As soon as the students put on the virtual reality headsets in Don McMahon’s lab, the exclamations of amazement begin.

Two of the students are exploring Google Earth. One, wearing the goggles, has her hands out, like she’s trying to maintain balance. The other tightly grips her classmate’s wrist, as if to steady her. “I ended up in Bulgaria!” “You’re an international traveler!” “Oh, this is really cool; can I move to France?”

Another student is apparently underwater. “This is terrifying! I’m swimming with sharks!” she says, sounding more thrilled than frightened.

Yet another student is immersed in Space Station Experience. At first, she seems fine: “I’m, like, in a spaceship!” But then she moves and gets lost in space. After McMahon steps in and guides the student’s hands to the navigation controls on the paddles she’s holding, she heaves a sigh of relief. “I found my way back to Earth.”

Virtual reality (VR) and augmented reality (AR) have the potential to revolutionize the way we teach and learn. For medically fragile and physically disabled students, VR lets them go where they never could in reality. And for behaviorally challenging students, the engagement offered by VR and AR gives teachers a precious tool that opens the possibility of their students learning new, more positive behaviors.

But video games, including AR and VR, also have their dark side. The games that hit the top of the bestseller list are often rife with violently racist and misogynistic stereotypes. In one version of a now-classic game, Grand Theft Auto (GTA), the player might learn that if they stop their car next to a female character, she’ll hop in. She’s a prostitute; there’s an exchange of money for services. If the player then drives around the corner, though, he can simply murder the woman—and the player gets his (or perhaps her) money back.

There’s the good, the bad, and the ugly when it comes to games and gaming technologies. While Washington State University teaching and learning professor McMahon and his colleague Jonah Firestone based at WSU Tri-Cities focus on the promise of the good, it’s the bad and the ugly that have caught comparative ethnic and American studies professor David Leonard’s critical gaze.
Leonard is one of the first scholars to analyze and kickstart conversations about the stereotypes in video games. As others spent countless research hours trying to determine if the violence in video games resulted in real-world violence, Leonard was asking questions about what games like GTA were saying about urban life through grotesque racial stereotypes.

When his cousin showed him the hidden “trick” about killing prostitutes, Leonard says, “Very little surprises me but I was struck ink that moment about how what we’re seeing in the video game world wouldn’t be seen on TV, on film—and it’s interactive.” GTA is rated for adults but is often played by children, and thus became one of many pivotal moments for Leonard, a white male who had begun to seriously question the types of representations and narratives available in virtual reality.

“If my understanding of urban life in Los Angeles was simply as a place to play because that’s what GTA San Andreas taught me, showed me, impressed upon me,” Leonard says, “then the conversation becomes about, ‘Well, who’s living there? What is their everyday experience like?’

“Conversation” is an important word for Leonard because, he argues, we simply don’t have enough of them. At least, we don’t engage each other in the uncomfortable conversations about race and sexism that need to be talked through in order to come to terms with the bad and the ugly—not just in video games, but in the real world, too.

“There’s a silencing of those voices, of those pleas, of those tears,” he explains, “emanating from the victims of violence those oppressed by systemic racism and brutalizing stereotypes. ‘We sandpaper over these issues by ignoring them, or by saying ‘look how far we’ve come’ or ‘at least it’s not this’ other bad thing. So it’s down to me to say, ‘No, these issues by ignoring them, or by saying ‘look how far we’ve come’ or ‘at least it’s not this’ other bad thing. So it’s down to me to say, ‘No, these issues need to be talked through in order to come to terms with the bad and the ugly—not just in video games, but in the real world, too.

“Challenging the script” is one of the few words used by Leonard in his interviews with the Washington State Magazine. In fact, he often repeats the idea of challenging the script, or questioning the norms and expectations that are often imposed on video games.

For example, when discussing the violence in video games, Leonard argues that “games can foster that critical conversation.” He also challenges the idea that video games are simply a form of entertainment, and instead argues that they can be a powerful tool for social change.

Leonard suggests that “a game that highlights the importance of water and the ways in which injustice, racism, war, and violence become obstacles to having access to water is something I can see.” Leonard says, “Games can foster that critical conversation.”

Or simply taking advantage of missed opportunities would be helpful, Leonard argues. “A war game only shows the field of battle. The only thing is your character or your infantry fighting an enemy. The worst that might happen is that your character might die—and then you just start over. But what if, in your “health score” tick after being wounded in action, “the game takes you to the hospital for rehabilitation for six months.” Even if the recovery hiatus was a short, animated interlude, the consequences of violence would be exposed and laid bare for further consideration.

There is nothing about what happens to that soldier when their tour is over.” Leonard emphasizes. “What happens is that soldier in terms of PTSD? Neither do we see that family living in Baghdad—what we see are abandoned cities,” like the city-center playgrounds of GTA. “We don’t see those who are living alongside war,” just as we don’t see the urban families working, teaching, learning, playing, and living.

If our consumption of media were neutral and without consequence, none of this would matter. But all media, including video games, Leonard says, “shape our opinions about war,” about romance and sex, about who gets to do what and with whom. “So we can think about the ways that video games tell stories and then erase so much about the story.”
Novety percent of kids in the United States play video games (which rises to 77 percent of children ages 12-37), and 99 percent of these games include mature content, including violence. Masshust, Thrill Kill, Gears of War: the titles speak for themselves.

In 2016, an in view of mounting evidence of the correlation between violence in games and aggressive behavior, both the American Psychological Association and the American Academy of Pediatrics began advising parents not to allow children and teens to play violent video games. As Gamergate shows, though, it’s not just the games that contribute to socially maladaptive scripts; it’s the culture of the gaming community itself that is often victimizing or ostracizing kids, girls of color, and gender nonconforming people. Games like Fortnite are played online, often with thousands, or even millions, of players at once. Game-associated chatting systems allow players to collaborate and strategize together, but also to bully players who, for whatever reason, are deemed socially unacceptable.

As dire as this culture of hyper-violence, misogyny, and racism appears, there is a flicker of hope among scholars and developers. 

“Same with the gaming community,” Leonard says. “Gaming is not only ‘over here,’ it is a large diverse community dreaming and realizing what scholar Robin Kelley called ‘freedom dreams.’ Gamers cut across communities and gamers want different kinds of games that do different kinds of work that inspire different kinds of imagination—that is a step forward.” Which is one reason why he and Cozy edited Wise Gaming.

“We challenge the idea that there is a core gamer community that wants a particular kind of game. But we still need to have a critical conversation about why we find joy and pleasure in committing acts of violence. Without dismissing the prevalence and demonstrably malign influence of negative social tropes in games—‘there’s a lot of that!’—Firestone, like his College of Education colleague McMahon, sees gaming as full of teachable moments.

Firestone has a historical perspective that helps put gaming technologies, and their uses and abuses, into perspective. “Technology has always met resistance,” he says. “Socrates against writing.” As Plato sat at his feet, writing down what the wise guy said, Socrates warned that writing would rot memory and leave us unable to recite the oral literature of the Iliad, the Odyssey, and other culturally important works. “The printing press—civilization ends if everyone knows how to read!” Especially, the argument went in Gutenberg’s day, if everyone can read the Bible for themselves. “And if you stick your kid in front of a TV for eight hours a day, and think they are going to learn something— you are going to be damaging that child. But if we approach technology in a systematic, thoughtful way, it can be useful.”

Firestone and McMahon are especially interested in educational tech. “Play for five minutes, generate some numbers, and then ask, ‘What happens next?’ That’s how you model inquiry for kids.” As Hust points out, “Video games allow for the exploration of gender roles and gender identity in a virtual space as the player can choose an avatar that is not the same as his or her biological sex. Additionally, some video games provide an alternate script for women as they include physically strong female avatars who often complete the same tasks as male avatars. Oftentimes, these female avatars are sexualized, however.”

It’s that flicker that keeps Leonard thinking critically about gaming and pushing the conversation. It’s like hip hop, he says, the music he grew up with. “If we say that hip hop is sexist by defining it by what has the most visibility, then we miss all the artists who are redefining the genre.” If all we hear are Jay Z or Snoop Dogg, then we miss, for instance, Aesop Rock, whose rapped vocabulary vastly exceeds Shakespeare’s.

Now, Firestone says, technology is beginning to change that. “WSE” is invested in culturally responsive pedagogy, the idea that instead of saying a student has a deficiency because of X, Y, or Z, and we need to fix it, we want to understand that student’s strengths, their background, what do they have that they can bring to the table, and how we can use that to educate everybody.” Part of that cultural sensitivity might be getting teachers to visit students at home to see how they live. But that, Firestone points out, is a big ask of already time-challenged teachers.

“We challenge the idea that there is a core gamer community that wants a particular kind of game. But we still need to have a critical conversation about why we find joy and pleasure in committing acts of violence.”

Indeed, what Firestone and McMahon advocate is in some sense a return to that most basic of pedagogical goals, the teaching of inquiry. “The way you read a picture book to kids,” Firestone says, “is not that expensive. And AR and VR are on everyone’s phones already.” While emphasizing that “this stuff in no way replaces classical learning techniques, lectures, reading, writing, labs,” they do open up possibilities that have never existed before.

Firestone, Leonard, Hust, and Rodgers—they all lend in the same place. We’ve got to talk to each other about the issues we all contend with. “A lot of things get packaged and sold to schools. That’s why we do research,” Firestone says. “A VR program about cellular biology might look good, but has it been tested? Does it actually teach? I’m a big proponent of technology, but I’m an even bigger proponent of assessing that tech.”

But all this takes assessment, research, thoughtful consideration—and lots of conversation. McMahon says that the number one thing he needs are graduate assistantships; it takes a small army of grad students to do the time-intensive research that puts data behind assumptions about what works or doesn’t.

“This stuff is going to be available, and it’s going to be massmarket. We need a dialogue about what works, so that we can decide how to educate our kids.”

“All of these are getting packed and sold to schools. That’s why we do research,” Firestone says. “A VR program about cellular biology might look good, but has it been tested? Does it actually teach? I’m a big proponent of technology, but I’m an even bigger proponent of assessing that tech.”

Otherwise, we end up with pretty pictures or, worse, distracted students full of misconceptions about how the world works. “The goal of my research,” says Firestone, “is to make situations which are normally difficult to understand relatable.”

Firestone and McMahon, that might be geologic time, plate tectonics, evolution, or the nature of scientific inquiry itself. For Leonard, gaming might teach us about histories of racism, gentrification, environmental injustice, or the cost of war. For Hust and Rodgers, gaming might open up avenues of exploration to better understand how gender scripts are not biological destiny.

“This stuff is going to be available, and it’s going to be massmarket. We need a dialogue about what works, so that we can decide how to educate our kids.”

Leonard talks about growing up with games and now playing with his child. Where once parents were advised to monitor their kids screen time and what they were watching on TV, “now it’s what are you playing with your kids? And are you talking about what is being represented? And if you’re a father, are you only playing with your son? Are you assuming your daughter doesn’t want to play? And are you assuming your son doesn’t want to play, because maybe he doesn’t.”

If approached thoughtfully, most games, even violent, sexist ones, contain teachable moments. For McMahon, it might be a few minutes of AR basketball: “Play for five minutes, generate some numbers, and work on mean, median, mode, or other math lessons.” For Firestone, it might be monopoly or some other board game, ancient or modern, around which he can build a lesson and a curriculum.

“One of the things we do is that we actually ask parents to talk to their own devices.”

As Hust points out, “Video games allow for the exploration of gender roles and gender identity in a virtual space as the player can choose an avatar that is not the same as his or her biological sex. Additionally, some video games provide an alternate script for women as they include physically strong female avatars who often complete the same tasks as male avatars. Oftentimes, these female avatars are sexualized, however.”

It’s that flicker that keeps Leonard thinking critically about gaming and pushing the conversation. It’s like hip hop, he says, the music he grew up with. “If we say that hip hop is sexist by defining it by what has the most visibility, then we miss all the artists who are redefining the genre.” If all we hear are Jay Z or Snoop Dogg, then we miss, for instance, Aesop Rock, whose rapped vocabulary vastly exceeds Shakespeare’s.

“Same with the gaming community,” Leonard says. “Gaming is not only ‘over here,’ it is a large diverse community dreaming and realizing what scholar Robin Kelley called ‘freedom dreams.’ Gamers cut across communities and gamers want different kinds of games that do different kinds of work that inspire different kinds of imagination—that is a step forward.” Which is one reason why he and Cozy edited Wise Gaming.

“We challenge the idea that there is a core gamer community that wants a particular kind of game. But we still need to have a critical conversation about why we find joy and pleasure in committing acts of violence.”

Without dismissing the prevalence and demonstrably malign influence of negative social tropes in games—‘there’s a lot of that!’—Firestone, like his College of Education colleague McMahon, sees gaming as full of teachable moments.

Firestone has a historical perspective that helps put gaming technologies, and their uses and abuses, into perspective. “Technology has always met resistance,” he says. “Socrates against writing.” As Plato sat at his feet, writing down what the wise guy said, Socrates warned that writing would rot memory and leave us unable to recite the oral literature of the Iliad, the Odyssey, and other culturally important works. “The printing press—civilization ends if everyone knows how to read!” Especially, the argument went in Gutenberg’s day, if everyone can read the Bible for themselves. “And if you stick your kid in front of a TV for eight hours a day, and think they are going to learn something—you are going to be damaging that child. But if we approach technology in a systematic, thoughtful way, it can be useful.”

Firestone and McMahon are especially interested in educational tech. “Play for five minutes, generate some numbers, and then ask, ‘What happens next?’ That’s how you model inquiry for kids.” As Hust points out, “Video games allow for the exploration of gender roles and gender identity in a virtual space as the player can choose an avatar that is not the same as his or her biological sex. Additionally, some video games provide an alternate script for women as they include physically strong female avatars who often complete the same tasks as male avatars. Oftentimes, these female avatars are sexualized, however.”

It’s that flicker that keeps Leonard thinking critically about gaming and pushing the conversation. It’s like hip hop, he says, the music he grew up with. “If we say that hip hop is sexist by defining it by what has the most visibility, then we miss all the artists who are redefining the genre.” If all we hear are Jay Z or Snoop Dogg, then we miss, for instance, Aesop Rock, whose rapped vocabulary vastly exceeds Shakespeare’s.