

“It Was Like I Was There”: Inspiring Engagement through Virtual Reality

The setting and characters of To Kill a Mockingbird came to life in new ways when eighth graders in Georgia explored virtual reality apps as they studied the novel.

[R]ethink what schooling is and how you can make it more authentic, dynamic, purposeful, and fulfilling for both students and teachers. Doing so requires you to think of alternatives to what is conventional.

—PETER SMAGORINSKY, *TEACHING ENGLISH BY DESIGN: HOW TO CREATE AND CARRY OUT INSTRUCTIONAL UNITS*

It is 11 a.m. on a Tuesday, and twenty-eight eighth graders are enraptured by the study of the Great Depression and its connections with *To Kill a Mockingbird*. The classroom is alive with focused chatter as students peer into virtual reality (VR) devices to “walk around” a house from the 1930s. They dictate what they see to a partner, and the partner takes careful notes. They are on a virtual expedition—a field trip back in time—and they are fascinated by their explorations.

“Oh, my God! This is so cool,” says Sarah (student names are pseudonyms) as she peers into her virtual reality device. She stands up, steadying herself with one hand on her desk, the other holding the cardboard device to her eyes. She reaches into the air of the classroom as if to grab something. “That is so cool,” she repeats.

After Sarah’s partner takes a turn, the two of them write collaboratively about what they saw and how the images connect to the novel they are reading in their language arts class. VR, they agree, made the setting of the novel much clearer and more real for them as they were able to virtually interact with images within a 360-degree sphere.

On a questionnaire about the experience, Sarah wrote,

I loved using Google VR for *To Kill a Mockingbird*. What I liked about it was that you could really see what went on during the Great Depression. Also, it gave a lot of information that helped me understand the novel more. I love it, and it is useful so that I understand what the characters are going through.

Such is the power of VR to inspire and engage students, turning the study of an often-taught novel into a twenty-first-century learning experience. Our exploits with the technology in one eighth-grade classroom confirmed what we believed: VR is not a space-age novelty for intense video gamers. It is a legitimate digital tool that can enhance the English language arts (ELA) curriculum and enrich—but not replace—traditional pedagogy. And it is surprisingly easy to implement, even for introductory-level technology users.

Although our experiences with students vary—Clarice is a teacher educator, and Maya is an eighth-grade ELA teacher—we had both heard of media in which VR played a role, and we wondered if VR could work in a classroom. Clarice approached Maya with the question that eventually undergirded our work together: Can VR enhance the literacy experiences of secondary ELA students? As we discussed ways to introduce VR into the curriculum, we were reminded of the work of James Paul Gee, who advocates for multimodal texts that use words, images, video, and sound to communicate in ways that are

more complex and meaningful than any of the modes alone. Multimodal texts encourage students to think at a metalevel and to make connections between their world and the world of the text. Gee's work acted as a framework for our discussions, planning, and implementation. We believe, as Gee states, that "the theory of learning in good video games fits better with the modern, high-tech, global world today's children and teenagers live in than do the theories (and practices) of learning that they [sometimes] see in school" (5). Although VR is used in gaming applications, our interest was in using it to allow students to view content that connected with what they were reading and writing about in school.

In this article, we discuss the strategies and tools we used to integrate VR into a unit on Harper Lee's novel *To Kill a Mockingbird*. We both love and incorporate digital tools regularly in our work. However, we wanted to know if VR's multimodality would enhance students' literacy skills, including deepening their experiences with texts. Integrating the technology into an existing unit was far easier than either of us imagined.

VIRTUAL IMMERSION ACROSS TIME AND PLACE

The eighth graders in our study were enrolled in Honors Literature and Composition, an accelerated course that used a ninth-grade curriculum. The students in the class already had academic and life experiences that had taught them how to view a movie and how to look closely at a picture. Douglas Fisher et al. note that "a close association between a previously learned task and a novel situation is necessary for promoting the transfer of learning" (106). We aimed to capitalize on this idea by encouraging students to use the immersive VR environment to make new connections between the setting, time period, and characters in *To Kill a Mockingbird*.

VR differs from augmented reality (AR) in that it is a complete world to which viewers feel as if they have been transported. Viewers can see up, down, behind, and around them in a 360-degree sphere. We wanted to know if viewing realistic VR destinations would provide a stimulus for literacy activities, including enhancing background knowledge and

deepening understanding. Rather than prompting students to "imagine what it's like in the Great Depression," we wondered if the VR would give them an experience of time and place—similar to the effect of primary source documents on studying history. We knew that students use higher-level analysis skills and connect to history on a more personal level when they view primary source documents (Dutt-Doner et al.; Morgan). We wondered if VR images would have a similar effect.

The research into using VR devices in the ELA classroom is limited, but a few researchers have written about the positive use of VR to help students with special needs (Gandolfi). Others have made connections between VR's immersive powers and Dewey's call for experiential learning environments (Pilgrim and Pilgrim). In one study, students responded favorably to an exploration of Roman ruins through a VR program on a computer. The exercise proved to be fun and practical, and it balanced collaborative and independent work (Frontera). Experiences like these can be used to build support for students as they interact with the virtual environment and "cognitively construct knowledge for themselves" (Hanson and Shelton 120).

VIRTUAL REALITY AND *TO KILL A MOCKINGBIRD*

Maya has taught *To Kill a Mockingbird*, a novel that has been part of the required curriculum in her rural southeastern school for more than a decade, and she was eager to explore new ways to discuss the text with her students. In the past, as part of their study of the novel, Maya has directed students to investigate the setting and time period to better understand the *why* of the events, but she has struggled with helping students imagine the world of *To Kill a Mockingbird*.

To launch the project, the students spent a class period downloading apps and playing with the VR. Although we chose Google Cardboards (\$15 each), other companies also manufacture inexpensive VR devices suitable for classrooms. A simple Google search for the term "virtual reality cardboard device" will return a variety of options. Students who did not have a smartphone paired with

another student. Maya was careful to phrase this as an option for those who “forgot” to bring their phones to school so that students who did not own a cell phone would not feel embarrassed. Furthermore, sharing the devices in pairs made the project easy and helped students work quickly. After playing with the devices, students watched a YouTube video titled “Google Immerse VR—Racial Identity: Dezzie’s Story 360° VR Video.” Maya wanted the students to think about the differences between Scout’s and Boo Radley’s experiences in *To Kill a Mockingbird*, and “Dezzie’s Story” offered a starting place. In the video, “Dezzie” is a mixed-race woman who describes her personal issues with identity and her unwillingness to box herself into a specific racial category. The video served as a prereading experience and allowed students to try out the VR devices.

Two weeks into the unit, the students downloaded Google Expeditions, available for free from the Google Play store or the App Store, onto their smartphones and used the Google Cardboard devices again to view two Google Expeditions: “The Great Depression” and “Mattox Family Home at The Henry Ford Museum.” Google Expeditions feature interactive VR images that allow users to “walk around” inside a 360-degree sphere. These Expeditions helped students better imagine the setting and

time period of *To Kill a Mockingbird*. This is critical for understanding the message of the novel and its racially charged outcome.

Maya discussed the importance of the setting and time period to prepare for the lesson and encouraged the students to relate the images in the Expeditions with *To Kill a Mockingbird*. In “The Great Depression” Expedition, for example, students walked around a simulated Dust Bowl and Hooverville to better understand how the Great Depression influenced the poverty in Maycomb, Alabama, and the *To Kill a Mockingbird* characters’ experiences. In the “Mattox Family Home,” students explored an impoverished Depression-era home that may have been similar to the Ewells’s. Working in pairs, the students dictated to each other what they saw in the Google Expeditions. As one student explored the VR, the other took notes on a laptop. Then, together they selected a scene from *To Kill a Mockingbird* and wrote an adaptation based on the VR experience. To cocreate their narrative, the students discussed the power of setting, moving beyond where and when a story takes place to the way setting affects our view of events and can even create bias. They imagined that the events of the story took place in another time and location (today in New York City, for example) and wrote about how this change would alter the outcome of the novel.

This narrative-constructed response mirrored the Georgia Milestones Assessment System, a required assessment that includes a text-based narrative. It also gave students practice crafting short stories. Two students wrote the following response, imagining that the novel had taken place in modern-day New York City:

Everyone stormed out of the courthouse. Jem stood still, his face streaking with frustrated tears. We pushed through the angry crowd and made our way over to Atticus who was standing on Wall Street in a complete disarray. His collar and tie were undone and he had lost his briefcase.

We could not make it home, because protesters swarmed the streets around us. Aunt Alexandra met us on the sidewalk where we all looked around at the chaos unfolding after the decision was made. Guilty. Guilty. Guilty.

“It isn’t right,” cried Jem.



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“It was no accident that you were asked to defend Mr. Robinson, Atticus! We have to do something. Look around. The entire city is in uproar, and we cannot go home and sit down at our dinner table as if nothing happened,” Scout pleaded. “I’m going to post something on Twitter right now!”

Unaware anyone was listening, Scout, Jem, Atticus, Dill, and Aunt Alexandra were overwhelmed by an encouraging outburst from the crowd. They looked at each other with reassuring eyes, took a deep breath, then marched forward. In this moment of chaos, there was an unexplainable feeling of unity. “It’s a sin to kill a mockingbird!” they chanted.

Scout typed in her Tweet and put #mockingbird at the end. Things were going to change.

Although the shared writing task could have been accomplished without the use of VR, adding the technology helped students to more fully experience the setting of the novel. VR was the portal through which the students were able to learn about a new semiotic domain, connect with each other, and pave the way for future explorations into the role that setting, time, and place have in literature. It enhanced the literacy experiences of the students by helping them to think critically about the impact of setting on the novel’s events.

STUDENTS’ REACTIONS TO THE VR EXPERIENCE

At the end of the *To Kill a Mockingbird* VR unit, we surveyed the students to find out how VR had affected their understanding of the story. The students wrote responses to the following questions:

- How often have you used a virtual reality device prior to this project?
- What aspects (if any) of the Cardboard did you enjoy?
- What aspects (if any) of the Cardboard did you not enjoy or find difficult?
- How useful was the virtual reality video in understanding *To Kill a Mockingbird*?

Overwhelmingly, the students wrote that they enjoyed using VR in the classroom and that its immersive qualities helped them better understand the setting and time period of *To Kill a Mockingbird*.

They reported that VR helped clarify the setting and that the characters felt more human and more “real.”

Ryan wrote, “I enjoyed the fact that I was able to look around a different place without even going there.”

Leah explained, “I enjoyed being able to listen to the narrator read the text while I got to look around at the (virtual) room or area I was in.”

Stephanie added, “I liked this better than just straight up looking at regular pictures from the time period.”

This sentiment was repeated by students who felt the VR experience was incredibly immersive and made them feel as if they traveled back in time to the

setting of the novel. McKenzie explained, “I really liked how the Google Cardboard was so real. It was like you were experiencing the time period first-hand.”

And Aiyisha wrote:

I like that the VR provided the students with an actual picture of what the setting looks like. This is helpful because sometimes students have trouble picturing scenes mentally. It also gave [us] facts about the time period and what it would be like to live during that era, which is also beneficial. I have never read the book, so it gave me a good idea about where the narrative took place.

However, the experience wasn’t a slam dunk strategy. A few students complained about the physical discomfort of holding the VR device up to their faces for extended periods of time; they wished for a “strap” to hold the device on their head. In addition, the current design of the devices means they accommodate mobile phone screens up to six inches. This was a problem for several students, who were using larger-format mobile phones.

As Asaadi said, “Something that I don’t like is that since my case is too big, I have to take it off and this increases the risk of (my phone) falling out and breaking. Another thing is that since there isn’t a

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strap to hold it in place, my hands start to hurt and my arms do, too.”

A few students also complained that viewing VR made them motion sick. This was noted by twelve students in our survey through comments such as, “Looking through the device gives me a sense of car sickness and I cannot use it for more than a minute.” We instructed these students to stay seated while viewing the images, to rotate their head slowly, and to take frequent breaks to look away from the VR device.

Despite these glitches, the VR undoubtedly enhanced understanding of the time period and setting. The students agreed that the VR helped them to connect to Depression-era Maycomb, Alabama, in ways that simply reading about it did not. Students used the VR technology “to make concrete the abstract thoughts” they were exploring (Romano 17). They also reported a greater connection to understanding the roles that setting, time, and place play in literature. Although they already had an innate understanding of the rural South (since that is where they also lived), they said the VR images helped them better connect to the lives and time period of *To Kill a Mockingbird*.

SUGGESTIONS FOR VR IN THE CLASSROOM

In light of our experiences, we offer suggestions for teachers who are interested in exploring VR with their students as they study literature.

1. *Pair tech-savvy students with those who may feel less comfortable.* For our students, this ensured that at least one person was confident with the technology and reduced questions about how to work the applications or the VR devices.
2. *Pair students with a device with those who do not have one.* We worried at the outset about students without access to a smartphone, as well as the inevitable socioeconomic comparisons that might come from those with fancier new phones. However, by telling students who “forgot” their phones to pair up

with students who “remembered” to bring theirs, we allowed students to preserve dignity. We also loaned our phones to students who did not have a device with downloadable capabilities. Our concerns about equity and access became a nonissue, and students shared phones happily.

3. *Work with your school administrators to explore connectivity options that comply with school policy.* Maya’s classroom was located near a bank of windows, so our students had no trouble streaming data to view the apps. However, we recognize that some classrooms are enrobed by giant, signal-stopping concrete blocks and others are located in schools that limit or block access to the Internet. Some teachers may want to consider buying one or two mobile hotspot devices, which support about eight smartphones each. These devices will bypass the school’s Internet. Or, teachers can use their own mobile phone as a hotspot for three devices. It also may be possible to enlist the help of a media specialist or administrator to unblock a particular classroom when the VR devices are being used. We support the idea of working with administrators to troubleshoot and find ways to provide Internet access to students.
4. *Devote an entire class period to learning about and playing with VR before you try to begin a project.* We have presented our work on VR at several conferences, and we have discovered that even adults become enamored and distracted initially by the cool factor of the devices. We recommend that teachers do not try to teach anything substantial on the day they introduce the devices but allow students to simply play with them. Technical troubleshooting and exploration will take an entire class period. We also recommend that teachers give all instructions related to the devices prior to handing them out. As soon as students have them in their hands, they will stop listening and begin to explore.

5. *Work in groups to make troubleshooting easier.* Collaboration can encourage students to support each other and rely less on the teacher. We found that grouping students on the first day nearly eliminated the need for “tech support” from us. Students were able to help each other, and their learning was self-directed. When we did need to step in, we found that talking to a small group of students at a table was much more efficient than trying to address an entire classroom of eighth graders with VR devices in their hands.

CONCLUSIONS

Our explorations with VR demonstrated to us the power of immersion and VR’s ability to promote a multiplicity of literacies (Gee). We found that VR underscored Gee’s assertions about the potential of multimodal texts to communicate in complex and meaningful ways. Students were able to make connections between the virtual world and the world of the written text. Gee’s “Committed Learning Principle” says that “[l]earners participate in an extended engagement [lots of effort and practice] as an extension of their real-world identities in relation to a virtual identity to which they feel some commitment and a virtual world that they find compelling” (64). This principle applies to students who use VR devices to help make sense of a virtual place and connect it to their own lived experiences.

Our students’ understanding of *To Kill a Mockingbird* became more nuanced, which translated into vivid writing. We came to understand that the VR reflected Gunther Kress’s call for “new tools for thinking with, new frames in which to place things, in which to see the old and the new, and see them both newly” (8). The pairing of a canonical text with a twenty-first-century technology tool promoted deeper understanding and encouraged students to see how place and time affected the events of the novel. The VR also enhanced students’ transactions with the text (Rosenblatt) and allowed them to connect their personal experiences with those of the characters, since they could “see” a typical house and

place that might have existed in Scout’s world and compare it to their own homes.

Even as we write this, more apps and VR resources are becoming available for instruction and in support of students’ learning and understanding. Sarah, the student who was so impressed by VR’s capabilities at the beginning of this article, did not forget the experience and asked repeatedly throughout the academic year when Maya planned to use VR again. We envision this as new territory in which ELA teachers can stake their claim and expand the study of literature. Rather than surrendering new technology to teachers in the STEM disciplines, ELA teachers can harness it to enliven their curriculum. Far from being a space-age toy, VR has the potential to enhance ELA and open the world to our students—all without leaving the classroom. [EJ](#)

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READWRITETHINKCONNECTION

Lisa Storm Fink, RWT

In this lesson, students imagine spending a day in someone else’s shoes. After reviewing the characteristics of narrative writing, they then write narratives from that person’s point of view. <http://bit.ly/1HirMjz>