation to learn for all students and this experience highlights that gamification of literacy learning standards seemed to have the same effect on language learners.

Multisensory literacy instruction

The shift to a systematic, multisensory approach to literacy instruction lends itself to the gamification pedagogy utilized by our preservice teachers. Legislation regarding literacy instruction, recently passed in the state of Ohio, requires educators to be equipped with best practices and methods for universal screening, interventions, and remediation for children with reading difficulties, including those with dyslexia, using structured literacy (Ohio Department of Education, 2022a). The requirement that EPPs prepare teacher candidates to adequately incorporate “science of reading” strategies is in response to the alarming data that one in every five children in the U.S. has a significant reading disability (National Center for Learning Disabilities, 1999). Furthermore, groundbreaking research in brain imaging technology discovered that the brain reacts differently in response to systematic reading instruction; the activity in the area called the parietal cortex changes when exposed to effective instruction in the basics of reading: comprehension, phonological awareness, and rules of spelling and writing (APA, 2014). Using Multisensory learning (MSL), or learning by using the visual, kinesthetic, and tactile modalities, creates new pathways in students’ brains to aid in learning to read and retain information, and provide learners with multiple opportunities to process new information while engaging the brain in fun, interesting experiences (Willis, 2007).

Given this significant body of research in neuroscience, our preservice teachers were eager to get creative when gamifying literacy instruction using multisensory aspects for their students. Incorporating tactile learning as students manipulated game pieces and active participation when collaborating with teammates, rather than passively listening to a lecture, supported a multisensory approach to learning. Furthermore, instead of paper, students were provided with whiteboards to work out their spelling of words. For auditory learners, students were offered a read aloud for each question and options for second readings. Themes in the preservice teachers’

reflections were engagement and improvement. Students stayed engaged for the full learning period and showed great improvement in their motivation to learn as well as in their literacy skills. While the benefits of a multisensory approach to learning is widely researched, the preservice teachers reported a connection to utilizing gamification techniques with reluctant readers and their increased literacy skills in a very short period of time.

For language learners, Naderiheshi (2022) suggests that outdated techniques for language learning such as grammar translation and audio-lingual approaches make way for game-based strategies for teaching vocabulary that engage and draw students’ attention to collaboration and a healthy dose of competition. The use of game play ultimately brings language skills into the classroom, and this style of communication helps language learners develop grammar and vocabulary skills through collaboration (Naderiheshi, 2022). Our preservice teachers reported that playing their game with the L2 learners promoted a positive learning atmosphere that seemed to enhance the learning process. Their learners were able to manipulate colorful marbles, roll dice, and utilize pictures to make connections to key vocabulary concepts. This multisensory approach to teaching literacy in a low-stakes competitive environment helped the L2 students connect their knowledge of concepts in their native language to the same concepts in English. Not only were the international students gaining essential social skills in his new environment, they practiced effective communication skills in their second language that helped reinforce new grammar content in a game-like environment.

Conclusion

Gamification is an exciting and reliable way to motivate learners and promote a positive experience for students with diverse abilities. Our preservice teachers were faced with the challenges to motivate students to achieve learning outcomes in a variety of settings - an afterschool program, middle school inclusion setting, and university class of second language learners. Autonomy and engagement in learning emerged as themes during this teaching experience. Gamification provided a safe and healthy learning environment that promoted growth and encouraged students to try their best. This experience enabled our preservice teachers to leverage gamification in a low tech environment that excited their students. The multisensory approach

to teaching literacy skills was incorporated in all three learning games and encouraged new pathways to knowledge. Gamification emerged as an effective way to differentiate language instruction for English language learners, and promoted autonomy in learners of all abilities while fostering socioemotional skills that will stay with students throughout their lives.

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Politics, Power, and the Stories That Move Us: How Podcasts Can Support Student Inquiry

– Rhonda C. Hylton

Introduction

The times when people received news via television, radio, and newspaper are limited. Now, we read information on our cell phones, tablets, or smart watches and turn to social media platforms like Facebook, Twitter, or Instagram for relevant reports of the day's top stories. In these media, the news is often intertwined with story, both the story of the message and the story of the people in the message. The art of storytelling is central to English Language Arts (ELA) instruction, and how it is being used has changed over time. According to the National Council of Teachers of English (NCTE) Teaching Storytelling Position Statement, "Storytelling is part and parcel of human socialization—a tool for making us known, both to ourselves and to others." Storytelling expands possibilities for students to hear and tell others about identity, relationships, and community, and it makes us feel connected to each another.

In their blog post for NCTE, Lewis Ellison and Solomon (2019) wrote, "Digital storytelling is a perfect opportunity that students need in order to create their own stories fully across modalities and tell you who they really are." Such stories have an important place as society engages in inquiry around race and identity. Ellison and Solomon's article, "*Counter-Storytelling vs. Deficit Thinking around African American Children and Families, Digital Literacies, Race, and the Digital Divide*," encourages ELA teachers to have conversations that resist racial and oppressive viewpoints that monopolize education, social media, and politics. This issue of *OJELA* centers the topic of literacy in a digital world, which changes rapidly every day. As a literacy educator who teaches preservice teachers how to maximize literacy skills and practices in their future teaching, I am encouraged to think about the intersection between technology and the classroom, both in schools that

readily embrace shifts in technology and intertwine those with the learning curriculum for students, and in schools that need more support in this area.

I concentrate on podcasts as a digital storytelling tool that supports student inquiry around issues they care about—or come to care about—based on the stories of others. Exploring digital storytelling allows ELA teachers to better understand how teaching about and using podcasts in their classrooms can amplify students' voices. Using podcasts also encourages student choice by providing opportunities to investigate topics that affect them or their communities. Examples are the history of politics in local communities or a global context, and what it means to have power in American society. Through podcasts, students can learn about issues of equity, so they are informed, empathetic, and prepared to engage in—and confront—critical issues in society.

I introduce podcasts and how they have been used in education, followed by a description of one teacher's podcast listening assignment. Next, I highlight how another colleague and I helped the teacher think through the assignment in different phases as students focused on discovering and listening to the stories of other people's denial, rejections, and hardships within a podcasting project. Through evidence of our collective work, I showcase how ELA teachers can use podcasts with students to explore storytelling in their classrooms and promote and sustain student inquiry. I end with final thoughts on the intersection between technology and the classroom and how I view this intersection as less of a divide and more as a space to better understand oral storytelling and how it can support student inquiry.

Terms

The term "podcast" was derived from the combination of the famous "iPod" brand with "broadcast"

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(Evans, 2008). Podcasting is a different approach to webcasting and refers to “any automatically downloadable audio and or audio/video file commonly in mp3 format” (Walls et al., 2009, p. 371). This medium is set apart from webcasting because it ensures that audio or video footage is available to download on a computer or other digital media device (Walls et al., 2009). Podcasting began in 2005 and was reinforced a decade later when Apple began using iTunes 4.9, the first version of software to offer full podcast support (Bottomley, 2015). As a result, more people were able to easily search for and subscribe to various podcasts, making the medium a standard element of mainstream culture.

Podcasts do not have a set format, length, or style. They usually cover a wide range of subject areas with an episode concentrating on one topic or story. Podcasting is the “preparation and distribution of audio files using RSS feeds to the computers of subscribed users” (Lutkevich, 2022). The files can then be uploaded to streaming services, which users can listen to on their smartphones. Podcasting involves the creative process of constructing episodes for a show or program. Throughout this article, I use the term podcasts to mean specific episodes of a story and podcasting as the medium of presentation.

Context

I frame this article with the thinking, leadership, and classroom efforts of a high school classroom teacher and a school media specialist over the course of two years; the teacher taught U.S. Government. The setting took place in a predominantly white, conservative Catholic high school located in Northeast Ohio. I problematize the context by recognizing that there are other, more diverse high schools across the state with teachers and students of color who may also be interested in and committed to using podcasts as a way into storytelling, and examining similar issues presented in this article.

The first year, the classroom teacher designed a podcast listening assignment that targeted student’s understanding of the podcast medium. She wanted students to hear what strong model texts sounded like as they created their own podcasts inside and outside of class. The second year, she followed up with a podcasting project in which students explored the history and legacy of redlining in U.S. society. Podcasting is one technological tool that can be used to support the standards of any content area; here, the focus was on how social injustice is intertwined with politics, power, and the stories that move us and create calls to action.

These topics were chosen because of the teacher’s desire to educate all students about them. The teacher also wanted students to interrogate their own positions of power and privilege in their communities and learn about the history of injustice that occurred—and still occur—in Northeast Ohio. An advocate for gaining awareness of historical facts, the teacher was passionate about students exploring the past and connecting it to present-day events and concerns. Ultimately, podcasts can help students integrate technology in their learning and be in control of their own stories and the stories they tell.

The Use of Podcasts in Education: Advantages and Shortcomings

Teaching students about podcasts and guiding them through the process of producing their own podcasts has many educational advantages. Besser, Blackwell, and Saenz (2021) indicated many educators use podcasts to “ask questions regarding the meaningful integration for teaching and learning” (p. 750). Student-created podcasts have many benefits, such as: improved reading, writing, and listening skills (Smythe & Neufeld, 2010); student engagement that and collaboration that leads to increased literacy development (Morgan, 2015); and opportunities to return to classroom content and instruction (Evans, 2008; Shumack & Gilchrist, 2009). Podcasts also help students learn storytelling skills that focus on logic and coherent thinking.

Dversnes & Blikstad-Balas (2023) noted studies have demonstrated that students use higher-level thinking skills as they go through the different stages of creating a podcast, which are an essential component of ELA curriculum. For example, they make decisions about the topic of the podcast and generate content, they write the script, and make editorial decisions about the types of audio to include in the final product (Putman & Kingsley, 2009). Additionally, students learn how to engage in the research process, communicate effectively with listeners and peers, and grow into active producers of texts and media rather than passive consumers of knowledge (Besser et al., 2021; Sprague & Pixley, 2008; Bolden, 2013). ELA teachers can use podcasts to help students think critically about content they consume, whether through class readings, exchanging information with each other, or via digital and online formats.

Although podcasts are generally beneficial in education, there are shortcomings ELA teachers should be aware of: students may need help acquiring basic software skills; software constantly changes

and updates; and podcasts can be challenging to implement and sustain over time. However, the use of podcasts in education continues to increase. Therefore, it is imperative that students learn to critically think about and actively produce texts and not accept every piece of information they receive. Podcasting is one technological tool teachers can use to ensure students develop more critical literacies.

Podcast Listening Assignment

The classroom teacher we worked with was curious about ways she could use podcasts in her classroom to connect students with social issues and their impacts on their local community. The first year of her inquiry took place in 2020, as schools across the United States moved to remote learning because of the COVID-19 pandemic. She planned a unit around a podcasting study. She introduced the topic of podcasting by sharing with students a Google Slides presentation titled “Why Stories Matter.” She reminded students that all politics are local and asked them to respond in writing to a political cartoon. Next, she presented 3 facts about podcasting. Below were the objectives of the lesson:

1. Consider the role storytelling has in podcasting and how it might be used to shape a political conversation.
2. Look at the features of podcasting: what makes a good podcast story?
3. Prepare students to become skilled listeners and novice podcasters.

The last objective focused on helping students become better listeners. Rather than aiming for students to become podcast experts, they were to learn enough to become novices at using podcasting and applying their knowledge to think critically about issues in U.S. society.

Lessons then shifted to sketchnoting and how the concept would help students think as they listened

to various podcasts. Sketchnoting is a method of note taking, with the term *sketchnotes* credited to designer, author, teacher, and illustrator Mike Rohde who defined sketchnotes as “rich visual notes created from a mix of handwriting, drawings, hand-lettering, shapes, and visual elements like arrows, boxes, and lines” (Rohde, 2003-2020). Next, students were encouraged to think about podcast elements such as: editorial choices (music introductions, sounds, commentary by hosts, and ways interviews are introduced) and stories shared, and how they are meant to shape political ideas for listeners.

Following lessons on sketchnoting, students listened to a trailer for the podcast *Nice White Parents*, a five-part series about building a better school system and what gets in the way of that goal. Students listened to the podcast and verbally shared the elements of craft they heard and the political message they anticipated the podcast series would offer to listeners. Lastly, students wrote their own sketchnotes and created a one-pager as they listened to the first 15-20 minutes of the first episode of the *Nice White Parents* podcast. Students used their sketchnotes to create annotations to demonstrate their understanding of the podcast’s craft and substance and then shared their thinking with a partner. They were also provided a handout with details about the one-page sketchnotes and podcast choices for the assignment.

Podcasts and Student Inquiry

To pique students’ inquiry around podcasting, students were assigned to listen to one podcast episode three times from a provided list. As they listened, they actively engaged with the media by creating and sharing a one-pager sketchnote on which they annotated their listening of the podcast. When students were done sketchnoting their one-pager, they wrote a 2-3 sentence reflection on the back of each page in which they shared one takeaway about



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the style of the podcast and one takeaway about the substance. Table 1 displays possible podcasts for the assignment offered to students as a starting point. Table 2 displays the rubric for the assignment.

In groups of 3 or 4, students chose a focus on redlining that considered one of the following areas of its impact: civic engagement (voting), criminal justice, public health, education, or economic

Table 1. Possible Podcasts for Podcast Listening Assignment

Serial (any Season)	Unknown History with Giles Milton (any season)
This American Life (any season)	Who Is? (any season)
Revisionist History (any season)	Protected Class (any season)
Freakonomics (any season)	School Colors (any season)
Radiolab (any season)	Political Theatre (recent season)
Invisibilia (any season)	Politics Warroom with James Carville and Al Hunt (recent season)
Ear Hustle (any season)	The Making of ... (any season)
Myths and Legends (any season)	
Slow Burn (any season)	

Podcasting Project - Critical Issues

As students moved from the Podcast Listening Assignment to a Podcasting Project, the classroom teacher concentrated on critical issues affecting U.S. society today, and by extension, what they might mean for their local context in a predominantly White community. One of these issues was the history and impact of redlining, a discriminatory practice in which potential customers are denied services such as mortgages, insurance loans, and other financial benefits. Redlining has had far-reaching impacts on American society, particularly on people of color because it cemented racial bias as an accepted practice not only for homebuying opportunities, but also for quality education.

The essential question posed to students was: “What can we learn by hearing others’ stories of denial, rejection, and hardship?” Through the project, the term “redlining” was used to discuss very specific housing policies; however, it is clear what imagery the term “red lining” is trying to evoke. The image of a red line cutting one off from something he or she wants is undeniable, and it is part of our human story. In the podcast, students had to share a story of somebody’s “red line” and how they responded to this challenge. Perhaps their “red line” was entry into a school because of grades, employment with a job because of gender, or unacceptance of love because of religion.

opportunity. As part of the podcasting project, students were required to create and host a podcast that humanized and contextualized their research. The podcasting project included four steps:

1. Research redlining and its legacy. Refine and continue to find resources that give an overview of the ways racialized segregation has impacted our society. Tell a story that brings this research to a place of human experience.

2. Dig into the story. Find more information about the event, place or person that is the focus of the podcast. For example, students could write a series of 10-15 open-ended interview questions for their subject and explore what happened in their story, and how it impacted them. Then, students shared those questions with their subject to allow them to prepare for what was to come and develop thoughtful answers.

3. Create a “sound library” for the podcast. Use audio found in the research (including pulling sound from video), or by finding sound clips that can be embedded in the story and make use of the podcasting genre (i.e., the sound of an ambulance in the background or chants from a Black Lives Matter protest). Students had to use at least 3 of these clips in their podcast. Another option was to find a person to interview that can help tell the story.

Table 2. Podcast Listening Assignment Rubric

Criteria	-5- Exceeds Expectations	-4.5 to 4 – Meets Expectations	--3.5— Needs improvement	--0-3— Inadequate
Structure Flow of thought Use of visual and verbal detail	One-pager is organized and can be easily followed to demonstrate attention to style and substance of the podcast. Strong details and use of sketchnoting elements demonstrate engaged thinking with the podcast.	One-pager is generally organized and can be followed to demonstrate attention to style and substance of the podcast. Many details and use of sketchnoting elements demonstrate generally engaged thinking with the podcast.	One-pager is somewhat organized and with some attention to the style and substance of the podcast. Few details and limited of sketchnoting elements demonstrate some evidence of engaged thinking with the podcast.	No attention is paid to either the style or the substance of the podcast. Few if any details are present, and there is little to no evidence of engaged thinking with the podcast.
Take-aways Clarity of purpose Critical and original thought Use of examples	Central idea is well developed, and the reflection makes important takeaways about both the style and substance of the podcast. Selection of such evidence demonstrates a tight focus.	Central idea is developed, and the reflection makes takeaways about both the style and substance of the podcast. Selection of such evidence demonstrates focused attention.	Central idea is somewhat developed, and the reflection makes takeaways about either the style or the substance of the podcast, but not both. Selection of such evidence demonstrates some attention and focus.	Central idea is undeveloped, and the reflection fails to share takeaways about either the style or the substance of the podcast. Selection of such evidence demonstrates little to no attention and focus.

4. Plan the podcast. Anchor FM software was used in the classroom for this project. Cell phones or computers could be used for the interviews.

For Step 3, the teacher co-created a class Google

Doc that housed ideas for podcasting topics students were able to access to help them get started. The Google Doc focused on 5 main areas: Education; Criminal Justice; Civic Engagement; Economic Opportunity; and Public Health.

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Students were given class time to share your stories with one another. First, their goal was to find a unifying theme for their episode. Then, they wrote and recorded a brief introduction to the episode. Finally, they wrote and recorded a conclusion that shared insights and lessons learned by the hosts in the podcast.

Some of the stories in the Google doc were local. These could include students' audio clips as well. If students chose this option, they let the school media specialist know and she provided additional technical

support before the interview. For the last part of the podcasting project, students had to produce a chapter as part of their podcast. Chapter 1 explored the topic of the podcast; Chapter 2 focused on the story; and Chapter 3 included students' reflections on how the past has shaped the present day. Students were encouraged to use Chapter 3 to reflect on their learning journey throughout the project. If students worked in groups with more than 3 people, they could expand on one part of the podcast or plan a fourth chapter. The rubric for the Podcasting Project is shared in Table 3.

Table 3. Podcasting Project Rubric.

Category	Exemplary 9-10	Proficient 7-10	Developing 5-6	Insufficient 0-4
Topic and research	Topic and research are timely, provocative, and clearly rooted in the course. All members contributed to group knowledge as evidenced by Padlet.	Topic and research are timely and clearly rooted in the course. All members contributed to group knowledge as evidenced by Padlet.	Topic and research are not always timely or clearly rooted in the course. There is not clear evidence that all members contributed to group knowledge as evidenced by Padlet.	Topic and research are not outdated and vague. It is clear all members did not contribute to group knowledge as evidenced by Padlet.
Content	Creativity and original content enhance the purpose of the podcast in an innovative way. Accurate information and succinct concepts are presented.	Accurate information is provided succinctly.	Some information is inaccurate or long-winded.	Information is accurate.
Delivery	Well-rehearsed, smooth delivery in a conversational style. All members participate and demonstrate effective enunciation, using clear and professional tones. Correct grammar is used throughout.	Rehearsed, smooth delivery. Enunciation, expression, and pacing are effective throughout the podcast. Correct spelling and grammar are used during the podcast.	Appears unrehearsed with uneven delivery. Enunciation, expression, rhythm, and pacing are sometimes distracting. Occasionally incorrect grammar is used during the podcast.	Delivery is hesitant and choppy. It sounds like the script was simply read. Enunciation of spoken word is distant or muddled. Poor grammar is used throughout.
Stories	Either through narrative or	Either through narrative or	Either through narrative or	The podcast does not use or

	<p>interview, the podcast uses storytelling to personalize, humanize and contextualize the topic.</p> <p>In the final chapter of the project, the members of the team bring their perspective and experiences in a compelling way that helps the listener understand how the members have leveraged their learning to enhance their understanding about the topic.</p>	<p>interview, the podcast uses storytelling to personalize the topic. The connection to the topic is not as clearly made as it could have been.</p> <p>In the final chapter of the project, the members of the team bring their perspective and experiences in a compelling way that helps the listener understand how the members have leveraged their learning to enhance their understanding about the topic.</p>	<p>interview, the podcast uses storytelling to personalize the topic, but the connection to the topic is not considered.</p> <p>In the final chapter of the project, the members of the team bring their perspective and experiences to share some insight into how their understanding of the topic changed.</p>	<p>uses on limited storytelling to personalize the topic.</p> <p>In the final chapter of the project, the members of the team only discuss what they did, not how they learned from those tasks.</p>
Production	<p>Podcasting elements (graphics, music, artwork) effectively create a mood and enhance the quality of the production.</p> <p>Transitions are smooth. Length keeps the audience interested and engaged.</p>	<p>Podcasting elements (graphics, music, artwork) are used to create a mood and enhance quality of the production.</p> <p>Transitions are usually smooth. Length keeps the audience interested and engaged.</p>	<p>Podcasting elements (graphics, music, artwork) are not always used to create a mood and affect the quality of the production.</p> <p>Transitions are sometimes choppy. Podcast is either too short to keep people engaged or too long to cover important topics.</p>	<p>Production elements are unrelated to topic and do not create mood. Transitions are abrupt, and podcast is either too long or too short to keep audience engaged.</p>
Points				

Student Perspectives

Students were divided into two groups and each group created a pre-podcast and a post-podcast to demonstrate their learning around the podcasting medium. Students selected a topic, chose a person to interview, and told personal stories about injustices their grandparents faced, teachers whose jobs were terminated without cause, gender discrimination, and personal loss. The intimate nature of some of their stories indicated students’ investment in the podcasting work and they were excited to narrate and share the experiences of others. Both groups used redlining to frame their stories. They also used rhetorical elements such as description and

definition and rhetorical appeals to engage listeners’ logic, emotions, and ethics.

Students expressed two big understandings during a unit on civil rights which provided background information and set them up for their podcast listening assignment:

1. Societal issues are more complex and are shaped by government practices across time.
2. Governmental practices have an impact on individual lives.

Students identified issues such as cooperation, equality, freedom, justice, morality, security, and tolerance and how they can be controversial in

American society. These elements, in conjunction with the podcasting assignment and project the classroom teacher and the school media specialist introduced and taught students to implement, demonstrate how students used their learning to not only make connections between redlining and their chosen topics of study, but also to share their thoughts with their peers and other audiences who listened to the podcasts.

Strategies for Implementing a Podcast Listening Assignment or Podcasting Project in ELA Classrooms

It is important to note that the classroom teacher and the school media specialist in this work used several tools and resources to build a robust inquiry around podcasting: an inquiry graphic organizer, vlogging work that centered students' experiences around segregation or other social problems, Padlet, a viewing guide for the cartoon analysis, and a viewing guide focused on students' podcasts. ELA teachers might consider using some of the same technology resources presented here if they have access to them, or pairing podcasts with traditional print literacy materials like novels, plays, or text sets. If they do not have access to technological tools, they can talk with school administrators and build a case for the necessity and usefulness of the technology to cultivate and advance student learning inside and outside of the classroom. For example, students can learn about and listen to podcasts in the classroom and then go into their community to find people to become part of the storytelling process. Students might also listen to podcast episodes for homework that they find interesting and relevant to the ELA curriculum.

Assuming each school and community context is not the same as the one discussed here, it might not make sense to teach students to use podcasts as a tool to disrupt power or examine the role politics plays in American life. Communities in different contexts might not notice or struggle with issues of power and privilege. However, Language Arts teachers can help students locate and focus on stories and storytelling that move them to some sort of positive action. Finally, Language Arts teachers can use podcasts to cultivate student learning about characters in literature, the world around them, and themselves as they interact and communicate with others. Podcasts can serve as a catalyst for students to engage in and confront important issues that affect all of us.

Helpful Tools and Resources for ELA Teachers and Students

Below is a list of technology tools and podcasting software for ELA teachers interested in using podcasts in their classrooms; some websites also include the best podcast apps and websites for students:

1. <https://padlet.com>
2. <https://godigitech.com.ng/12-free-podcast-tools-for-educators/>
3. <https://www.macmillanenglish.com/us/blog-resources/distance-teaching/article/tech-tools-for-teachers-podcasting>
4. <https://gotteched.com/edtechtoolsforpodcasting/>
5. <https://www.common sense.org/education/lists/best-podcast-apps-and-websites-for-students>

Sources of Funding

If getting technology devices, applications, or subscriptions proves challenging because of lack of funding, ELA teachers can search for grants to provide money to buy these resources. Below are a few websites that outline available grant programs:

1. <https://cie.spacefoundation.org/grant-programs-to-support-technology-in-the-classroom/>
2. <https://tech.ed.gov/funding/>
3. <https://ohio.grantwatch.com/cat/42/teachers-grants.html>
4. <http://www.inspirationforinstruction.org/classroom-grants.html>
5. <https://www.bridgeteksolutions.com/news/14-best-sources-of-funding-for-your-classroom-technology-vision/>

Implications and Future Directions for This Work

My colleague, the classroom teacher, the school media specialist, and I extended our work around supporting student inquiry and cultivating student learning through podcasting. As we considered the rich data from the two years of our collective learning, and the students' introduction to podcasting, we wondered if the thinking of white students was disrupted by the stories they heard through the podcasts, and if they learned to recognize their white privilege in American society. It seemed that some, not all, white students were protected from social injustices of the world, particularly concerning issues like race and poverty. We wanted students to better understand how the experiences of people of color (POC) are informed by social, economic, and political concerns.

I do not propose that ELA teachers (or any teachers) should implement the work outlined in this paper solely for the learning of white students, nor do I believe white students are the only people that can benefit from knowing how politics and power inform local and global contexts. However, I do contend that using podcasts as a technological tool in classrooms can aid students in their understanding of genre and art of storytelling, which has been greatly influenced by mass media. Students can be taught how to use podcasts as a digital way to capture an audience's attention or teach lessons about story characters, historical figures, or even themselves. Podcasting offers a bridge between the real world and students' imagined world where they can portray their visions and tell stories in contemporary ways. I invite ELA teachers and school communities to consider ways podcasting can pique students' interests and encourage them to naturally explore questions about their communities, literary texts, or the world around them.

One aspect this work did not focus on as much as it could have was how students internalized the skills and knowledge they learned through the Podcast Listening Assignment and Podcasting Project. Little data was collected about how students felt about the inquiries the classroom teacher offered, and whether they were encouraged to share their podcasts with their family members, peers outside of their classroom, or the community. Further, it was not clear if students felt their voices were heard beyond the classroom setting. These are topics that can be considered for future work in this area, and insight students might provide could lead to more robust knowledge around technology and the classroom.

Through my involvement with this project, I encountered the types of critical thinking being done in classrooms by teachers who care about social justice work. I was also reminded why storytelling matters and how it can be problematic when society prioritizes the stories of those in the majority. Stories drive us to think, to frame problems differently, and to make connections between what we are told is happening in the media and what is really happening. Telling this story of such impactful work for an ELA-specific audience highlights ways ELA teachers can use technological tools to allow students to tell stories of their own, contribute to their classrooms, and to the world.

Final Thoughts on the Intersection Between Technology and the Classroom

I observe the intersection between technology and the classroom as less of a divide and more as a space to better understand storytelling and how it can support student inquiry. As a former middle school ELA teacher and current teacher educator, I have seen the ways technology has shaped classroom interactions and learning. Cell phones, streaming options, Google, and artificial intelligence like ChatGPT have all become considerations for classroom instruction. Even though I don't always understand the nuances of new technology, I remain curious about how I can use it to support student inquiry and help students discover issues they care about and want to explore more.

As ELA teachers consider ways to use digital storytelling, I am reminded that how we tell stories changes as rapidly as the technological tools we use to help shape them. Ohler (2006) stated: "The problem for many students is their focus on the power of technology rather than the power of stories. Some students are engaging the medium at the expense of the message, producing a technical event rather than a story" (p. 46). As we look to the future and our changing world, I hope we center storytelling to make meaning, and to support student inquiry and spark intellectual curiosity. Considering how politics and power affect ELA classrooms right now, we all need curiosity, and we can achieve it through sharing the stories that move us.

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Immersion in Mursion: Using Avatar Rehearsals to Prepare Preservice Teachers for Writing Instruction

– Stephanie M. Moody and Bethany M. Rice

...today I, on my own, I went to the elementary school that I attended when I was in kindergarten and first grade, and I saw writing instruction in both kindergarten and in first grade, and both for they watched a video about something, and then they just wrote about the video...they didn't use mentor text. And in my actual internship placement I have seen mentor texts, but it's...like a one-off text, and it's like you never refer back to it. It's almost there, but not (Margaret, May 2023).

Margaret (all names are pseudonyms) is an education major particularly interested in writing instruction. Her quote exemplifies the tensions she experienced between what she learned about the tenants of solid writing instruction, and what she sees in the field. Her experience and subsequent reflection are not isolated. Margaret, along with two other early childhood/ elementary education majors, worked as a Peer Writing Mentor (PWM), a research program structured around practice-based opportunities to learn about providing high-quality writing instruction for young learners. The PWM program was born as a result of myriad research and feedback about field experiences that reflect what Margaret described above; namely, preservice teachers (PSTs) rarely witness writing instruction in schools, and when they do, the lessons tend to be centered around one-off compositions that do not utilize or reflect the writing process, composing across genres, or writing for authentic purposes (Brenner & McQuirk, 2019; Cohen, 2020; Moody, Holtz et al., 2022; Myers et al., 2016).

The experiences of Margaret and her peers are not uncommon; despite being a critical and highly valued skill, authentic and high-quality opportunities to compose across genres are rarely provided in schools at any level, and particularly in

the early childhood and elementary grades (Graham, 2019; Graham, 2020). This problem originates in PST training; most teacher education programs (TEPs) minimize writing instruction and fail to have even one course dedicated exclusively to the subject (Brenner & McQuirk, 2019; Moody, Holtz et al., 2022). The lack of high-quality writing instruction witnessed in the field combined with the failure of TEPs to focus on writing pedagogy means that a different approach is needed to prepare PSTs to be good writing instructors.

Inspired by the new focus on practice-based methods within educator training, some teacher educators have begun using technology-based simulations to prepare PSTs to enact specific pedagogy, particularly when not enough time to experience it is provided within field experiences (Cohen et al., 2020) or when experiences in the field do not represent best practices. Simulations are experiences that recreate certain parts of a classroom reality, but in a low-stakes environment where PSTs can repeatedly practice a particular skill without impacting real-life students (Cruz & Patterson, 2005). While simulations have been used sporadically in teacher education to prepare PSTs for a variety of subjects (see: Kaufman & Ireland, 2016), there has yet to be a real focus on how simulations can

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be used to authentically and meaningfully support writing instruction. This article outlines our efforts to integrate Mursion, an avatar simulation program, into our PWM work, and how this supported PST's understanding about high-quality writing instruction.

What's So Special About Writing?

Writing is one of the most difficult skills to master and is substantially more complex than reading (Fitzgerald & Shanahan, 2000). For students to become successful writers they must be aware of: functions and elements of different text genres, how to plan, draft, and revise writing, how to gather and organize content or ideas for writing, the basics of sentence construction, vocabulary and figurative language, spelling, handwriting, and typing, and many more genre-specific elements (Graham, 2020). This means that their teachers must spend at least 30-minutes a day on writing instruction, emphasize both conventions and the writing process, set goals for student writing, provide opportunities to compose for a variety of purposes and audiences, engage students in interactive writing and share mentor texts that allow students to study and model the elements of writing, share feedback through writing conferences, and provide plentiful and copious time for independent writing (Graham, 2020). As such, becoming a fluent and successful writer is no small task and is directly correlated with teachers who are highly prepared to teach the abovementioned skills (Carter et al., 2022).

One reason that writing instruction is so important is that the ability to fluently and fluidly compose for various purposes has been widely recognized as one of the most valued and desired skills by employers; likewise, being able to write well is considered a gateway skill to success in college and beyond (Holland, 2013). Because of this, it is essential that students in all grade levels receive consistent and thorough writing instruction. The consistency and quality of writing instruction within P-12, however, has been a well-documented problem for at least a decade now (Carter et al., 2022; Graham, 2020), an issue which will be explored further below.

The Problem with Writing Preparation

Researchers have long problematized writing instruction, or the lack thereof, in P-12 schools (Durgunoglu & Hughes, 2010; Grisham & Wolsey, 2011; Morgan & Pytash, 2014). The most recent writing assessments suggest that students in the United States (U.S.) greatly underperform in writing (NCES, 2012), probably because they receive less

than 30-minutes per-day of the type of high-quality writing instruction suggested above, particularly those in the elementary grades (Graham, 2020; Graham & Harris, 2016; Troia & Olinghouse, 2013). While objectives centered around the above areas have become increasingly emphasized in the Common Core State Standards (Graham & Harris, 2015), which have been adopted by most states in some form, the Standards have failed to shift the instructional focus in schools as intended.

Many researchers attribute the low writing achievement of U.S. students to the fact that they are taught by teachers who have been ineffectually prepared for writing instruction (Graham, 2020; Morgan & Pytash, 2014). This problem begins in TEPs, where writing is largely addressed for personal writing competency and not pedagogical knowledge; there is a well-documented paucity of writing methods courses within TEPs (Brenner & McQuirk, 2019; Moody, Eslami, et al., 2022; Morgan & Pytash, 2014; Myers et al., 2016). One reason for the lack of writing methods courses is the belief that if teachers are strong personal writers, they will then be strong teachers of writing. This derives from the literature which suggests that teachers who are confident in their personal writing abilities typically make better writing teachers, not just because of subject-matter competency but because they have the requisite efficacy to tackle the challenging demand of writing instruction (Zimmerman et al., 2014). As such, many TEPs have implemented advanced writing courses or writing intensive courses designed to build PSTs' personal writing abilities (Hodges, 2015). While we do not deny that strong personal writing skills are an important qualification for a teacher, this does not mean that courses focused specifically on writing pedagogy for P-12 students are unnecessary. Consider this: most teachers are able to fluently decode and comprehend texts, but TEPs still provide a heavy load of reading methods courses. Why, then, is this not the same for writing?

To fully prepare PSTs to teach writing to P-12 students, TEPs must not only provide courses to improve PSTs' personal writing abilities but also writing methods courses that focus on the Writers Workshop, the writing process, and the other elements mentioned by Graham (2020) and reiterated above. Unfortunately, research indicates that standalone writing methods courses are rarely present within TEPs. Brenner and McQuirk (2019) conducted a snapshot analysis of writing in 42 elementary TEPs across the country, determining that the term

appeared in only 38 of the 155 literacy courses. Myers et al. (2016) had similar findings; faculty surveyed at 50 institutions across the U.S. reported that only 28% of TEPs had standalone writing courses in their P-12 programs. Finally, Moody, Holtz, et al. (2022) found that writing is rarely mentioned within ESL coursework for early childhood and elementary teacher preparation, indicating that most teachers are unprepared for the writing instruction of emergent bilinguals. Many TEPs seek to address writing within reading methods courses, however this is unlikely to yield the amount of knowledge and proficiency in writing pedagogy needed to improve student outcomes (Carter et al., 2022).

In responses to these concerns, TEPs across the country have been challenged by the National Commission on Writing in America's Families, Schools, and Colleges to upgrade their writing instruction and close the gap between theory and practice (Carter et al., 2022). Tenants of practice-based teacher education (PBTE) provide an obvious suggestion to meet this challenge: hands-on practice with writing instruction (Cohen et al., 2020). This, however, is easier said than done; given that most schools fail to prioritize writing instruction, it is unlikely that PSTs will witness its instruction (Graham & Wolsey, 2011; Morgan & Pytash, 2014). When they do see writing, typically teachers do not demonstrate best practices, teach it in a way that is misaligned with what is taught in TEPs, and provide isolated instruction unrelated to the process of writing and with limited opportunities for repeated practice (Kaufman & Ireland, 2016). These field experiences are insufficient to cultivate highly prepared writing teachers. Recommendations suggest that PSTs need ample time and repeated opportunities to learn about the writing process, idea development, writing assessment, modeling writing through metalanguage, writing genres, and many other highly complex skills (August et al., 2014; Lin, 2015; Schwarz & Hamman-Ortiz, 2020; Sunseri & Sunseri, 2019; Williams & Pilonieta, 2012), opportunities which are largely unavailable in schools today. As such, there is a need for a new approach to writing instruction preparation that will ensure PSTs have hands-on opportunities to practice their instructional skills. One way to do this may be through an underutilized method in PST education; simulations.

Simulating Writing Instruction

Simulations are relatively new to the field of teacher education and have recently garnered more attention through the rise of PBTE (Kaufman & Ireland, 2016;

Luke & Vaughn, 2022). PBTE is a cycle of teacher preparation created to bridge the gap between theory and practice through providing PSTs with multiple opportunities to learn about, enact, and decompose core educational pedagogies (McDonald et al., 2013; Peercy et al., 2019). PBTE is centered around the idea that PSTs need more time to practice targeted instructional techniques than they are typically afforded in TEPs (Cohen et al., 2020). While field experiences are the obvious place to gain such practice, they can have many pitfalls, including a misalignment with what is taught in TEPs as well as lack of opportunities to enact certain areas of instruction, such as writing (Clark et al., 2014), as evident in the opening quote from Margaret. Another issue that has arisen with field experiences relates to specific feedback; for PSTs to truly make progress in their enactment of pedagogy, copious practice must be coupled with high-quality feedback from expert teacher educators (Cohen et al., 2020). Obviously, opportunities for this in field experiences are limited due to both supervisor availability, classroom expectations, and time in the school day (Cohen et al., 2020). Likewise, PSTs are rarely able to receive feedback and enact the same lesson a second time to make the recommended improvements.

One way for PSTs to gain repeated practice and targeted feedback is through the use of simulations. Simulations have long been used in other fields, most notably within nursing and medical schools, as a realistic way to deeply learn a skill through the recreation of certain aspects of reality (Cruz & Patterson, 2005; Kaufman & Ireland, 2016). Simulations are beneficial because they recreate parts of a field experience without any of the typical barriers and uncertainties present in the real classroom, thus allowing for a deep practice of the target skill (Ferguson, 2017). Simulations can be run for longer periods of time than would typically be available in classrooms, allowing PSTs to move between theory and practice to perfect their pedagogy without any negative repercussions to real-life students (Kaufman & Ireland, 2016). While simulations are fairly new to teacher education in general, they have been used within specific content areas like physical education, math, and social studies (Baghurst, 2014; Brkich & Newkirk, 2015; Dotger et al., 2015), but never writing.

Simulations can come in many forms and be run through a variety of systems. This article focuses on the use of Mursion, a mixed-reality platform run by a real-time simulation specialist. Within Mursion, users can choose to use an individual avatar or

a group (up to five) of avatars from all age ranges in which to practice a key skill. Mursion scenarios are typically created by individual faculty members to reflect a particular instructional move they hope to cultivate in their PSTs. Within the development process, the faculty member closely coordinates with the simulation specialist to create avatar personalities, hits, and misses (Luke & Vaughn, 2022).

For this article, Mursion was used as a *rehearsal*, which means that the simulation was run to provide PSTs with practice teaching writing and was not intended to be a formative evaluation of their abilities. Rehearsals are a particularly powerful way to practice a skill, as PSTs can pause and receive in-the-moment feedback and input from their instructors and classmates as they learn to navigate a new pedagogical practice (Kavanagh & Danielson, 2019). The present study provides an overview of a Mursion rehearsal that we designed centered around writing instruction, an understudied area, to thus provide other literacy educators with ideas about how they could use rehearsal simulations to support literacy instruction within their TEPs.

Mursion: What and How

The authors are two faculty members at a large, public university in the mid-Atlantic region of the United States known for its innovative teacher education. Mursion has been part of the TEP at our university for several years, used to varying degrees by the faculty. For our part, both authors have used Mursion within their courses to work on classroom management, parent conferencing skills, and assessment. The design of this particular scenario, however, was quite different. In our program, PSTs receive little to no instruction on how to teach writing, prompting us to create an extracurricular research-based program (Peer Writing Mentors; PWM) to provide a small group of interested students with practice-based opportunities to learn these pedagogical skills. The program has run for several years, with over a dozen PST participants. The scenario described below was conducted with a group of three PWMs in Spring 2023. Our PWMs (Margaret, Millie, and Holly) were females, early childhood or elementary education majors, and in their junior or senior year. All three had spent the previous semester in an advanced writing course for teachers that focused on PST writing competencies, not pedagogy. The PWM program is an extension of this advanced writing course that focuses specifically on training PSTs about teaching writing (to adults and young learners) and giving the PSTs opportunities to use

what they learned in the program to mentor college-level writers.

The Mursion scenario described in this article was the third Mursion scenario that the PWMs engaged in. The first two scenarios focused on writing feedback, and engaging students in productive, scaffolded writing conferences. The present scenario was derived from requests by the PWMs to get authentic practice conducting a writing lesson.

Designing the Mursion Scenario

The first step in designing a rehearsal scenario is to determine your objectives and how Mursion can best support them (Luke & Vaughn, 2022). For our part, we believed that instruction on the narrative writing process in our university was solely lacking and would benefit from extra attention. Additionally, we recognized that narrative writing is highly emphasized in the Common Core standards for early childhood and elementary students but is one of the most difficult genres to teach and compose (Moody, Holtz et al., 2022). It was also important for our objectives to center around the goals of our university, which emphasizes the use of PBTE to teach high-leverage practices (HLPs), one of which is “explaining and modeling content” (Teaching Works, 2023). Given this, we decided to center our scenario around revision within narrative writing, focusing on the skill of explaining and modeling the use of “vivid verbs” (words that paint a specific picture) within writing. Revision is a critical part of the writing process that includes the use of anchor charts, mentor texts, and plentiful modeling, and as such allows for the development of our target HLP. Our specific outcome for the Mursion scenario was articulated as such: *PSTs will learn to lead a small-group writing lesson on revising within the writing process, in a way that scaffolds avatars to write independently. PSTs will learn to use mentor texts and the writer’s work/ ideas as a resource, while also ensuring that they provide high-quality feedback that will lead avatars toward a successful final composition.*

When designing Mursion scenarios, there is a specific structure that must be followed. Typically, each scenario contains between one to three challenges. Within those challenges, the scenario designer (typically a faculty member) writes a short description and identifies performance objectives. The scenario designer also needs to identify “hits” and “misses” by both the PSTs and the avatars. Hits are actions that the PST or avatars will take that demonstrate successful mastery of the objective.

Misses are, naturally, areas in which the designer anticipates the PSTs will misstep. They are also areas that the scenario designer wants the avatars to present a challenge.

At some point either before or during the scenario planning process, it is necessary for the faculty member in charge of designing the scenario to meet with the Mursion coordinator to discuss and design the personalities of each avatar. With the elementary avatars for Mursion, there are five students- Mina, Will, Jayla, Emily, and Carlos (see Table 1). Those five students can be prescribed a variety of personalities and exhibit a plethora of needs- both behaviorally and pedagogically. The avatar “hits” and “misses” can be calibrated to fit each individual avatar profile and should be centered around the objective of each challenge.

Appendix A presents the avatar scenario that we designed for “vivid verbs”. For the most part, our objective did not include challenging behaviors on the part of the avatars; instead, their “misses” (see Appendix A) were more centered around confusion about the topic and a lack of participation in the activities.

Our scenario had two challenges, the first of which focused on how to explain the concept of vivid verbs, as well as modeling their use in mentor texts. In this challenge, we wanted PSTs to engage in

direct instruction about “vivid verbs” and to share a mentor text that illustrated vivid verbs. We chose the book *Crickwing* by Janell Cannon as a mentor text because the author intentionally uses verbs that elicit strong imagery such as “flailed,” “throbbled,” and “clobbered.” Selecting and using high-quality mentor texts to model is an essential part of the writing process (Thompson & Reed, 2019) and thus was something essential to emphasize within this scenario. Sharing mentor texts, however, is not enough; teachers must learn how to purposefully select segments of the text and discuss the intentionality behind the author’s moves. Thus, our identified hits for PSTs included these goals.

Our second challenge focused on the act of modeling how to revise a specific piece of writing while also encouraging and eliciting student participation. This challenge is less centered on familiarizing the avatar students with the concept of vivid verbs, and more about teaching the process of revision, meaning that this challenge could be easily modified to teach revision over any area: figurative language, organization, adding details, dialogue, or any other essential element of narrative writing. This challenge also embedded the goal of explaining and modeling content, as hits required PSTs to engage in a think aloud about the process of revision.

Table 1

Avatar Characteristics

<u>Avatar</u>	<u>Profile</u>
Carlos	Carlos is a multilingual learner (native language: Spanish) who is at the beginning stage of English language acquisition. He listens well to the discussion and can be encouraged to participate, particularly if his native language can be used.
Mina	Mina is an active learner who loves to participate and share her ideas. Mina is very certain in her knowledge and very inquisitive.
Emily	Emily is an exceptional learner. She loves to participate but does not always maintain attention to the discussion or remain on topic. Emily’s favorite subject to discuss is horses.
Will	Will is a multilingual learner (native language: Macedonian) who is at the intermediate to advanced stage of language acquisition. Will can be a bit shy and need encouragement to join the conversation.
Jayla	Jayla is an outgoing and gregarious student. She is respectful of others in the class, helpful, and eager to contribute.

Essential within the planning process for any Mursion scenario is collaboration with the simulation coordinator. Typically, the faculty member who designs the scenario will meet with the coordinator at least once before the scenario to ensure that they understand the goals of the scenario and expectations for the behavior of the avatars. At our university, the Mursion coordinator is a former schoolteacher who brings a wealth of knowledge about teaching to her enactments, often enriching the planned scenarios with her own ideas for how the avatars could be used. It is also essential that the Mursion coordinator is able to ask meaningful questions about how the scenario will play out, as the coordinator is the one who will serve as the interactor, or the voice behind the avatars. Successful communication between the scenario designer and the Mursion coordinator means that avatar responses are more likely to be realistic, congruent, and targeted toward the objectives of the scenario.

Preparing for the Mursion Scenario

A Mursion scenario is not something that can be entered into lightly; a substantial amount of training is needed to ensure that PSTs have the requisite content and pedagogical knowledge to successfully engage with the avatars. It is important to remember that simulations, whether rehearsal or evaluative, are not intended to be introductory activities, but instead should reinforce procedural knowledge and behaviors in a way that strengthens understanding of the particular skill (Ferguson, 2017). The Mursion simulations are opportunities for PSTs to enact learned skills but without the pressure of doing so in the field and should be considered a bridge between what is learned in TEPs and field-based experiences.

To set our PWMs up for success within our vivid verbs scenario, several understandings were essential. First, we needed to refresh their knowledge about the genre of narrative writing. Margaret, Millie, and Holly (our PWMs) had all taken an advanced writing course during Fall 2022 which had tasked them with crafting a personal narrative about their life. To prepare for the scenario, we needed to refresh their knowledge about the elements of narrative writing, particularly as they related to early writing. This was accomplished through a series of asynchronous training modules and tasks developed by the authors. Training included recorded mini lectures, as well as related tasks specific to narrative writing.

Second, our PWMs needed training on how to teach early writing, particularly focused on modeling

and thinking aloud about the process. Our PWMs had each received approximately two to three weeks of instruction on writing pedagogy through various ELA coursework, but our asynchronous modules provided more specific training on the following: the writing process, characteristics of writing genres, crafting personal narratives, and teaching the writing process. To accompany this instruction, we engaged our PWMs in a role-play of a writing lesson focused on revising a personal narrative to add dialogue. We also asked our PWMs to watch a video of an expert teacher leading a writing revision lesson and reflect on what they saw in that classroom footage.

Finally, our PWMs were asked to prepare materials for the scenario like they would have to do within a writing lesson with real students. Specifically, they were told to prepare an anchor chart about vivid verbs with a definition, clear examples, and space to add student contributions. PWMs were also asked to obtain a copy of the mentor text *Crickwing*, and earmark passages within the text that strongly reflected the use of vivid verbs. Finally, they were told to review a second-grade writing sample, which the scenario would be based around and practice the scenario enactment with their peers.

The Mursion simulations described in this article were recorded for two purposes; the first for immediate critical reflection amongst PWMs and the second for future planning and use with upcoming PWMs. Critical reflection did occur during the live scenarios but was amplified after the fact when PWMs could step back and examine their practice further. The use of recordings also allowed us, as instructors, to make changes to future scenarios, studying what worked well and what needed to be improved, but also provides a way to introduce new PWMs to the use of Mursion. Allowing PWMs to see how a scenario works before asking them to engage in one, provides a level of familiarity with the experience, leading to an increased focus on their practice when engaging in a live simulation.

The Scenario

Our Mursion scenario was conducted via Zoom, with each PWM and instructor signed in on individual accounts, and the avatar students on a separate account sharing their screen. This is one major affordance of Mursion, which naturally lends itself to online enactment and thus is useful for both traditional and non-traditional TEPs. Mursion can also be run in a lab setting on campus, as an alternative to the online format. In our online scenario, the PWMs

were already familiar with Mursion procedures as well as the characteristics of the avatar students based on previous trainings, and so they were aware of how to begin the scenario and interact with each avatar, as well as some basic personality quirks to expect from the avatars themselves.

A Mursion scenario, in this case a rehearsal, is typically run following these procedures:

- One student (in our case, one PWM) volunteers to take the lead as the rehearsal teacher.
- When ready, the rehearsal teacher states, “begin simulation”, at which point the avatars are activated.
- The rehearsal teacher begins the scenario in the same manner that a classroom teacher would begin any lesson, targeting the objectives of the first challenge (see Appendix A).
- As the rehearsal teacher proceeds through the challenge, they are able at any time to state, “pause simulation”. This is typically done when a teacher needs advice and/or feels uncertain how to proceed. Similarly, the instructor(s) or even other classmates can ask to pause the simulation to ask clarifying questions or provide feedback.
- The rehearsal teacher can choose to exit the scenario at any time. Typically, this is done after at least one challenge has been enacted, however there is flexibility around this and truly depends on the comfort level and needs of the rehearsal teacher.
- Once the first rehearsal teacher has finished, there is typically a debrief between all participants to discuss a) areas of success and b) areas in need of improvement. Everyone involved in the scenario is asked to give input and work together to provide alternative techniques that could be used to support and strengthen instruction. This is an important aspect of the critical reflection process.
- After the discussion, another participant gets the turn to serve as the rehearsal teacher. At this point, based on the needs identified as the discussion, the simulation can either be a) restarted to practice the same challenge in a way that reflects the suggested moves, b) resumed to finish

the challenge (if it had not already been concluded), or c) resumed to begin the next challenge.

- The rehearsal proceeds until time runs out and/or all participants have had the chance to serve as the rehearsal teacher.

The success of rehearsals largely depends on the richness of the conversations around each enactment. For our part, we believe it is crucial that we elicit the input of all PWMs so that we can understand how the rehearsal resonated not just with the rehearsal teacher, but also with the observers. We begin by soliciting and identifying positive feedback for the rehearsal participant. This accomplishes two important goals—one to provide positive reinforcement for the PWM, and second to determine next steps in the feedback process. The feedback from participants also serves as a formative assessment or progress check. The first step in the feedback discussion can be seen in the following exchange, which occurred after PWM Margaret had completed part of the first challenge (she introduced vivid verbs, shared the anchor chart, and brainstormed other vivid verbs with the avatar students). The first author paused the simulation, then asked Millie and Holly to weigh in with some areas that Margaret excelled at.

Millie: I really like that she’s [Margaret] giving every kid a chance to kind of give their input. Like, the one kid Will, I realized after she called on him that I hadn’t heard him talk at all. So, I think that’s good that she’s kind of not just picking on the same kids every time.

Holly: Yeah. I also notice that sometimes, if a student didn’t quite know what the answer was...then she (Margaret) would use something that they said, and turn it into an answer like, “Oh, I really like that you said that,” and then she would like turn, so that they weren’t just getting defeated, and then continuing to struggle.

In this example we can see that both Millie and Holly focused on how Margaret garnered student participation. While important, these comments indicate that our PWMs might not have been attending to the practice of modeling and explaining content, which was our objective. It is essential for us, as the instructors, to know how the PWMs interpret the moves of each rehearsal teacher so we can redirect toward the objective. At this point, we as instructors noted that the PWMs needed to be redirected toward the set objectives for the simulation.

Technology and the Classroom

After receiving and acknowledging these comments, we strategically shifted the conversation to an area that we identified in need of development: how to get the avatar students to generate their own vivid verbs. We provided suggestions for how to model this, such as acting out verbs and giving the avatar students options for the verbs they could select. As instructors, we were able to share immediate, valuable content within a shared experience. This was then applied by the next student to engage in the scenario.

Margaret: I think the most difficult for me was thinking about what words I wanted to put on the anchor chart, because I wanted to make it purposeful for revising the draft, and I feel like the verbs I chose are just like a little bit too broad, I guess...like, *get* and *come* are kind of difficult...*received* isn't necessarily a vivid verb. But then I was like, oh, I guess I'll just put it on there because I already said it and then I didn't know how to tell her [the avatar] it's not really vivid, if that makes sense.

Instructor 1: It does. So, I think that's great that you made your anchor chart with intentionality. So, how are we going to scaffold them to learn these words? Say that you had the word *walk*, right? You're like, "We want to think of more vivid verbs for *walk*, because *walk* can mean so many things. So, how does a baby walk? What's it called when a baby walks?" [Acts out crawling]. That's what I'm thinking of.

Instructor 2: Another interesting piece would be to pull out a number of possible vivid verbs and some, maybe, that aren't vivid, and post them all up there so that the students have almost a word bank. And then talk about, "Oh, do we see any, you know vivid verbs in this group of words?"... As you're thinking about doing a review or getting more sophisticated, the word bank is then allowing all of the students to look up there and see, okay, we have a sense of what vivid means, now, I can look at a bunch of examples, pick out ones that are vivid. That will also give you a sense of who is moving toward the target and those who aren't.

This exchange demonstrated active learning from the PWMs in two notable ways. First, the PWMs felt comfortable and confident sharing their struggles openly with the group. As Margaret remarked, she

had some hesitation when creating her anchor chart. It also allowed us, as instructors, to engage in teachable moments with not just one student, but all three PWMs at once. In traditional models of field experiences, PSTs may receive feedback, but it usually occurs in isolation. The Mursion scenarios provided opportunities for PSTs to not only learn from one another through shared experiences, but also allowed for instructors to address key understandings or misunderstandings in the moment. Following the discussion, we also engaged our PWMs in a brief role-play of what this would look like before releasing the scenario to Millie, who served as the second rehearsal teacher. The Mursion scenarios elicited learning opportunities through engaged participation. The way that Millie immediately applied our recommendations can be seen below.

Millie: Oh Carlos, can you tell me what you think *exclaimed* means?

Carlos: Uh, explained means uh, yeah like I am going to tell you uh what this is. Like the teacher will explain how to do something.

Millie: Yeah. And if I were to exclaim something, would I say it kind of quiet? Would I say it really kind of boring? [Slouches and softens voice]. Or would I say, "Guys we're going to do this!" [Gestures excitedly].

Carlos: That's what teachers do, they say, "Guys we're going to learn how to do this!"

Millie: Yeah, so I really got your attention, I *exclaimed* it. Can we try to exclaim something? Let's say vivid verbs, can you say "vivid verbs!"

Carlos: Vivid Verbs!

Millie: Now I'm going to think about the word *walk*. Is that... do you guys think that's a vivid verb? It's not that exciting? Right?

Mina: Yes, yeah. It's just *walk* so.

Millie: It's just *walk*. And so, if I said, Hmm. If I said *dashed*, *walked*, and **bolted**. Which words do you think we are vivid there?

Mina: So, I think *bolted*.

Jayla: Uh yeah, so I like amusement parks and they have a ride that's called The Bolt and it jerks around and it's like really fast.

From this excerpt we see that Millie took our pedagogical suggestions of acting out and providing choices, and through this was able to scaffold

identification of vivid verbs, while also involving multiple students in the discussion. This example speaks to the power of rehearsals: in her attempt to teach the first challenge, Margaret ran into some roadblocks in scaffolding vivid verbs. In a traditional classroom, she would have had to muddle through the lesson, and possibly even reteach it the next day, wasting precious instructional time. Our rehearsal, however, afforded the opportunity to recognize the areas of difficulty in her practice, brainstorm possible solutions, and try it again, all done without interference to student learning (Ferguson, 2017). The simulation also allowed for immediate feedback in a low-stakes environment, allowing the PWMs to process the remarks without concern of penalty from a formal observation.

Another powerful aspect of rehearsals is the opportunity to observe and learn from the teaching of a peer. These types of experiences can often be more powerful than observing a skilled mentor, as PSTs are more able to envision themselves as successful when it is someone who comes from a similar background; if they can do it, then so can I (Tschannen-Moran & Johnson, 2011). Such opportunities are rare in teacher education, as most field experiences are solo experiences with one student teacher and one mentor. However, the opportunity to observe a peer has been shown to promote growth in instructional knowledge (Moody, Kuo et al., 2022) and is evident by Millie's enactment of the first challenge; Millie learned from Margaret and applied her new knowledge within the same context, which led to a more skilled execution. Mursion provided the shared experience the students needed to make these instructional gains.

Reflection After the Scenario

At the end of any scenario, it is important to reflect. This can be done in a number of ways, including written reflection. For our part, we engaged the PWMs in yet another discussion where we focused on how they perceived the scenario, and how the use of the Mursion rehearsal may or may not have helped their pedagogical understandings about teaching writing. We chose to have an oral discussion because typically, peers will build on each other's responses thus creating a rich environment to discuss practice. Likewise, self-reflection can sometimes be deleterious if not accompanied by expert coaching, which is why we consider this to be an essential part of any rehearsal (Cohen et al., 2020). In our reflection, we gleaned several insights. First, Margaret mentioned how she has traditionally struggled with brevity in her instruction, overexplaining and spending time on

teacher talk without providing enough independent work time. Margaret felt that practicing the mini-lesson in front of the avatars and being able to stop and start over was helpful to correct this practice, without sacrificing student work time. Her experience aligns with the research on avatar rehearsals, which suggests they provide PSTs with low-risk ways to learn a skill (Ferguson, 2017). Millie felt that the biggest affordance of the rehearsal was that she was able to conceptualize how pieces of the writing lesson fit together, which she struggled with during planning. However, being able to watch her peers before doing it herself helped her realize how each piece of the instruction would fit together. Finally, Holly related the rehearsal directly to her experience conducting a writing mini-lesson in her student teaching classroom. She explained that her students had struggled with adjective generation, but that she did not have any "teacher tools" to help them. She directly connected this to what she learned through watching Margaret and Millie enact the rehearsal, in which they provided choices to the avatars in vivid verb generation. She explained that the ability to work through these common problems before doing the lesson with students would have been essential in her understanding of how to teach writing.

The points brought up by our PWMs reflect those from other studies. First, it seems clear that the benefits of rehearsals come not only from repeated opportunity to practice the skill, but more from the coaching and peer modeling that they were able to participate in during the rehearsal (Cohen et al., 2020; Moody, Kuo et al., 2022). Thus, it is not enough for PSTs to be given multiple opportunities to try a specific pedagogy if it is not coupled with targeted feedback and coaching. Similar to findings in Ferguson (2017), our PWMs also felt that they were able to more effectively gain procedural knowledge because of the low-stakes nature of the scenario. With other classroom factors removed, such as student behavior, the PWMs in our study were able to specifically focus on aspects that needed specific improvement.

Recommendations and Conclusion

Teacher education is always changing and evolving as the field searches for the best ways to prepare PSTs for instruction. In our experience, Mursion rehearsals, and other simulations, are effective and innovative practice-based techniques for improving PSTs' pedagogical and procedural knowledge of a number of literacy skills (Ferguson, 2017; Kaufman & Ireland, 2016). To expand this study, we hope

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to engage our PWMs in rehearsals to practice writing instruction across a variety of genres, as well as giving high-quality writing feedback and conducting student-centered writing conferences. Other teacher educators with access to Mursion or similar technology can design scenarios to work on any number of literacy skills, such as (for example) a phonics scenario to learn about diphthongs. This type of scenario would also be helpful to refine the skills of in-service teachers; because Mursion can be conducted remotely, universities that have access to it can partner with local school districts to provide professional development to teachers. Any individual scenario need be no longer than an hour, thus making it ideal to refine teacher skills on a training day or even during a weekly faculty meeting. Likewise, while our study was situated within an early writing program, there is no reason that Mursion would not be useful to support pre- and in-service teachers of the middle

and upper grades. For writing in particular, Mursion could be used to support teacher's abilities to conduct productive and student-centered writing conferences with older learners. It is important to keep in mind that Mursion can be used not just for rehearsals, but also for evaluation. Thus, teacher educators looking to diversify their assessment approaches could use Mursion to evaluate how effectively their PSTs have learned a particular instructional skill.

When implementing simulations using Mursion or other technology, preparation is essential to success, both for instructors as well as PSTs. This includes not just writing the simulation, but also ensuring PST preparedness for the experience, anticipating challenges, and providing opportunities for robust reflection throughout. Table 2 highlights the necessary elements to consider when planning a simulation. These steps serve as a starting guide for those looking to implement this pedagogical approach.

Table 2

Preparing for a Simulation

<u>Steps for Success</u>	<u>Actions</u>
Step 1: Initial Planning	<ul style="list-style-type: none"> Decide whether your scenario will be a rehearsal or an assessment. Set the learning objectives for the scenario. State these clearly.
Step 2: Writing the Scenario	<ul style="list-style-type: none"> Identify your challenges, misses and hits, and avatar behaviors. Meet with the Mursion coordinator or other personnel to review the plan.
Step 3: Prepare the PSTs	<ul style="list-style-type: none"> Share a video of a simulation or a previous simulation to familiarize PSTs with the technology. Establish any pre-work requirements. This includes creating any necessary materials for the lesson, reviewing content etc. Review procedures for engaging with the Avatars.
Step 4: Anticipate Challenges	<ul style="list-style-type: none"> Plan opportunities for critical reflection throughout the simulation. Establish formative assessments or checks for understanding.
Step 5: Implementation	<ul style="list-style-type: none"> Create a supportive space for student participation. Use feedback loops to highlight both positive behaviors noted, as well as areas for growth.

Table 3

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<u>Lesson</u>	<u>Activity</u>
Lesson 1	<ul style="list-style-type: none"> • Direct instruction over your objective (a pedagogical practice).
Lesson 2	<ul style="list-style-type: none"> • Watch a video of an expert teacher engaging in the practice. • Read a transcription of the video and decompose it. What went well? What could be improved?
Lesson 3	<ul style="list-style-type: none"> • Give PSTs role-playing cards. They should have specific personality characteristics and possible responses (related to your objective). • Take turns engaging the PSTs in a role-play, where they take turns serving as a teacher and their assigned students. • Video record this role-play. • Engage the class in discussion during and after the role-play. What went well? What moves would you change?
Lesson 4	<ul style="list-style-type: none"> • As a class, review the transcript of the role-play and decompose. • Focus the decomposition on the target pedagogical practice, and how this could be improved.
Lesson 5	<ul style="list-style-type: none"> • Outside of class, have PSTs work in small groups to record a role-play of the pedagogical practice. • These videos can serve as rehearsal, where you discuss their practice with the class, or evaluative, where you judge their competency.

While Mursion is a wonderful tool, we do acknowledge that it comes with a steep cost as well as extensive coordination and training, and thus is not possible for all teacher educators. As such, Table 2 shows suggestions for how teacher educators could use everyday technology to create practice-based literacy instruction without the actual Mursion simulation technology. The lesson progression shown in Table 3 can be implemented with basic video technology or more interactive platforms such as Zoom, Webex or even Google Meets. While new artificial intelligence tools, such as Chat GT exist, these cannot replace the role of a trained educator overseeing and guiding the process. The steps for preparation and the implementation of Mursion or an online simulation requires a level of specialized

knowledge and experience held by trained educators. The simulations described here are nuanced, complex, and responsive to the needs of PSTs.

It is important to remember that, more critical than the type of technology used, is how technology can afford PSTs (and in-service teachers) with more time to practice underdeveloped instructional techniques, as well as provide feedback from experts. Our suggestions in Table 3 reflect ways that basic technology can be creatively used and applied, however it is our belief that simulations such as Mursion, which is already being used in over 65 teacher education programs (Luke & Vaughn, 2022), are going to become more widespread. Certainly, it would behoove all teacher educators to become familiar with the utility of simulations.

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Technologies such as Mursion offer opportunities for PSTs to develop essential pedagogical skills in a controlled, supportive environment, while receiving immediate feedback and instruction from both peers and instructors. PSTs learn from both their peers, as well as their instructors in real time, something that is difficult to replicate in the school setting. These shared virtual experiences provide invaluable learning and development, which can then be applied in a field-based classroom setting. Embracing technologies, such as the simulations discussed here, has the potential to greatly elevate practice.

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Appendix A Revising in Elementary Writing: Vivid Verbs

Set Up/Summary:

PSTs are leading a small group writing lesson with elementary students (second grade) on revising writing to add “vivid verbs”. Each elementary student has written an initial draft of a piece of narrative writing responding to the prompt “Write about a time you had a lot of fun.” The PSTs have been trained on how to teach revising in writing, particularly the use of vivid verbs.

For this particular scenario, the PSTs need to teach the avatars about vivid verbs- what are they and why would they be used in writing? Then, they need to engage the avatars in a shared writing where they demonstrate revising an actual student writing sample to include vivid verbs. PSTs must elicit student input into the revisions.

Avatar Environment: Lower elementary

Class Structure: One continuous class

HLPs:

- Explaining and modeling content

Outcome for class:

PSTs will learn to lead a small-group writing lesson on the writing process, in a way that scaffolds avatars to write independently. PSTs will learn to use the writer’s work and ideas as a resource, while also ensuring that they provide high-quality advice that will lead avatars toward a successful final composition.

Challenge One

Planned challenge one:

PSTs will introduce the idea of “vivid verbs” in writing, explaining what they are and why they are important for writing lessons. PSTs will engage the avatars in a discussion of vivid verbs, then share a mentor text (*Crickwing*) where avatars will help identify the use of vivid verbs by the author.

Performance objectives for challenge one:

PSTs must...

1. Introduce the idea of “vivid verbs” in writing and provide examples of them.
2. Explain why “vivid verbs” are important.
3. Brainstorm a list of vivid verbs by eliciting the input of the avatars.
4. Share a mentor text and encourage avatars to pause at any vivid verbs they come across.
5. Act out the vivid verbs with the avatars, emphasizing why they were carefully chosen by the author.

PST Hit

Successful PSTs will...

- State the purpose of the lesson, referring back to the draft of work that the avatar students have already completed.
- Provide a visual representation (anchor chart) of vivid verbs.
- Provide a child-friendly definition of vivid verbs.
- Explain clearly and simply about why vivid verbs are important.
- Engage students in brainstorming some vivid verbs for common words.
- Record the brainstormed vivid verbs on an anchor chart.
- State the purpose of the mentor text and why they are reading it.
- Provide avatars with a clear task to engage in during the read aloud.
- Read a carefully selected passage of the book and pause for avatars to recognize the vivid verbs.
- Engage the students in a discussion about the vivid verb they identify (potentially acting out) and record it on the chart/ discuss why the author included it.

Avatar Hit

Successful avatars will...

- Participate in the discussion by suggesting examples of vivid verbs.
- Identify vivid verbs within the mentor text.
- Provide accurate descriptions of what the vivid verb illustrates (mental picture).
- Be able to describe accurately why the use of vivid verbs is important within writing.

PST Miss

Unsuccessful PSTs will...

- Fail to state the purpose.
- Fail to have a visual representation.
- Fail to elicit or engage avatars in the lesson or elicit a discussion.
- Inadequately describe what vivid verbs are and why they are important in a child-friendly way.
- Inadequately describe what the mentor text is and/or the purpose of it.

Avatar Miss

Unsuccessful avatars will...

- Not participate in the discussion.
- Suggest examples of verbs that are NOT vivid (e.g., “mad”, “sad”).
- Be unable to identify vivid verbs within the mentor text.
- Incorrectly identify words they think are vivid verbs (but are not) within the mentor text.
- Be unable to engage in a discussion about the vivid verbs in the mentor text and/or inaccurately represent the vivid verbs.
- Are unable to describe why vivid verbs are important in writing OR inaccurately describe why they are used.

Challenge Two

Planned challenge two:

PSTs will display a student's writing sample to revise it for vivid verbs. PSTs will read it, then ask avatars to identify 3 non-vivid verbs that can be replaced with vivid verbs. PSTs will brainstorm with the avatars one vivid verb that could be used to replace one of the non-vivid verbs, demonstrating resources the avatars could use to identify vivid verbs. PSTs will then ask avatars to then do the same with the other 2 non-vivid verbs, and model how to replace those words within writing. PSTs will then re-read the revised product and ask the avatars why this revision was important for successful writing.

Performance challenge for challenge two:

PSTs must:

- Present an anchor chart of a piece of elementary writing.
- Describe the purpose of the activity.
- Read the piece of elementary writing.
- Lead the avatars in identifying three non-vivid verbs; PSTs should scaffold the avatars to identify these themselves and describe WHY they are not vivid.
- For one of the non-vivid verbs, conduct a think-aloud about a) how to identify a vivid verb to replace it with (what resources can be used) and b) how to select one that specifically conveys the meaning the writer is intending.
- Scaffold the avatars to replace the other two non-vivid verbs, eliciting their input about the specific vivid verbs to replace the other words with, particularly describing why they would use that word.
- Revise the anchor chart with the new vivid verbs as they brainstorm.
- Re-read the revised product.
- Engage the avatars in a discussion about why this revision was important for successful writing.

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PST Hit

Successful PSTs will...

- Have a clear example of elementary writing presented on an anchor chart.
- Describe the purpose of the activity in clear and child-friendly terms.
- Read the elementary writing and scaffold the avatars to identify three non-vivid verbs.
- Conduct a think aloud that includes a) using resources to identify a vivid verb to replace one of the non-vivid verbs and b) why the selected vivid verb accurately conveys the meaning that the writer is intending.
- Engage the avatars in a discussion about the other non-vivid verbs, adequately scaffolding the avatars to replace the words with specific vivid verbs, including why those vivid verbs would be appropriate.
- Revise the anchor chart in tandem with the discussion, re-reading the anchor chart and emphasizing why the vivid verbs are important.
- Re-read the revised product.
- Engage avatars in a discussion about why using vivid verbs is important for writers.

Avatar Hit

Successful avatars will...

- Are able to identify three non-vivid verbs.
- Accurately explain why the non-vivid verbs are not vivid.
- Participate in a discussion where they accurately identify vivid verbs that could be used to replace the non-vivid verbs.
- Engage in a meaningful discussion about why using vivid verbs is important for writers.

PST Miss

Unsuccessful PSTs will...

- Fail to have an example of elementary writing presented in a way that it could easily and clearly be seen by the avatars.
- Fail to describe, or inaccurately/unclearly describe the purpose of the activity.
- Fail to read the elementary writing.
- Unsuccessfully identify three non-vivid verbs.
- Fail to engage the avatars in a think-aloud to replace one of the non-vivid verbs.
- Fail to engage the avatars in a think aloud about how to use resources to identify vivid verbs.
- Fail to revise the elementary writing during the lesson.
- Fail to engage the avatars in a discussion/give the avatars the opportunity to identify vivid verbs to replace two of the words.
- Fail to re-read the revised product.
- Fail to engage the avatars in a clear and accurate discussion about the importance of vivid verbs for writers.

Avatar Miss

Unsuccessful avatars will...

- Provide off-topic responses.
- Be unable to identify non-vivid and/or vivid verbs.
- Seem confused by the task.
- Not engage in the discussion.
- Forget what the task is.

Using a Cluster Texts of Picturebooks to Teach and Learn about Technology

– Lisa Madera and William Bintz

Technology is any modification of the natural world made to fulfill human needs or desires.

–National Science Teachers Association (2023)

This article was inspired by the following vignette.

Vignette

Linnea is my (author 2) granddaughter. She is 5 ½ years old and in kindergarten. On her 5th birthday, Linnea's grandmother and I gave her a computer tablet as a birthday present. Not surprisingly, Linnea was thrilled! After the birthday party, Linnea asked if she could play on her tablet. She sat down at the kitchen table with the tablet, paused, and then asked us, "What's my password? I need a password." Fortunately, her grandmother had preset the password to be the six numbers of her birthday and told her, one-by-one, each number. Linnea typed the numbers on the keyboard. Suddenly, the tablet lit up and Linnea said, "It worked. Here's my screen." Then, she asked, "How do I scroll up and down?" I placed her finger on the touch pad and moved it up and down. She asked, "Can I use these arrows, to scroll, too? That's how I do it in school." I agreed. Then, she stated, "I want to go on a website and play games." In anticipation, her grandmother had already used parental controls to control her access to content and amount of time on the tablet. She continued, "I want to go to pbs.kids.com." I typed pbs.kids.org, using the right suffix and it appeared on the screen. "There it is. All those boxes are games. I'll click on this box because it's my favorite game." Linnea started to play the game, but soon paused and stated, "Look, I can move characters all over the screen by touching these keys on the keyboard." For the next 20 minutes she played this game. Then, her

time had run out. At that time, she turned to me and said, "I need to recharge my tablet."

Later, I shared this vignette with a colleague who, like me, is a teaching educator in literacy. We both viewed this experience as more than merely an enjoyable and informative interlude between a grandfather and his granddaughter. Rather, we saw this whole experience as a complex literacy event and wanted to examine and reflect on the experience from a literacy perspective. To that end, we positioned ourselves as teachers and Linnea as both a student and curricular informant.

According to Harste, "curriculum begins in voice" (2000, p. 10). We agree. The question, however, isn't about voice as much as it is about whose voice. Whose voice gets privileged and whose voice gets subordinated, or even heard at all. Here, we focused on Linnea's voice and, as a student, saw her as a *curricular informant* (Harste & Short, 2011). Building on the long-revered idea of kidwatching (Goodman, 1978), the notion of curricular informant posits that teachers listen to student voices, watch student behaviors, and observe student learnings to take an inquiry stance on curriculum and curriculum development.

Viewing Linnea as a curricular informant invited us to revisit and reflect on this experience from a literacy educator perspective. We asked two questions: What is Linnea learning about technology? What does Linnea need to learn about technology? Posing

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these questions reminded us of the importance of teaching broadly and deeply. Linnea did not just need to learn about computers. She needed to *understand* technology broadly and deeply reaching beyond merely playing and interacting with the computer and charging it when it is done. As with many topics, we thought picturebooks might be the perfect tool to reach this goal and to think about a third question: How can picturebooks help all students learn about technology broadly and deeply?

The purpose of this article is to address these three questions. We begin by responding to what Linnea's actions show she is learning about technology. We continue by sharing what we believe Linnea should learn about technology. Within this category, we present the idea of utilizing cluster texts. While thinking about forming cluster texts, we respond to the third question which asks how picturebooks might be used to help all students learn broadly and deeply about technology.

What is Linnea learning about technology?

From a grandfather's perspective, I was so proud of her. Starting at such an early age, Linnea was enthusiastically and effectively learning to be tablet (or computer) literate. She was learning how to operate the tablet on her own with less and less help from me over time. In the process, Linnea was developing a positive disposition about technology, that is, an attitude that says, "I know how to operate my tablet and it is fun."

From a literacy educator perspective, we also noticed her development of vocabulary about tablet technology. Clearly, she had acquired and was effectively using vocabulary words like password, screen, scroll, arrows, website, boxes, click, characters, keys, keyboard, and recharge. We suspect with some certainty that Linnea learned these, and other, words through personal interest, active engagement, and social interaction, not by defining and using them in sentences on a worksheet. She made the whole experience of learning about and from technology look and sound easy and effortlessly.

What does Linnea need to learn about technology?

There are many things that Linnea needs to learn about technology. As grandparents, we want Linnea to enjoy, learn from, and respect technology. Sir Francis Bacon (1597) introduced the idea of knowledge and power working together. We believe that respect is also linked to knowledge. With respect

and knowledge at the center, we have developed six cluster texts focusing on what Linnea needs to learn about technology.

Cluster texts are like text sets in many ways. Perhaps most importantly, both are curricular resources; they are not instructional strategies. Of course, many strategies used with single texts can also be used with multiple texts contained in text clusters and text sets. In fact, one of the real benefits of cluster texts and text sets is that both invite the use of multiple instructional strategies across texts rather than a single strategy for a single text. This is just one benefit.

According to Cappiello and Dawes (2012), teaching with text sets has many benefits to include the increase of engagement, the ability to differentiate instruction, and the potential of incorporating more informational text into the curriculum. Consisting of six to ten texts, the contents can vary from picturebooks, chapter books, informational text, poems, songs, and so on. The possibilities are endless. Cluster texts also hold these attributes. The difference between text sets and cluster texts is the text that is introduced first. This book is considered the "way-in text." A way-in text is a text that has the potential to stimulate interest where little or no interest previously existed (Bintz, 2011). The way-in text is the text that is read first, as an introduction to the text set. The other texts in the cluster text are considered "stay-in texts." They are texts that students interact with to sustain interest in the topic being explored.

We present six cluster texts to show what knowledge is important when interacting with technology. This includes the recognition and understanding of several aspects of technology: 1) the power and potential technology can have along with the problems of computer technology; 2) the nature and language of the digital world; 3) computer programming and the pioneers of computer programming; 4) staying safe in the digital world; 5) helping students learn to unplug; 6) using the internet appropriately.

We selected picturebooks to include in these cluster texts for several reasons. One, we believe that picturebooks have much power and potential as part of the curriculum for all age readers. Two, the quantity and quality of picturebooks on the topic of technology have increased significantly over the years. Fortunately, we had easy access to many of them. As parents, teachers, and teacher educators, each of us has developed an extensive, personal library

of picturebooks over the years, many of which are on the topic of technology. Therefore, we used our own libraries as a curricular resource to select picturebooks for each aspect of technology. We also used collections in the children's department in libraries at our respective university libraries. And three, different aspects of technology are published across different genres of picturebooks, e.g. narrative fiction, historical fiction, narrative nonfiction, informational, biography, poetry, drama, etc. When finally selecting specific picturebooks, we tried to include a variety of genres.

How can picturebooks help all students learn about technology broadly and deeply?

Many kinds of literature can help students of all ages learn about technology. Here, we focus on picturebooks because of numerous statements like the following.

One teacher recently stated that her school spent an enormous amount of money to buy e-books for all students in the elementary school. She admitted that on the one hand, this was a good thing. Many children who already liked to read were now reading even more, and other children who did not like to read were now reading e-books. At the same time, she observed that since receiving and reading the e-books, virtually all of the children now wanted to read stories and informational text only on the e-books. She worried that e-books were displacing picturebooks. Even worse, she worried that the school library and classroom libraries of teachers that consisted of high-quality and award-winning picturebooks would disappear.

In many ways, we share the same concerns as this teacher, and many others like her, concern about e-books and picturebooks. The e-book has arrived and will continue to be used by students of all ages. Quite frankly, we enjoy e-books ourselves, and believe they have an important role to play in the classroom. We also realize that many students enjoy physically turning the page of a picturebook while many others enjoy electronically flipping through a picturebook. We suspect most students enjoy both.

For us, it is a matter of preference. We are strong advocates of picturebooks and remain confident and vigilant that the picturebook will continue to be valued by teachers, parents, and students. For those still not convinced or weary, we recommend

four picturebooks: *It's A Book* (Smith, 2010), *It's a Little Book* (Smith, 2011), *Doll-E 1.0* (McCloskey, 2018); and *Goodnight iPad: A Parody for the Next Generation* (2011). These picturebooks are highly entertaining but informative and are parodies about the popular arrival of e-books. We recommend these as an introduction to technology and literature.

Following are six cluster texts that we suggest using to showcase the many aspects that are important to learn about when considering technology. We chose the themes for the cluster texts by thinking about what we thought students should know to interact with technology successfully and meaningfully. Consequently, the cluster texts are: 1) The Power, Potential, and Problems of Computer Technology; 2) Language of the Digital World; 3) Computer Programming; 4) Safety in the Digital World; 5) Learning to Unplug; 6) Appropriate Internet Use. For each cluster text, we designate and describe the way-in text to begin. Then we share the names of other texts that are linked to the way-in text. For teachers considering creating these cluster texts, descriptions of the other texts can easily be found from libraries, websites, and so on.

Cluster Text #1: The Power, Potential, and Problems of Computer Technology

The purpose of this cluster text is to help broaden and deepen student understanding about the power, potential, and problems of computer technology. Recognizing these aspects of technology may increase the potential of establishing and nurturing respect for technology which in turn can enhance learning potentials.

We selected *Human Computer: Mary Jackson, Engineer* (Diehn, 2019) as the way-in text. We selected this book because we knew about Katherine Johnson, who is featured in *A Computer Called Katherine: How Katherine Johnson Helped Put America on the Moon* (Slade, 2019) and her achievements. However, we were not familiar with Mary Jackson. We learned that Mary was the first female African American engineer at NASA. She was fantastic at both math and science and worked diligently to learn all that she could in school. Through her hard work, she overcame the challenges of segregation and sexism. This book is part of the "Picture Book Biography" series and includes several STEM activities for readers to make some real-world connections. Table 1 includes additional books featured in this first cluster text.

Table 1.

A Computer Called Katherine: How Katherine Johnson Helped Put America on the Moon (Slade, 2019)
Blips on a Screen: How Ralph Baer Invented TV Video Gaming and Launched a Worldwide Obsession (Hannigan, 2022)
Bugs That Make Your Computer Crawl: What are Computer Bugs (Cleary, 2019)
Computers (Cunningham, 2013)
How Computers Work (Dickmann, 2019)
How Do Cell Phones Work? (Professor, 2017)
How to Talk to Your Computer (Simon, 2019)
Human Computer: Mary Jackson, Engineer (Diehn, 2019)
Inside Wearable Technology (Martin, 2018)
Steve Jobs (Gregory, 2013); *1st Grade Computer Basics: The Computer and Its Parts* (Professor, 2015)
The Adventures of Leonardo the Drone (Purdy, 2019)
What's Inside My Computer (Zuchora-Walske, 2015)

Cluster Text #2: Language of the Digital World

The purpose of this cluster text is to help students understand the nature and language of the digital world. This is important because if you are not familiar, you can certainly get lost in the lingo which might things more difficult than they really are.

We selected *Hello Ruby: Journey Inside the Computer* (Liukas, 2018) as the way-in text for this cluster text for several reasons. First, this book is part of a series of three books. It is the second in the series. Second, it pushes the boundaries on picturebooks

because it is 96 pages long. Third, it is written as a purely fictional story while integrating technological language in an interesting way to share a story where Ruby fixes her father's broken computer. She and her friend Mouse take an imaginative journey inside of the computer to find the missing cursor.

From reading this book, students will learn the language of the digital world. They can also put their knowledge and imaginations into action with fun activities that accompany the book. In table 2, we present additional books for this cluster text.

Table 2.

"B is for Binary." In *G is for Google* (Schwartz, 1998).
"Computers." In *The Way Things Work* (Macaulay, 1988)
Computers: What They Are and How to Use Them (Yearling, 2015)
Hello Ruby: Journey Inside the Computer (Liukas, 2018)
The Computer Teacher from the Black Lagoon (Thaler, 2012)
"The Digital Domain and the Last Mammoth." In *The New Way Things Work* (Macaulay, 1998)

Cluster Text #3: Computer Programming

The purpose of this cluster text is to help students understand computer programming and some of the pioneers of computer programming. Recognizing and understanding history has several potentials. First, by knowing the history of computers, you may gain a greater sense of appreciation of all that computers are capable of. Second, knowing that the person to write the first computer program did so in the 1800’s is quite impressive and may ignite students’ curiosity at the evolution of computer programming as well as facts that are connected.

While there are several picturebooks about Ada Byron Lovelace, *Ada Lovelace, Poet of Science: The First Computer Programmer* (Stanley, 2016) shares some intricacies that we did not know about. It is common knowledge that Ada Lovelace (1815-1852) was Lord Byron’s daughter. Lord Byron was a famous poet. However, we did not know that Ada’s parents separated when she was young. Ada’s mother insisted that Ada receive a logic-focused education, quite opposite of her father’s love of poetry. Ada

considered mathematics “poetical science.” As an adult, she became friends with Charles Babbage, an inventor and showed her talents when she programmed his Analytical Engine, a precursor to the computer. This made her the world’s first computer programmer. Table 3 presents additional books about Ada Byron Lovelace as well as additional books for the cluster text.

Cluster Text #4: Safety in the Digital World

The purpose of this cluster text is to help students stay safe in the digital world. We all know how important digital safety is. We also know that there are dangers in the digital world. Making youngsters aware of these dangers and the importance of safety has immeasurable benefits.

For this cluster text, we chose *Webster’s Friend* (Whaley, 2015) because we believe it illustrates a realistic but what could be terrifying occurrence. This book is written for young readers in playful rhyme and is illustrated in a cartoon-like fashion. It is also part of a series of books, centering on the main character, Webster. In this book, Webster makes a

Table 3.

Ada Byron Lovelace and the Thinking Machine (Wallmark, 2015)
Ada’s Ideas: The Story of Ada Lovelace, the World’s First Computer Programmer (Robinson, 2016)
Ada Lovelace, Poet of Science: The First Computer Programmer (Stanley, 2016)
Decoder: Dorothy Vaughan, Computer Scientist (Diehn, A.)
Dorothy Vaughn: NASA’s Leading Human Computer (Head, 2020)
Gabi’s If/Then Garden (Karanja, 2018)
Grace Hopper: Queen of Computer Code (Wallmark, 2017)
Grace Hopper: The Woman Behind Computer Programming (Loewen, 2019)
Hello Ruby: Adventures in Coding (Liukas, 2015)
How to Code a Rollercoaster (Funk, 2019)
How to Code a Sandcastle (Funk, 2018)
How Do Computers Follow Instructions: A Book about Programming (Liso, 2019); *Computer Human Computer* (Deirdre, 2020)
Margaret and the Moon (Robbins, 2017)
My First Coding Book (Pottsman, 2017)
Somi the Computer Scientist: Princess can Code (Somide, 2018)
Who Says Women Can’t be Computer Programmers? (Stone, 2018)
Women in Science and Technology - Grace Hopper (Bia, 2019)

Table 4.

Cell Phoney (Cook, 2012)
Chicken Clicking (Willis, 2015)
Clicker Downloads an App (Cullinane, 2018)
Elle Gets a Mobile Phone (Thaler, 2015)
Neerdy Berdy Tweets (Reynolds, 2017)
Online Safety for Coders (Lyons, 2016).
Staying Safe: But I Read It on the Internet, Goldilocks (Willis, 2019)
Staying Safe Online (Hubbard, 2017)
The Fabulous Friend Machine (Bland, 2017)
What Does it Mean to be Safe (DiOrio, 2011)
Webster's Friend (Whaley, 2015)

new friend when he is playing online. He really wants to impress his new friend but when his new friend wants to meet Webster and find out who he is really talking to. The book shares a cautionary message about the drawbacks to anonymity on the internet. Table 4 presents additional books that comprise this cluster text to share alternative aspects to safety in a digital world.

Cluster Text #5: Learning to Unplug

The purpose of this cluster text is to help students learn to unplug. While computers and technology can be educational and entertaining; it is important that individuals know the importance of unplugging. Interacting with others over a board game or conversation could be in danger of becoming

obsolete. This would influence social skills as well as many other facets of life.

We chose the book *Blackout* (Rocco, 2011) as the way-in text. This book tells a story where the power in the whole neighborhood goes out. While at first, panic goes through the main family's house as well as the city, they discover many ways to pass the time. The family goes out on the roof to escape the heat and finds that there are so many neighbors there, it feels like a block party. They gaze at the stars, something that they find fascinating and new. The people below them, on the street, are also having fun: rollerblading, talking, and eating ice cream before it melts. The family enjoys not being so busy and even play a board game. The book is a great reminder of the value of

Table 5.

Blackout (Rocco, 2011)
But It's Just a Game (Cook, 2013)
Clicker the Cat (Cullinane, 2018)
Dot (Zuckerberg, 2013)
Goodnight Selfie (Menchin, 2015)
If You Give a Mouse an iPhone (Droyd, 2014)
Me, Myselfie & I (Curtis, 2018)
Tek: The Modern Cave Boy (McDonelle, 2016)
When Charlie McButton Lost Power (Collins, 2007)

Table 6.

<i>Clicker Goes Viral</i> (Cullinane, 2018)
<i>The Technology Tail: A Digital Footprint Story</i> (Cook, 2017)
<i>The Tweeting Galah</i> (Maslin, 2017)
<i>Troll Stinks</i> (Willis, 2017)
<i>Twinkle, Twinkle, Social Media Star: An Internet Fairytale of Fame, Fortune, and Followers</i> (Kennedy, 2018)
<i>Webster's Email</i> (Whaley, 2014)
<i>Webster's Manners</i> (Whaley, 2015)

unplugging and interacting with each other. Table 5 presents additional texts for this cluster text.

Cluster Text #6: Appropriate Internet Use

The purpose of this cluster text is to help students use the internet appropriately. Now that we have considered many facets of technology and computers; we feel that it is important to bring it together to think about the appropriate use of the internet.

We chose *Twinkle, Twinkle, Social Media Star: An Internet Fairytale of Fame, Fortune, and Followers* (Kennedy, 2018) as the way-in text for this text cluster. This book integrates various fairy tales such as Little Miss Muffet, Humpty Dumpty, and Little Bo Peep as a mama bear tells her baby bear a bedtime story. This bedtime story is far from typical. Mama bear wants to teach baby bear how to achieve social media goals and tells a story of fame, fortune, and followers through the social media accounts of beloved nursery rhyme characters. Throughout the story, baby bear discovers the good and the bad of social media, a lesson that readers can also learn from. Table six presents the books in this cluster text.

Final Thoughts

Neither one of us grew up in a digital world. Even our children did not grow up in a digital world. And yet, students at all grade levels across the globe interact with various forms of technology daily. These are just a few reasons why Linnea's experience with her birthday present, metaphorically, caught us off guard. Unlike us and our children, Linnae, and millions of other students, are growing up in a digital world. She taught us that, not only does her grandfather needs to better understand the impact technology plays at home, but also teachers and teacher educators need to embrace a wide range of technology in the classroom. Linnea also inspired us to write this article.

This article reflects our belief that it is critical that all students have opportunities to interact with technology in the classroom. We also believe that these opportunities are mindful rather than mindless. One way students can be mindful is by having opportunities to use technology and learn about technology at the same time. We hope the cluster texts of picturebooks presented here will be a valuable curricular resource to do just that in the classroom. Perhaps reading and interacting with cluster texts can be the beginning of stimulating mindful thinking and mindful learning in relation to technology.

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Teaching Matters

Shared Impulses: How Art Making Enhances the Writing Classroom

— Alison Covey Taylor

The itch to make dark marks on paper is shared by many artists and writers...the impulse is one.

—John Updike

Creativity was never a problem for my students. Teaching at an art college, I have the pleasure of working with incredibly innovative thinkers. Majoring in everything from fine arts to fashion design, my students come to me with creativity embedded in their core. Still, on the first day of class last year, I asked these creative students how comfortable they were with writing, and 85% responded negatively. While their personal experiences were different, the one commonality I found was that my creative students weren't able to translate their creativity and artistic skill to paper, which caused stress around the craft of writing. Why, I asked myself, were these talented artists struggling to bring their skill to paper? Why were they intimidated by what I have always just assumed was a different form of art?

My course at the Art Academy is called, "Artist as a Writer" and focuses primarily on creating narratives, artist statements, and art reviews. Considering how my students may have struggled to write in the past, I wondered if experiences with art-making would help them develop ideas for writing, cultivating their identities and personal processes as writers. Surely, bringing more of what they were comfortable with into my classroom would break down preconceived notions of writing. I hoped that by bringing art making into the classroom, my students wouldn't just suffer through the assignments but rather start to love writing by realizing how fun it would be to use their creative energy on paper.

Embarking on this early in the semester, I realized art making showed students how they could use their creativity when writing; and the most positively impacted students were those who explicitly reflected on the connections between visual art and writing. If a student painted as a way to brainstorm but then never spent time reflecting on where the painting process took them in their writing process, growth wasn't always ensured. Similarly, if a student spent a few days in a row sketching but never looked at all of the sketches together and sought a commonality, it became a missed opportunity. Noticing the powerful connections made in reflective students, I started to require reflection after an art making experience. These reflections not only helped me as a researcher but offered me guidance on how to continue asking how art making could enhance students writing.

Looking for Answers

Sketching to create ideas and sketching as prewriting is not a new idea. In *Drawing on the Right Side of the Brain*, Dr. Betty Edwards writes, "Learning to draw, without doubt, causes new connections in the brain that can be useful over a lifetime for general thinking. Learning to see in a different way requires that you use your brain differently" (Edwards, 1979, p.3). Edwards studies how drawing might help people overcome mental blocks during creative work, and she posits that drawing can truly reveal to us what is going on inside our minds. Edwards discusses perspective and observation as the key components

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Teaching Matters

in drawing. As a writing teacher, I find these essential in composition as well.

Researchers have also considered how art can help us become better observers, and, in turn, writers because “to learn to observe you need merely to slow down in the course of an ordinary day, to spend time concentrating on and cataloguing the sights, sounds, smells, and textures of the world as you move through it” (Bense, 2019). Bense writes, that “if students of mine had the impulse to draw and paint, surely they also had an impulse in them to writer,” and suggests writing teachers allow these impulses to marry:

“Writers, like artists, work to distill something tangible into the fewest necessary strokes. They must be careful not to bog readers down with the superfluous, and yet give them enough that is concrete and surprising to keep them engaged, to lure them into sinking completely and credulously into the text. A talented painter suggests movement and feeling with a slicing flick of the brush. So too can a skilled writer conjure a singular image, voice, or setting in one ringing sentence” (Bense, 2019).

I believe artists and writers share the same DNA, especially in the early stages of composing. This idea furthered my belief that my art students had the capability to create strong writing.

Because “writing that uses visual art as a starting point may prod some students to raise the verbal stakes of their work and to examine the properties of their writing in unaccustomed ways,” art can support expanding writer’s use of description (Upton, 2003, p.98). Such prodding may help students tune into unconscious ideas as “art brings out something intrinsically human, what Miro-like Jung called a ‘collective unconscious.’” This, in turn, allows the teacher to see “the value of discovery with her students” (Colin, 2003, p.26). Art making allows student writers to think more deeply and describe more accurately in their writing classroom.

It is important that writers write every day. Daily notebooks can become a place where students track their experiences, processes of “uncovering and discovering which are preludes to recovering” (Foster, 1976, p.66). Like journal writing, sketching can lead to the realization that “we have an ability to solve problems... designing is bringing order out of chaos as well as creating.” (Foster, 1979, p.65). While the idea of keeping a notebook had been a part of my teaching rhythm since the beginning of my career, it wasn’t until this last year that I considered the power of a writer’s notebook full of sketches and not just words.

Bringing writing and visuals together is not new. For instance, comics are important to the art world because “visuals make the writer transparent in a very different way than the writing of the prose memoirist. The comics writer may use images, including images of himself, to signify gestures, moods, and expressions that cannot be adequately conveyed in prose” (Sealey-Morris, 2015, p.36). Visuals allowed for students to more adequately describe inner emotions. Sketching offers similar advantages because:

“Sketching, drawing, or graphing developing ideas gives students who can visualize images an opportunity to use that talent productively. It forces those comfortable with words to see their text through a different perspective. For both experienced and novice writers, this unconventional mode can work with or against their customary thinking patterns, producing valuable insights regarding overall purpose, structure, use of evidence, etc.” (Finley, 2001, p.66).

The most important part of using sketching as prewriting is the conversation that happens around it, elevating the role of reflection in a writing classroom that uses art-making to support student writers.

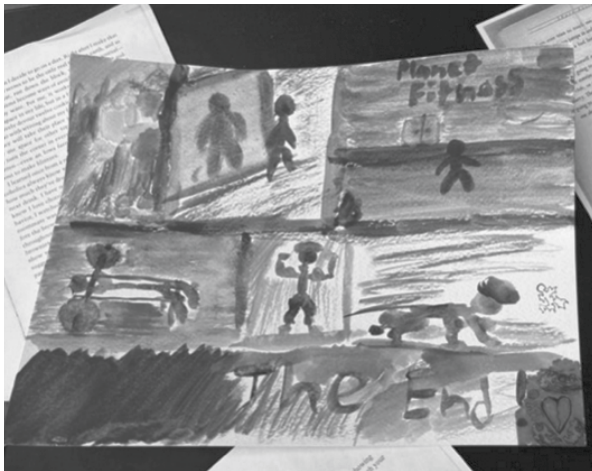
Sketching As a Way Into Writing

Kiera¹ stayed after class to let me know she could not think of any ideas to write about. She showed me a blank page with one word on the top, but right underneath her writer’s notebook her sketchbook was spread open with sketches filling the entire page. She couldn’t seem to get any words down on the blank page when writing, but I wondered what would happen if she brainstormed in the way her brain was already working. I considered how I could use her drawing skills and creativity to launch her into a space where she had ideas she could share through her writing. I thought that drawing would probably help Kiera, and other students who were struggling, get to that space. Putting my teaching alongside this research, I set out to offer experiences with art making that would help my students develop ideas for writing.

Because they are illustration majors, most of my students do a lot of drawing their freshman year. While they are used to sketching out ideas and concepts, they often struggle to do the same kind of exploration as writers during free writes. Seeing the similarities between sketching and free writing, I realized I could bring their ease with sketching into the writing classroom. Even students who are not

¹ Names are changed for privacy throughout

formally trained artists could benefit from this style of teaching. How many of us see notebooks filled with student doodles alongside the margins? Trying to engage this impulse, I decided to ask my students to sketch for 10 minutes every day for seven days then bring these sketches into class the following week. I told them nothing else about this assignment, hoping the vagueness would draw out authenticity. On Monday, I had them use their 20-minute free write to look through their sketches to find commonalities. After writing, students were asked to share and reflect with a partner. Students reported finding ideas they didn't know they had. Maya wrote, "I think my partner saw through these sketches how driven I am and how based on emotions my work is.



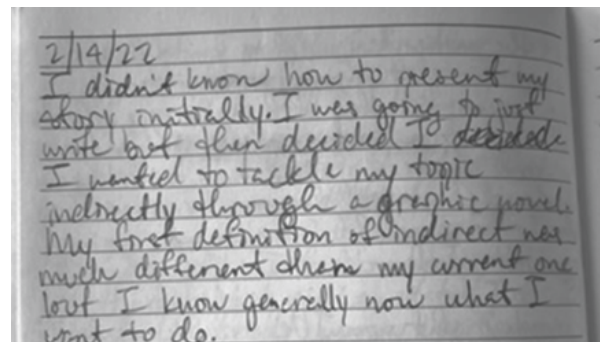
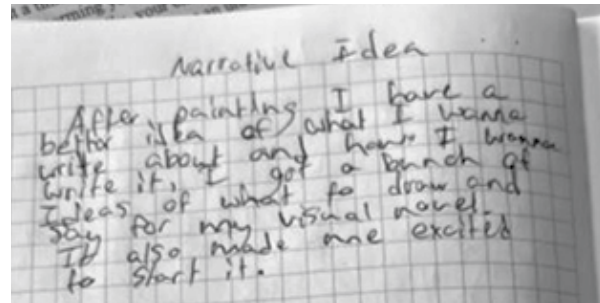
My mental space is more often than not a dark place and I think that is well reflected in both my art and writing which I realized through these sketches. I tend to draw things based on my current emotions."

Sketching allowed Maya to realize that emotions dictate her work. She wrote that even the colors she incorporated related to her feelings. Throughout the semester, she would start sketching before writing in order to consider where she was in her thinking about a project. This assignment focused on sketching encouraged other students to act similarly, allowing them to come to conclusions about ideas they had been considering for writing.

In some cases, this assignment also revealed students' passions, such as when Malique realized that his sketching impulses revealed a love for surrealism. Malique wrote, "Commonalities I saw within my sketches were concepts of surrealism, bold linework, eye sketches, wavy natural lines varying in width and geometrical shapes. The sketches were all small in size and done with a number two pencil. The sketches have a small surreal whimsical and abstract

nature to them." Prior to this assignment, Malique had not realized that this is where his creativity was leaning. His sketches, done on different pages, were nearly identical.

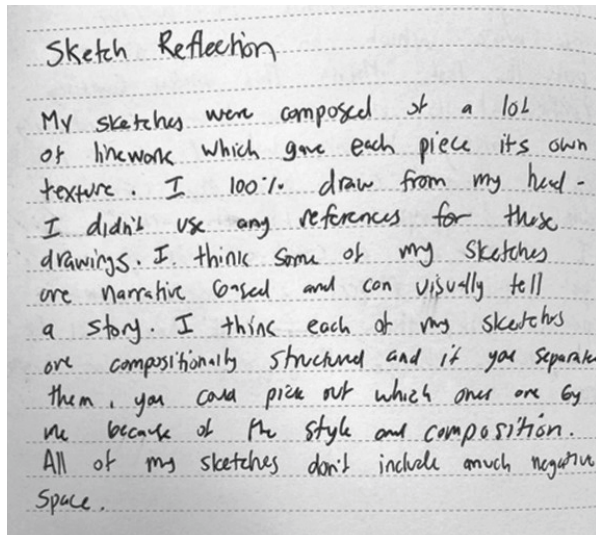
Similarly, Nayirah wrote, "(Sketching) can help a person lose themselves in their art like we do when we are writing sometimes." I have watched Nayirah during our writing periods, and she truly does seem to get lost in her work in a way I assumed she also did while painting. I hoped such discoveries might offer students insight into specific ideas for their personal narratives and other writings we would tackle later



in the course². After introducing quick sketches as a form of free writing, most students mentioned they felt excited to do sketching

As a writing teacher, I saw the importance of helping students see the value of working on something for a little bit every day. Daily writing made more sense to my students after sketching every day. For instance, Emma reflected that sketching came natural for her, writing, "Something that I learned and am going to carry with me is that you shouldn't always think before you write, sometimes you just need to start writing. I've always felt you needed to plan out everything you write beforehand, and I feel that's why it used to be so hard for me to write. I think this method really applies to me

² While it did not heed the results I expected, I do think a few students gained insight into who they are as creators. I will discuss this further later in the text.

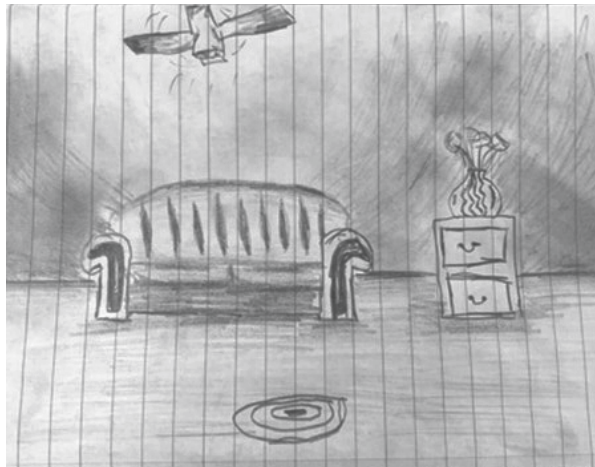


because I'm an artist who draws and have a hard time thinking of something to draw sometimes, and it can make it hard to draw anything at all. I've taken this method and applied it to my drawings, artwork, and writings as well. I no longer plan out everything I create, and it's made it so much easier."

For students like Emma, writing seemed daunting because she felt that each word hitting the page needed to be perfect. Sketching showed her a freedom she hadn't known that translated to her writing life as well.

Sketching to Solve Problems

Drawing also offered an opportunity for my students to problem solve as they engaged in writing. My students spent a lot of time telling me, "I don't know what to write." And I countered with, "How do you know what to paint or draw?" I thought of doodling, and wondered if such informal art making might help students consider what they *already* knew. Looking



for a tangible way to bring this understanding to my classroom, I handed my students a watercolor set and paper. Introducing the personal narrative assignment to them, I told my students to spend the class using this blank canvas in whatever way they wanted to prepare for the written assignment. I offered that while ungraded, this activity might help them explore the prompt, even if the artwork had nothing to do with their writing in the end.

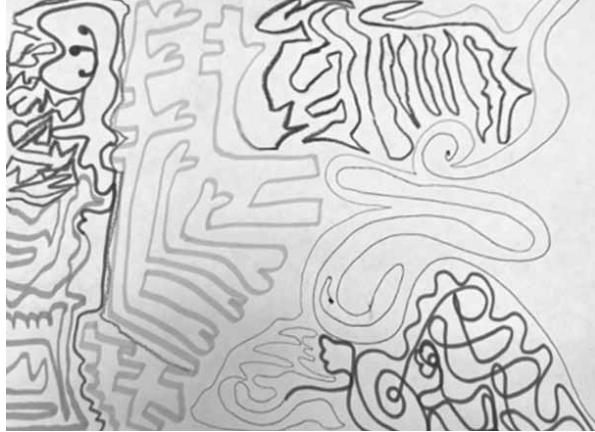
A few students wrote words and then painted beside the words in a web like fashion. Others blocked out comic squares creating potential story boards. One student just painted streaks on her sheet. Each student approached the process differently, but all came to conclusions about what they wanted to write on their own with visibly less stress. For instance, Leo was one of the students who blocked a potential comic. He shared that at first, he was just making squares with people in his life, but this led to ideas he used in his narrative.



Kiera, on the other hand, reported that the sketching allowed her to just think while she painted. When I met with Kiera during her one-on-one conference prior to this experience, she had no idea what she wanted to write about in her personal narrative because the memories she had felt too personal to share. But as she was painting, she considered a way that she could articulate what she wanted to share through a comic. It is important to note that just painting here would not have had the same result because it was during the five-minute reflection of that painting when Kiera was able to articulate what she had been thinking about as she made that cactus and painted blocks. Painting first helped student writers like Kiera come to their ideas about what to say. (Insert pictures 3 and 4 about here).

Sketching as a for Connections and Conversation

In another lesson, I had students listen to the 10-minute Ted Talk “How Drawing Can Set You Free” by artist Shantell Martin. In the video, Martin discusses how painting and drawing can set you free (Martin, 2020). This talk would be applicable for all students (and people), not just college students. Because Martin’s art style is one led by continuous lines, I put students in groups and asked them to

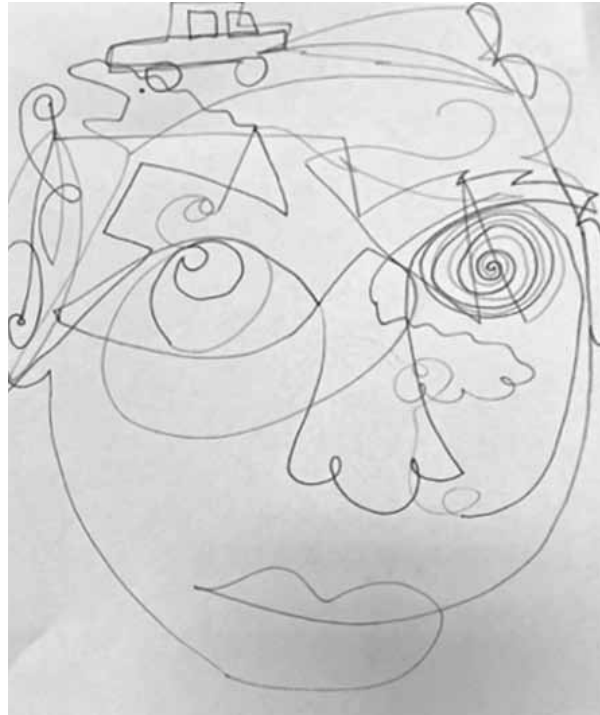


create a piece together with a continuous line without discussing a plan. The students had to pass the paper around to each member of the group until they collectively thought the line drawing was finished and then reflect on the experience.

During this experience, all of the groups created something they were proud of; I saw students taking pictures of the drawings as they were leaving class. This exercise allowed student artists-turned-writers to understand that they can just write or draw freely in order to brainstorm, which also helped them understand the relevance of our notebooks. After reflecting, one group wrote, “It’s kind of like if you’re randomly writing and letting it flow. You kinda just do what you’re feeling at that time. You could be brainstorming, creating ideas for a piece, or just for pure enjoyment.” Another group shared that they recognized the “Artist psyche, throughout the scribbles and lines we see glimpses of ideas.” Working together, my students could see how these lines led to ideas. These groups were connecting their drawing and writing through conversation and reflection.

A few days later, Maya reflected individually, sharing in a free write, “Both creative writing and being an author are types of art. It takes an imaginative mind and a good creative flow to be able to write something. Writing also helps spark inspiration for other forms of art. For me, personally, I get a lot of

my illustration ideas from simply doing our writing prompts.” Students like Maya were starting to see the connections not only from their art to writing, but the reversal as well, which shows direct success to the idea that painting/creating can help them in their writing thought process.



Lastly, Allie summed up the purpose of sketching and writing well, reflecting on how she appreciated the free-flowing nature of these assignments by writing: “I like writing even more now when I started to realize all the similarities it has with drawing and creating art as well. There are so many similarities between art and writing that people don’t realize.... Another thing very similar between drawing and writing is the process of coming up with ideas. You



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can either sit around and plan it out and think about it for a while, or you can jump right into it and just let your mind flow free.

Creating Experiential Artist Statement to Problem Solve

Since I teach at an art school, my students are required to create an artist statement in my class that will follow them through their art career. These statements may hang on walls in galleries, be underneath their illustrations or in magazines, or alongside their work. Last year I tried something different, hoping that bringing art making into this writing assignment would be helpful. A high school teacher might change this to asking students to create a “life statement,” asking students to think about who they want to be when they graduate. For this assignment, I asked students to create a visual or physical artist statement to represent what they hoped to portray as they composed their written artist statement³. Calling it an “experiential artist statement,” students understood that it would be different from the traditional assignment. To create their experiential artist statements, they used creative expression and art making to define their work. Students made videos, collages, paintings, or poems. One student even performed a one-person show. After we finished the experiential statement, students wrote traditional statements, and I observed that the art making helped enhance those statements.

Art-Making for Self-Discovery

Gabriel created a video artist statement before creating his written. After using art making in this way he said, “I work mostly with video and audio to create art. I’m appealed to it because of the many different types and styles of visuals I can make. Using different audios also gives the videos a completely new story and it only expands the number of possibilities I can

³ An artist statement is a piece of writing that helps people understand what you create.

create.... Although there aren’t words explaining what is going on, one can still try to understand what they’re seeing and translate it in their own way. I made all these videos with different color themes and different speed paces which contrast with one another helping the experiential learning. The section with one word: “story.” signifies that something made in pixels and with sounds can be turned into any story. Which is why I enjoy creating videos like these and experimenting with them”.

Gabriel’s written artist statement was stronger after creating this experiential statement. After reflecting he wrote, “This semester, I was opened up to the idea of writing being a branch of art. I realized this when I saw our alphabet and the words we use to write things, are only symbols. We give these symbols meaning as a society and we agree upon them. Words being symbols isn’t the only reason I see writing as another art form. I’ve also opened up to the way words can be used to convey messages and evoke emotions in descriptive and abstract manners. Through self-experience, I can say writing about something with flooding description is not easy. It’s a craft that I am now intrigued by and will work on using it with more ease.” He felt he was more thoroughly able to describe himself through his experiential statement, but I would argue that





his confidence in creating the experiential statement allowed for him to write his strong artist statement that will now follow his artwork.

James shared that he found it fun to “provide information about myself in an expressive and non-literal way. My goal in what I create is to tell a story or narrative that viewers can connect with on a personal level whether it’s visually or conceptually. I feel like my experimental statement did a better job at communicating who I was as an artist and what inspires me than my traditional statement. I was able to present more information in a shorter amount of time.” James had made a video for his experiential artist before creating a rich written statement. His traditional statement was more descriptive than the other work he has created in this class and I assumed that came from creating the video.

Creating these experiential artist statements opened new opportunities for us as writers. Alessia started the project already worried about her traditional artist statement and felt stumped when she began her experiential project. She started just creating to see what would happen, and she ended

up with a bright pink paper-mache painted birthday cake. While making the cake, Alessia said she came to realize what she wanted to convey in her traditional statement as well: she wanted her art to feel childlike and happy, and to her there was nothing more childlike than a child’s birthday cake.



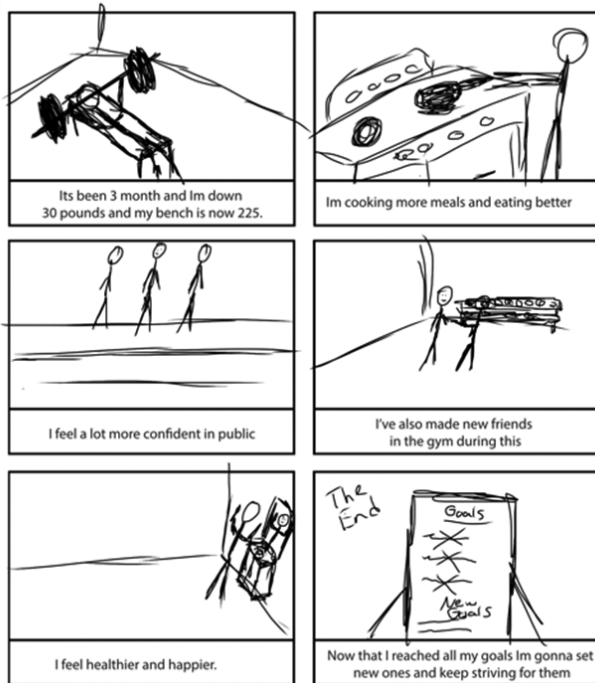
Students learned more about themselves through this art making which provided ideas for their written statements. And as seen with the students above, their realizations came through reflection.

Creating Graphic Narratives

For the personal narrative unit, I allowed students to involve more art making by writing a graphic novel, allowing them to integrate art making and technology with their personal stories. While the graphic novel was not required, nearly 70 percent of my students chose to do the narrative assignment as a graphic novel.

In my classroom, students who created graphic novels had already learned the program Indesign, but teachers can incorporate other ways for students to compose graphic novels. For instance, teachers

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can create a comic template on Google classroom for students, allowing students write the text before printing and illustrating the strip. Another option would be to incorporate a program such as Storyboard that, but I would recommend also making a tutorial video for students to watch before creating.

Tish is an expressive artist who came dressed daily in the colors she used in her art. Her writing prior to this assignment did not have the same “sense” of Tish’s personality. By creating a graphic novel narrative, Tish was able to use the colors and images she wanted to convey her story. Tish wrote, “What I’ve enjoyed from my personal narrative is that I got to draw and remember each specific thing I did that day. I remember each face and what I even wore on that day. I loved how I could love and be in that memory of that day. I never did a graphic novel before so I would have to say I had fun with this project. Writing this way made it much better to be in that experience instead of writing it down”

James also found that using imagery to convey his story allowed him to share it more accurately. After finishing his piece, he wrote, “I chose to write a graphic novel instead of formally writing a personal narrative. I did this for a few reasons that I felt would challenge me but also make me feel comfortable. I am an illustration major, and a lot of my personal artwork is made to somehow tell a story (most of the time) so I felt that making a graphic novel and drawing my story would be more fitting considering

illustration is what I want to make my career one day I am not a terrible writer- but I wanted to use my imagery to convey a story because I feel I am better at that than using my words.”

Students who considered themselves more artistic than writerly found it easier to draw their story and then write beside their illustrations. I found their writing to be more authentic.

For instance, James shared that by using imagery to convey his story, he could more accurately describe what he wanted to share. Ariana reflected a similar idea when she wrote, “I am able to understand the story more through the pictures when I read graphic novels and it helped me to do this when I told my story.” For others art-making helped students write through the experience with more detail. Milo shared, “Graphic novels give all the internal dialogue so it helps me to be able to tell me story in a more personal way.”

Because of the growth I saw in the students who selected the graphic novel option, I plan to require the graphic novel rather than simply offer it as a choice in future semesters. I found the graphic narratives to be more insightful and students to be more engaged with their work while writing it in this form.

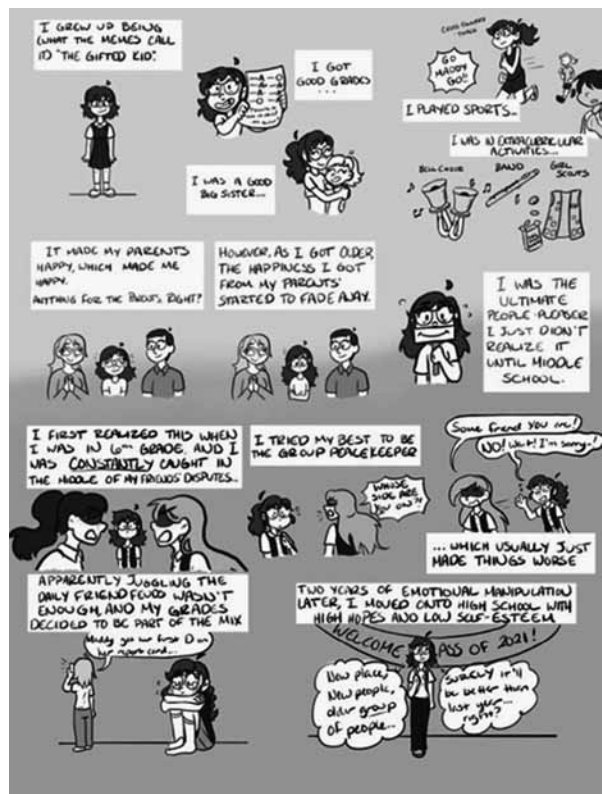


Barriers to the Process

While most students realized that art making made a positive impact on their writing, I found that certain art students could not be convinced to see themselves as writers as well. Alex, for example, spent all of the time I had allotted for painting and curating ideas on a canvas just staring at her paper. She responded, “I zoned out hard. I will probably just write about my friend Mai.” To better support students like Alex, I plan to offer painting prompts for students during painting brainstorm activities, realizing that activities that are too open ended may cause some students to find themselves at a loss.

Other students struggled to understand the purpose of the art making. Every time we did an art-making assignment, Amir told me that he just didn’t understand the point or connection because he was “an artist NOT a writer.” Amir was visibly frustrated that he had to take this “non-art” class. I could not help students like Amir see the joy in what we were doing. In the course evaluation, one animation major wrote, “Good class but not for me, not helpful for my major.” Another student wrote in a midterm review, “This class isn’t helpful to my development as an artist.”

Reflecting on these student experiences, I know I need to spend more time prior to art making and



draw explicit connections between art and writing. I also plan to include model texts that share artists’ claims that art and writing go hand-in-hand. Perhaps seeing artists and illustrators they respect share their writer identities will help my students see the value of giving writing a chance.

To help motivate resistant students, I plan to find tangible ways to help students see their art improving by including more reflection time and by asking students to offer examples of times that writing was enhanced by the art making process. I may also change the process up a bit: some days, I may ask students to write their ideas out before engaging in art-making.

There is still room for improvement in my classroom, and I was sometimes disappointed by the lack of depth in student writing and art making. During our daily sketching assignment, for instance, Johnny worked hard to try to gain a deeper understanding of what impulses compelled his art making, but the only conclusion he could arrive at was that he was excited about Halloween because each day he drew something related to the holiday. While I wouldn’t call that a failed assignment, it didn’t meet my teacher vision that students would arrive at a deeper knowledge about themselves and what they hoped to create. Again, I wonder if I need to use a bit

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more structure in the activity, meeting the needs of students like Johnny, who may need more guidance. I plan to include model responses, sharing examples before students reflect on their sketches, in hopes of prompting more curiosity from my students.

In Creative Harmony: Art and Writing

The majority of my student artists-turned-writers learned to express their creativity through writing. I want my students to see writing as another enjoyable form of art making. I want students to learn how to help their creativity cross genres and build a lifelong relationship with writing, causing writing and art to live in creative harmony in their lives. I wonder if writing teachers might find meaningful ways to blur the lines between visual art and writing.

The lessons I learned have a place in every writing classroom. Every writing classroom can include the practice of keeping a writing/sketching notebook, offer writers an opportunity to write graphic novels in response to a prompt, and allow students to incorporate art making in the thinking process before a paper begins.

Teaching at an art school has convinced me of the importance of the relationship between art and writing but I am also convinced this connection needs to be made in a traditional writing classroom. Writers will grow from being influenced by their art making. The research is pointing to a future of multimodal writing classrooms and I hope we start to see courses that offer a more holistic approach to

writing. This will allow students to become better writers, thinkers and humans. Incorporating art allows students to gain a deeper understanding of themselves, their writing and the world.

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REVIEWS

Expanding Literacy: Bringing Digital Storytelling into Your Classroom (Pierce, 2022)

– Jen McCreight

“Are we preparing our kids to be meaningful contributors in this digitally literate universe? Are we teaching them to write effectively inside of this literacy?...I don’t think we are” (p. 11).

Brett Pierce’s *Expanding Literacy: Bringing Digital Storytelling into Your Classroom* (2022) simultaneously makes the case and draws up the plans for digital storytelling as a student-led, process-oriented opportunity for middle and high school students to show what they know and engage meaningfully with their learning. He defines digital storytelling as “the capacity to communicate using text, sound, music, and imagery – still and moving” (p. 6), and he powerfully combines his voice with the voices of teachers and students who have engaged with digital storytelling to bring this concept to life in the context of the day-to-day classroom.

Pierce began his career teaching high school English in Virginia, and then spent over 20 years at Sesame Workshop as a producer in the international department. The combination ignited in him a new professional focus, leading him to bridge his content creation work with classroom curriculum.

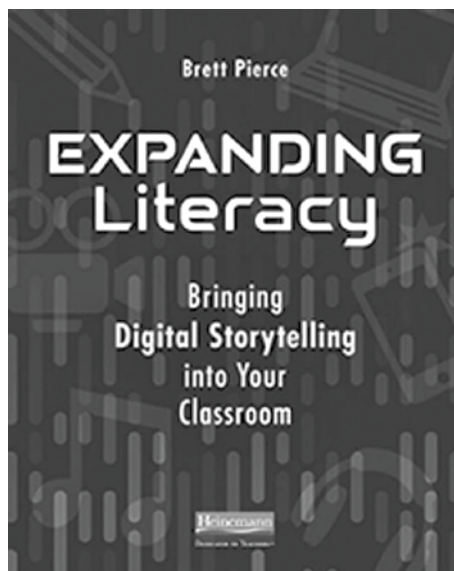
As a first step, he started the non-profit Meridian Stories (www.meridianstories.com), whose mission was to prepare students “for the 21st century workplace by providing opportunities to collaborate, create, problem solve, and lead in the development and production of meaningful digital narratives that address curricular goals” (Pierce, 2010). The student and teacher voices

highlighted through Meridian Stories feature heavily in *Expanding Literacy*, and readers are encouraged to peruse the site for even more examples and stories.

Pierce’s goal with this text is to support teachers in creating an environment in their classrooms where digital storytelling is front and center, and through which students not only demonstrate understanding of content, but also have the opportunity to practice what he calls *human skills*. These are:

“...the traits that students need to enter a workplace that is in constant motion. Human skills are about training the mind to take calculated risks, look for patterns, and transpose failure into opportunity. They are about listening, delegating, empathizing, and imagining... We are talking about curating a student’s identity from operating in a narrow, finite sense of self to an infinite sense of self. Not pie-in-the-sky infinite. No. We are talking I-can-handle-most-things-that-come-my-way-infinite. Open-ended thinking” (p. 19).

As such, digital storytelling is more all-encompassing than the oft-discussed 21st century skillset and encourages students to engage with an ever-shifting set of abilities prized by the broader world. We must teach our students how to problem-solve, how to collaborate, how to think,



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Reviews

how to create, because the digital world is constantly reshaping how we experience the world around us – and how we engage in it.

For Pierce, then, digital storytelling is so much bigger than a learning strategy or a lesson hook to involve students in classroom content, and this book is his chance to convince you, his reader, of the same.

Outline of the Text

According to Pierce, within digital storytelling, “there’s an inviting portal for just about everyone – a window into the possibility of academic engagement and success for all” (p. 9). But what does it *look like* in a classroom? He breaks its process (and that word – process – is used very intentionally, as Pierce repeatedly makes the case that *process* is more important here than *product*) down into four main steps, that can be applied within any genre: research, create, develop, and produce.

After spending his first two chapters laying out the rationale for and justification of the use of digital storytelling in middle and high school classrooms, Pierce dives into chapter three by sharing what it means to engage in each of these steps, and then provides hands-on exercises in which to engage students to prepare them for the eventual creation of a digital story. He encourages teachers to incorporate these exercises when they can, to increase students’ comfort level and prowess in outside-of-the-box thinking. Among each set of possible activities, Pierce sprinkles in the voices of students and teachers who have engaged in digital storytelling, to highlight what they learned from the process.

Chapter four is focused on both the value of storytelling (look at how prominent it is in the world!), and how to teach students to craft a compelling narrative. Pierce argues for the importance of this skill, even as it is somewhat underutilized and undervalued in educational spaces. Harkening back to his focus on process, he states, “As humans, we *process* knowledge and information best in the form of stories. Conversely, as humans, we *communicate* knowledge and information best in the form of stories” (p. 83). Ever focused on practical application, Pierce also provides examples of how traditional assignments (often papers or presentations) can be turned into opportunities for storytelling. Both do the job of communicating learning, he says, but only one is memorable...

It’s in chapter five that Pierce puts all these parts and pieces together, laying out a plan for creating digital stories in the classroom. You’ve

built the skills intentionally, he says, and now it’s time to relinquish teacher control and give the classroom over to student agency and ownership. While this can be frightening, and it can feel risky, the student-driven work that emerges is well worth it! Sure, missteps and challenges will occur in the short-term, but the long-term impact will lead to greater student investment in their own learning. Pierce then lays out a four-week plan to engage students in the creation of digital stories, with each week focusing on one of the four core components: research, creation, development, and production. He describes the crux of each in detail, and then guides readers through what each week might look like from the context of a particular curricular goal/topic. Importantly, he makes clear throughout that the teacher is by no means absent during this process – this timeline, while largely student-focused and student-led, also includes mini-lessons and guides for what students should expect to accomplish each class period.

Overall Impact of the Text

I came away from *Expanding Literacy* with a clear but flexible framework for how to scaffold students in the process of creating digital stories. As someone who has always loved the concept but was uncertain how to guide learners toward meaningful content creation, this in and of itself was valuable. Throughout the book, Pierce shares specific activities to focus on small but important digital storytelling skills, which helps educators to see how they can fit the scaffolding necessary to engage meaningfully with this work into the busy flow of their classroom day. And while he does provide critical frameworks and ideas for supporting students, he also eases teachers’ minds by arguing that they do not need to give over their entire academic year to this process; instead, Pierce recommends “choosing four to eight activities for the first year, building up to one or two full-on digital stories in the spring” (p. 147). Even more, he states that teachers do not need to be fluent in all the new apps and digital tools with which their students will be familiar. Instead, the students can figure this part out, within the context of a space where learning is student-driven, and where all members of the community are positioned as both *educator* and *learner*.

Pierce’s overall framework and the rationale behind the use of digital stories in classroom spaces was even more compelling, and I am certain it will permeate how I think about assignment

construction well beyond the scope of this particular learning strategy.

First, he focused throughout on the fact that digital storytelling offers students multiple pathways to content. As one teacher, Darren, said, “there was a little bit of a hook to get everybody. There was a wide enough hook...there’s a hook for everybody on a wider spectrum” (p. 125). There are hooks for artists, for researchers, for musicians, for project managers, for everyone! This is powerful.

Second, Pierce continued to come back to the idea that digital storytelling is designed for an authentic audience, and not just for the teacher’s consumption. As he said, “students, for the first time in history, have a variety of media platforms to amplify their voices. It’s our job as educators to teach our students to tell meaningful and impactful stories that can become significant contributions to this infinitely expanding digital universe of content” (p. 11). Educators must pay attention to students’ want to amplify their voices within this digital world and be active in helping them cultivate this voice in a developmentally appropriate and ethical way. After all, students are in these digital spaces

whether we enter them in partnership or not – by wading in together, we can help shape students’ participation in them.

In short, I find Pierce’s *Expanding Literacy* to be an incredibly useful guide for any middle or high school teacher who is interested in digital storytelling but who might not be sure where to begin. This text could also be used quite effectively in pre-service teacher programs, to support novice educators in building robust digital learning spaces with their students.

I encourage you to check it out. And in the spirit of the text, I am certain Brett Pierce would welcome your stories and experiences into the threads of his digital storytelling community.

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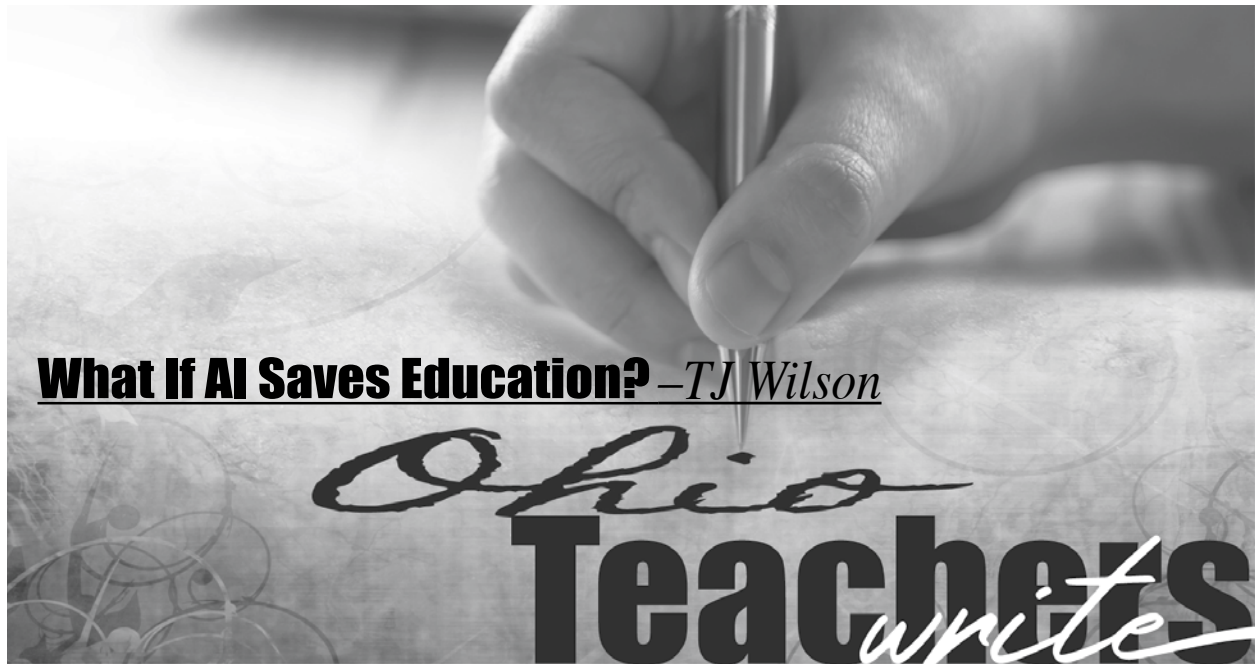
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What If AI Saves Education? –TJ Wilson

Plagiarism as Monster from the Deep

Standing on the sands of Cape Cod, on the edge of a continent, in front of vast waters, I watched a woman bobbing in the waves not five feet from a seal. The woman observed the seal much like a tourist hovers around a fence looking at some landmark or zoo animal. Meanwhile, I stood on the sand, waiting for the whitewater surge of a beast of the deep.

Much like people fear that spiders are hiding in all the dark spaces, I am always suspicious of the presence of an apex predator whenever I'm near the ocean. I find myself drawn to this ominous zone of anxiety that humans probably felt often in the past, standing on the edge of the known and controllable, the transition to wilderness.

Before visiting Cape Cod, I had hardly ever thought of the Northeast or its coastline. For some reason, to me at least, northern coasts have more charm to them. Perhaps because it contains evidence of a harsh winter, or maybe it's the presence of houses with weathered cedar shingles, romantic in some out-of-time way. Even in summer, you can catch yourself looking around for someone wearing a captain's hat, smoking a pipe that never leaves their mouth, wearing one of those turtleneck sweaters with contours like corduroy. This the type of person I have my eye out for in a place like Nauset Harbor, which is a weird body of water full of grassy

sandbars whose tides fluctuate quite drastically. It's look has all the quaintness of northern coasts, and it's a great place to go clamming.

One day, after an hour of clamming, my wife's family and I stowed our rusted horror-movie-esque clamming rakes, strapped our buckets of clamming bounty to the kayaks, and set off back over the bay to the waiting trucks. This was fine, except that the only vessel left for me was a paddle board. I had never captained one before, and so I remember trying my best to keep up with everyone, hiding my high-level anxiety of falling in front of my wife's teenage cousins as they chatted with me nonchalantly in their far safer kayaks. I engaged my legs past their usual strength, gripping the board underneath my feet, making little jitters and falterings and rockings, things that any novice would do as they attempted to make the board part of their own body. All the while, I was looking around me for a large grey underwater shadow heading my way.

My fears weren't totally off-base. The growing seal population had increased the interest of Great White sharks. Attacks on humans and seals had increased around the area. During the pandemic, I read a *New York Times* article that featured drone pilots who attempted to help spot the sharks. Great White sightings aren't difficult to find on YouTube. And once you do watch them, you will realize what I realized: sharks are more present than you think.

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It is not that they are there that's of any interest; it's how much they are there without anyone knowing.

My anxiety of the ocean is so strong. There have been countless times when I've wanted to dip my whole body into the water, open my eyes and look around so that I can monitor the below-water environment, looking for signs of would-be predators. In my weirdest moments, I think of strange evolutionary modifications that must exist in the multiverse. Take the seal, for example. The seal's ancestors were mammals that slowly evolved back to the ocean, transforming its legs back into halfway points between fins and land appendages. What if a more aquatic version of ourselves constructed brains in our legs similar to the nine brains of an octopus? What if this made saltwater-adapted eyes in our legs so that we could sense what was underneath the water? Would I feel safer?



Even with leg eyes, I would be no seal. Seals are fast but they can't outrun sharks. And this sort of leads to a kind of mental exhaustion and a mind that is definitely not enjoying the pleasantries of a vacation with an ocean and beach involved.

Now, far inland in my Ohio home, typing this essay, I think such fear produces much waste. Why go to the beach if you are going to spend so much of your focus just worrying about sharks? Play the statistics through your head and let it go. This is the sort of risk-management we do in our day-to-day when we drive a vehicle, cut vegetables with a knife, or lock the doors of our houses.

I bring up these fears of the deep because it reminds me of how us teachers think of a new form of plagiarism. This one differentiates itself from a long line of plagiarism technologies in that it holds many tricks in its depths and will only get craftier, leaving teachers wading in more menacing waters.

AI Increases the Deadliness of the Monster of the Deep

Sharks have existed long before dinosaurs. They are attuned to their environment in ways we are still understanding. But statistically speaking, as far as dangers to humans are concerned, sharks are moot. Not to say you shouldn't flaunt an encounter with a shark by wearing shiny jewelry that looks like fish scales and swimming 50 yards into the ocean at dawn or sunset, when sharks are active and can't see well.

AI increases the mysterious depths of plagiarism. It is the most dangerous cheating aid teachers have come across, a sleek and smart and versatile predator. AI is a large shark whose habitat is more prevalent than sharks in the ocean or sharks in a tornado. We have no idea where such a thing might strike.

But like shark attacks, the actual threat has remained small even if the fear remains large. Perhaps the biggest thing we worry about is that we basically cannot totally prevent plagiarism. With AI, there is less certainty than before. And it's especially disconcerting that AI affords plagiarism the most efficiency it has ever had.

Let's not minimize the fears of plagiarism. Plagiarism is the ultimate failure for teachers because it negates feedback that is truly needed, leaving students without an experience that propels them forward to their next learning challenge. Any sort of plagiarism causes a teacher's heart to sink, a tragedy spanning both teacher and student self-doubt. A culmination of anxieties. And this is not to mention what a student will have learned if they rely solely on plagiarism throughout their educational careers.

This is our main worry with AI. Will AI make us all into *Fahrenheit 451* characters? Will society be filled with a bunch of Mildreds, lost in mindless entertainments, not wanting to think. Totally unhappy and unable to understand why. Will we become like Faber, the professor who let it all go by without doing anything? Or maybe Beatty, who adapted to enforce the society but whose own curiosity and intelligence landed him on the same depressive plane as Mildred?

The fear of society's downfall certainly hits harder than a fear of sharks.

The Journey of the Last 30 Years of Education and Plagiarism

Fortunately, the last 30 years have prepared us for this moment. It started with the prevalence of desktop computers and two simple computer commands

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we now use daily: copying and pasting. In those times, for those choosing to plagiarize, this “digital Xerox” thing must have been *the* invention. Yes, you could still plagiarize the old way: stealing words by transcribing them into your document, but the copy and paste revolution was huge. It made the internet and fellow students’ writing far easier to submit as your own work. And, if you were good, you could copy and paste and then *edit the paper* to smudge the previous fingerprints.

Years later, in my student-teacher days, the internet evolved to run applications previously downloaded and installed to your computer operating system. Conditions were formed for the next era of plagiarism fueled by a web app called Google Docs.

In the beginning, Google Docs was clunky and plain text-ish, but this internet word processor’s documents could be easily shared *and* worked on simultaneously by multiple users, making it a valuable tool. (Also, that revision history!) The plagiarism palette grew and so did the panic.

In response, school districts paid for plagiarism-detecting services like [Turnitin.com](https://www.turnitin.com). Or teachers resorted to messy reverse-engineering: copying and pasting entire essays into Google search bars or our own Google Drive databases to check for matches, sometimes emailing each other links to student essays to verify things were legit.

This atmosphere of distrust wasn’t fun, but it felt necessary. We had amazing new tools, but they could be used for good and ill, and we teachers felt we needed to be vigilant.

In my second year of teaching, I attended an NEA conference seminar run by a fellow teacher named Barry Gilmore. He had recently written a book about plagiarism called, of course, *Plagiarism*. Gilmore talked about the psychology of plagiarism, the fears that caused students to want to plagiarize. He also talked about how to design assignments so that students found meaning in them and, therefore, plagiarized less. This made sense. Instead of improving the fortifications, work toward the cause of the plagiarism.

I was at the beginning of my career, yet this was a renaissance for me. I bought Gilmore’s book, flew through it, and began implementing his ideas. Before then, I had no concept of professional development books apart from my college teacher curriculum. Like many teachers, I thought my education was finished. This changed when I learned that there were other books written by *real and working* English teachers. I started filling up my reading schedule. I read all the greats: Carol Jago, Maja Wilson, Penny Kittle, Kelly Gallagher, and Thomas Newkirk. I siphoned anything from anyone. I became more *student* than *teacher*. This was the key.

The first change I made in my classroom was that I started writing with my students. This not only



showed me what I was asking of my students, but it also made my students aware of all of my errors, false trails, and problematic structures. It showed how I had to take breaks to review my work with a more editorially-minded brain. Writing with students laid out the creative process, and it normalized the struggles that would be in store for anyone—student, teacher, or professional.

Realizing that I must model what I am teaching—everything from writing and reading to thinking and projecting—is by far the most helpful thing I’ve done in my career for myself and for my students. It kept my classroom fresh and nimble because I encouraged students to read and write about things that were meaningful to them. Not only that, but I was transparently modeling what I wanted them to do. And, yet, even after this wonderful transformation, students still chose to plagiarize. So I kept reading, kept learning, kept siphoning.



Constant Educational Reinvigoration

Six years ago, I joined the Ohio Writing Project to get my masters. The love I had for my job doubled that first summer at OWP. For my master’s thesis, I was interested in doing something that would allow my students autonomy and choice, which I hoped would increase the meaningfulness quotient of my classroom. Not everyone reads the same, especially when they are trying to read deep or complex works. I studied the various ways of what I called “active reading” and showed these to my students. I wanted my students to experiment and reflect upon their own ways of traveling the path between mind and text. I knew that this sort of reflective analysis practice would follow them long after school.

I tested more boundaries. I had been a huge fan of Maja Wilson’s books about getting rid of writing rubrics and had done so successfully for years. After reading Sarah Zerwin’s *Point-less*, I used the book as a blueprint for my own gradeless project. I got rid of grades, replacing them with goal setting and reflection. Only at the end of a semester did students compile evidence to argue for a grade. Several colleagues joined me in creating what we called a “Narrative

Feedback Crew” (a less intimidating name for a group interested in replacing grades with reflection). A couple years later, we added some middle school English teachers in our district to our group.

My classroom felt far more meaningful and educational than I expected. And the way I ran my classroom took the pressures off failure, making students accountable for their work in more genuine ways. And, yet, even without the pressure of grades or rubrics or pre-ordained reading systems (annotations), I still caught cheaters. And there are probably more out there that I haven’t caught.

(My district doesn’t have [Turnitin.com](https://www.turnitin.com).)

And then, in December, AI came.

My super smart ELA teacher neighbor Nathan Coates had his kids research and write about ChatGPT. Sensing that this was too big a moment to ignore, I stole Nathan’s lessons and adapted them to my argument unit, including all the new revelations about AI,

revelations that seemed to reveal themselves almost every hour. The end goal was to have my students write an argument on how our high school should handle AI.

My students didn’t all celebrate ChatGPT’s arrival, nor did they hate it. Most were in between writing super thoughtful and pragmatic responses. These were good pieces of writing. But amongst them were many student opinions that worried me and defied what I had thought I had made my classroom about: meaningfulness.

The worrisome writing came from arguments that ChatGPT could help students make writing more efficient. Or even write an outline or initial draft of an essay for a student to revise and complete. These students had misplaced the meaning of education and the focus of my classroom. And many of these students were very solid students. I felt like a failure. Had I not pushed students to understand the truth of the writing practice: that it’s about the process and not the product?

And as further proof that my classroom was yet perfection, I caught students using ChatGPT to write their argument essays.



What Do We Do with Our Fear of the Depths?

AI could be the ultimate educational cheat, or it could be just another technological tool we don't think twice about in 10 years. Regardless of what it becomes, we need to make education more about process than product. Therefore, I'm wondering—due to the abject fear AI has created in the court of plagiarism—what if AI saves education?

My journey as an English teacher did not end when I got hired as a full-time teacher. Reading Barry Gilmore's work on combatting plagiarism started me on a journey that led me to see the benefits of being the best learner in the classroom rather than the commander of wisdom. Each year of my career, I have tried to instill that same journey into my students. It's difficult and sometimes overwhelming. And it's flawed: students still fake read and plagiarize in my classroom. But focusing my students on the processes of thinking, writing, and reading has given them the most benefit for their future lives. This is something that AI cannot replicate.

When we uphold process, we create more curious and more open-minded students that know one thing very well: end results are less important than what



happens to create them. When we create, we learn. Most importantly, having healthy creative processes is the one thing that shows humans that they themselves can be wrong. Being wrong is inherent in any creative process, and it is a humbling realization we should always be prepared to experience.

One important byproduct of such a focus is that students who reflect and treat the evolution of their minds as a thing to continually cultivate will necessarily increase their empathy. For our perspective is weakest when we are alone, but strongest when we are with others—even if that “other” comes in the form of a book or a piece of art. This seems like a fundamental requirement to a society that comes to disagreements so easily, a society with so much information and human



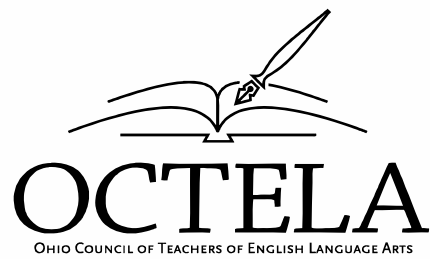
experience available to us. If we are going to disagree on things, which will always be the case, shouldn't we do it with empathy?

Often, when my students are in the midst of writing a first draft, I'll see a student staring at a blank page. I'll walk over and ask, “How's the writing going?”

“I don't know where to start,” they'll say.

This is a problem of anxiety, of confidence. If I answer in a way that doesn't convince them to push through, they will remain stuck. Or worse, they'll consult AI to help them complete their writing. This is why I need to show them that the first things they will write, the words that will help them open their work, are not what's most important. Rather it's the journey itself that will provide the best words.

This sort of teaching is far better than living in fear of the depths, of being afraid of what we cannot see in the water and spending such sunny days on the beach, looking out with a tinge of anxiety instead of the invitation of the waves.



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