ONLINE CL@SSROOM

IDEAS FOR EFFECTIVE ONLINE INSTRUCTION

Easy Methods for Using Virtual Reality in Your Teaching

John Orlando

The terms "virtual," "augmented," and "mixed" reality have been thrown around a lot lately in education, leaving many instructors understandably perplexed over their different meanings. Discussions of these concepts often fail to disconnect them from their gaming origin, making one wonder whether they have useful applications to education. The good news is that there are many educational uses of these applications, and a world of free educational content is available to instructors. Most of these applications do not require expensive goggles or other equipment for making or viewing content.

Virtual reality

The term "virtual reality" has gone through three iterations. The first referred to an animated world that the user entered through their computer by taking the form of an avatar representation of themselves. Second Life was the most famous of these systems. Users could build homes and other structures, as well as interact with one another within the world.

A number of educational institutions started using Second Life,

most using it for recruiting purposes by designing a mockup of one of their halls that prospective students could explore. Champlain College went a step further by connecting its site to its gaming program. Students would learn to create game elements by adding to the school's Second Life site, designing new buildings and even a concert venue that hosted live concerts put on by local musicians. Jean Haefner at the University of Wisconsin–Stout built a gallery for students in her art and design class to allow students to have the experience of a virtual art exhibition, including interaction with the public who asked questions of the students. Harvard Law professor Charles Nesson created a space to broadcast lectures and hold discussions for his class Cyber One: Law in the Court of Public Opinion.

These early efforts eventually fizzled out due to the need for specialized programming skills to build the virtual worlds and falling pubic interest in Second Life itself. Virtual reality then reinvented itself by allowing participants to become their avatar's virtual reality goggles. The user completely immersed themselves in a virtual world where

---

Create an Online Book for Your Courses

Jillian Ruth Yarbrough

As an instructor I am constantly seeking strategies that will allow me to deliver content to a diverse population, support student-directed learning, and facilitate ongoing communication exchange between instructor and students. It was during one of my searches that I realized the potential benefits of online books. First, the reader is engaged with the text through their computer, smartphone, iPad, etc. (Kelly, 2016). Instructors can include chunks of material followed by video examples and interactive exercises. An online book is not a separate text, but an interactive tool specifically aligned with the course. Second, when a course instructor builds their own online book, they are building the content with their learners in mind (Gende, 2012). As a content expert myself, that has taught management courses for many years, I understand potential student content translation pitfalls. The online book can be created antici-

---

A Simple Way to Gamify Your Courses for Better Student Engagement

Chris Roddenberry, Shelley Evans, and Cynthia Bowers

Student engagement, performance, and retention in online education are major concerns for higher education administrators. Wake Technical Community College improved all three with its Operation Graduating Gilbert (OGG) course that adopts a story design and gamification format to build a more engaging experience for the learner.

OGG Narrative

The first thing a student notices about the OGG course is a storyline with a multiethnic cast of four college student characters. The characters include: Gilbert, the military veteran; Daphne, the African American culinary student; Maria, the Hispanic business student; and Anish, the math student from Utter Pradesh, India. Each of these characters face a problem that becomes the focus of assignments during the semester.

Students taking the course will incorporate information from the narrative to solve the problem and complete their weekly homework assignments, allowing students to see how psychology applies to different people in everyday life. For example, the narrative for the first week of the course introduces Gilbert as a psychology student who is worried about finding a position as a research assistant in order to gain experience in the field of psychology. His biggest hurdle is determining which subfield of psychology best suits his interests. He discusses this problem with his friend Daphne, who asks Gilbert to make a list of his research interests. As a homework assignment, students are asked to review Gilbert's list of research interests and explain in an essay which subfield of psychology Gilbert should choose to study and why.

The weekly narrative was written to help students develop a growth mindset, which has been shown to be critical to student success (Dweck, 2006). This is done by having characters model both the challenges and solutions to problems that students might have to face in their own lives. For instance, students do activities in which they reflect on their own growth mindset orientation. One requires the students to identify three helpful college resources and write about how the resources will support their success. In another, students write a letter of advice to a future student to explain how they overcame a struggle and what was learned from the experience.

Campus resources that are important to student success are incorporated into the storyline of the narrative. For example, in Episode 2, Anish has difficulty learning calculus and his friend, Maria, suggests that he visit the Individualized Learning Center to get some free tutoring and support. In another episode, Daphne and Maria notice Anish is rather emotional and they discuss suggesting that he look on the college's Student Life web page for a club or activity to participate in for fun. Instructors could incorporate campus resources into their own courses sporadically or through a narrative, as in the OGG course to help students recognize the resources that are available to them.

Social presence was facilitated in OGG through the use of Adobe Connect web-conferencing for regular synchronous interaction, and a group project. Regular office hours and voluntary weekly online

Prepare Students for Course Activities with Online Decision Trees

Sarah McLean

I remember being stressed for undergraduate science laboratories, unsure whether I understood the protocol sufficiently and worried that I was going to "mess up" in the lab. With this in mind, I thought about what I could do to help ease my students' anxiety in a new third year laboratory course I was developing. The answer was an online decision tree that guided students through laboratory procedures, which I named LaboraTREEs. Students would do the module before coming to lab, making mistakes online where they were not in sight of others.

I took a "Choose Your Own Adventure" approach to helping students prepare for laboratory sessions. Students were presented with the same scientific problem and protocol that they would encounter in the laboratory. Throughout the simulation, students encountered many "branching points" where they would have to choose between a few options for how to proceed with the experiment. Their selection in the branching point could lead to a few different options: they would proceed to the next step (if the answer was correct), they could be led to a quick review tutorial (often in video format), or they could continue to another step, even if their selection was incorrect.

I allowed students to move forward even if their choice was incorrect because it matched laboratory experience. Frequently during experiments you do not know if your experiment worked or did not work until the very end. Therefore, I wanted to include this aspect in the simulation for my students, to mimic what "real" science was like, and to model some of the problem-

solving skills that are essential to being successful in science. If the students chose a "wrong" path, they would find that their experiment did not work, and would be given a short explanation as to why. The idea was that when students went into the laboratory environment, the LaboraTREEs gave them some previous experience with the laboratory technique, so that they had a better understanding of the importance of certain steps, and thus would make fewer mistakes and feel better prepared.

Development of LaboraTREEs

I designed LaboraTREEs by first reflecting on the common mistakes that students make in a lab. These mistakes formed the foundation of the branching points. I then mapped out the entire decision tree so that I had a good overview of what the simulation would look like.

Next, I worked with an instructional designer, who helped bring the LaboraTREEs to life using Adobe Captivate. Adobe Captivate allows branching options, and can also allow you to track students' progress through SCORM. Both of these features were essential to the development of the LaboraTREEs, as I wanted to ensure that students completed these simulations prior to the laboratory. Captivate is by no means the only option for creating branching tutorials. Articulate Storyline is a very powerful system used for training in the private sector, as is iSpring. An even simpler option is to use PowerPoint's ability to send users to different slides based on their input. See this tutorial on how to create branching scenarios with PowerPoint: https://youtu.be/YXGD-z5s5a8.

I created the short review tutorials by simply creating an mp4 file in

"Explain Everything" on my iPad, which the instructional designer then embedded in the simulation. Finally, I embedded images for the various pieces of equipment and reagents that were identical to what we would use in the lab. Overall, the idea was to make the LaboraTREEs as close to the actual wet lab experiment as possible.

Implementation of LaboraTREEs

I introduced the students to the idea of the LaboraTREEs on the first day of class. I told them that these were developed to help them apply the theoretical knowledge that they would need in the lab. Importantly, I stressed that I was not concerned with how well they performed on the LaboraTREEs, I simply wanted them to complete them *before* the lab. In fact, I encouraged them to complete them many times, and try different ways of "messing up." Again, this all led back to the initial rationale for the LaboraTREEs, which was to give the students a safe place to make mistakes. I embedded the LaboraTREEs on our course website through our learning management system, to make it easy for students to access.

So how did students receive the LaboraTREEs? I received positive feedback on the simple, quick, and interactive nature of the design. Students liked that they were able to complete it multiple times, and that it was visually engaging. They also commented that they appreciated the short video tutorials that helped them if they made a mistake. One drawback to this approach is the technology itself. I found that certain web browsers supported the simulations better than others, and needed to do some troubleshooting

the system would detect the user's body movements to translate them into sword swings and the like. This added an exciting kinetic experience to virtual reality, so much so that because the user could not see their immediate surroundings the systems needed to project virtual walls around the user to avoid having them put a foot through a television set or the like.

The problem with this second iteration is that the virtual reality goggles were expensive, starting at $400 each, and the new virtual reality worlds were even more complex to program than those of Second Life. This made virtual reality only economical for game developers who could afford to put $50 million into game development expecting to make twice that back in sales.

The third iteration finally made virtual reality easily accessible to education. The major event was Google's release of the 10-dollar Google Cardboard Viewer in November of 2015. These viewers attached to an ordinary smart phone to allow the user to view virtual reality content at a fraction of the cost of stand-alone goggles. In fact, they were so cheap that Google first introduced them by sending one to all of the over one million *New York Times* subscribers.

The Cardboard Viewer release corresponded with the *New York Times* creating free virtual reality content to watch on the viewer. Importantly, this was not animated content designed by game programmers, but real content filmed with virtual reality cameras. For instance, the *New York Times* filmed a vigil in Paris for the victims of the recent bombings. The viewer could get the experience of actually attending the vigil, including signs, sounds, and the ability to look around by simply moving their head.

Google also started creating its own content for education through its Google Expeditions program. It filmed tours of various locations around the world, such as monuments and museums. A teacher could lead a class on a tour by giving each student a viewer for their cell phone and direct the tour from their own guide's access. The tours even came with questions that the instructor could ask students during the tours.

Instructors and students can also shoot virtual reality videos for free on their cell phones.

The ease of viewing virtual reality videos with these goggles has led to a proliferation of free virtual reality educational content. Besides the *New York Times* and Google, a number of organizations have been releasing content in specific areas. Google added a function to YouTube that allows a user to view any video in virtual reality mode by clicking the Cardboard Viewer icon at the bottom right of the video, though the video needs to be shot by a virtual reality camera to get the effect. This makes YouTube a good source for virtual reality content, with the "360 videos" the best starting point. This channel draws together content from a variety of sources, including the Discovery Channel, the BBC, and the *New York Times*. The content ranges from scientific tours of places such as Antarctica, to documentaries on events such as the Syrian war.

Much of the virtual reality educational content is also being released as dedicated smart phone apps. An instructor can simply search on "Virtual Reality" in either the Google Play store or the Apple Store to find apps in specific areas. For instance, Sites in VR has virtual reality tours of many historic locations, with an emphasis on Middle Eastern sites. Titans of Space provides a self-guided tour of the galaxy that allows the user to explore planets as if they were steering a spaceship. Jaunt VR provides a variety of interesting tours, while Within hosts educational content and virtual reality films produced for the virtual reality category at the Sundance Film Festival.

At only $10, it is not unreasonable to expect students to get the goggles to view the videos. Even if a student does not want to get the goggles, he or she can still view the video without goggles in 360 format, where the user simply watches a video on their camera and moves around to get different perspectives. This allows instructors to provide students with experiences beyond what they could get by simply reading material. For instance, the Guardian VR app gives users the experience of solitary confinement, with narration and spooky noises from other prisoners, and is real enough that it begins with a warning. The VLIPP Med app gives medical students the experience of standing next to a surgeon during various types of procedures.

Instructors and students can also shoot virtual reality videos for free on their cell phones by downloading the Google Cardboard Camera app. This uses an ordinary smartphone camera to shoot a video by rotating around in a circle while narrating with voice. With this, a history professor could make videos of the Roman Forum for his or her class while on vacation in Italy, or a geology instructor could make videos of different rock formations around the campus.

Addressing Privacy Considerations with Social Media Tools

Kathleen Bastedo

Many instructors are incorporating social media into their instruction due to their ability to break down the walls of the institution. But with privacy being more and more of a concern today, it is a good idea to provide students with information on privacy settings for tools that you use in class. Here is the important privacy information to provide to students for some of the major social media tools.

Facebook

Facebook user's privacy settings (http://bit.ly/2FeGbP0) consist of an entire page that includes frequently asked questions about privacy, how to control who can see an individual's post, how to be sure only certain friends can see their posts, and who has access to profile and timeline information. However, buried deep down in the page is the information related to the public profile and cover photo information. Students should be made aware that their profile picture is public, meaning that everyone using Facebook can see that image whether or not they are friends with those individuals and whether or not they have enacted all privacy settings. If students choose to add a cover photo (the larger top picture on the main page), that photo is also available for public viewing no matter what other settings students have chosen. There is also a Facebook privacy checkup (http://bit.ly/1nBTHkz) that lets users review who can see their posts.

Twitter

Twitter tweets with a new 280-character limit are public by default and can include photos, videos, and links to various websites. Users generally must agree to Twitter's privacy policies (https://twitter.com/en/privacy) which includes Twitter's ability to collect, use, and share individuals' information across Twitter websites. Twitter's information collection and use policy is extensive and if users have questions related to this policy, they must complete and submit an online form. Not everyone typically reads software policies in detail and may be completely unaware of what types of information they are agreeing to share with companies. Be sure students know what they are agreeing to if you require them to create/use a Twitter account in your course.

LinkedIn Privacy Settings

LinkedIn's privacy default settings make most of its users' profile information available to everyone, including the user's profile picture, work summary, education, and past jobs. LinkedIn's privacy settings (http://bit.ly/2oQmohH) page is not as extensive as other social media tools, but it does allow the user to hide their profile photo from everyone. Users can also choose a block of followers and decide what, if any information, can be shared with third parties. It allows the user to choose who can see them as a suggested user if these other individuals have access to the user's email address. The default for this feature is for everyone to have access. There is an advertising preference section that allows the user to choose whether LinkedIn can use cookies to personalize ads. The default for this preference is "Yes" as are all the LinkedIn profile privacy, data privacy, and advertising default preferences. Students should be made aware of this if they are being encouraged or required to create or use an account as part of a course activity. In fact, if they already have an account, they should be reminded to review their settings as one of the first activities required for the course.

YouTube Privacy Settings

The YouTube privacy policy (https://support.google.com/youtube/answer/157177?hl=en) provides users with the ability to adjust three types of video and playlist settings: Public, Private, and Unlisted. Unlike the other social media tools already mentioned, YouTube provides the user with the ability to adjust these settings for each video they choose to upload to the YouTube website. These settings can also be changed by the originator of the video at any time. Subscribers will be notified of the change the next time they try to access the video.

The *Public* video settings can be set so that the video and playlist can be seen and shared with anyone that uses YouTube. These videos will show up in anyone's search results and appear on related video lists. Users do not need to have a Google account to access these videos.

Private videos can only be seen and shared by the originator of the video. Other users cannot share the link nor will these links show up in a search or appear on playlists. This provides the originator of the video with a great deal of flexibility as to who can view these videos. These invited viewers must already have a Google account created to access these private videos.

Unlisted videos are a bit different. These videos can be seen and shared by anyone with a link; however, unlike private videos, these people do not need a Google Account in order to view them.

Discussing the privacy settings for each type of social media that you intend to use in your online course will not only benefit students

Free virtual reality production makes it possible to assign students to shoot virtual reality videos for class projects. For instance, students in an architecture class can be assigned to create narrated virtual reality videos inside different buildings that explain the architec-tural features of each structure.

Between using free, professionally created virtual reality content, creating content on their own, or assigning students to create content, the possibilities are endless for how an instructor can use virtual reality in nearly any field. The two best places for finding educational videos are Virtual Teach at https://www.virtualiteach.com, and Virtual Reality for Education at https://virtualrealityforeducation.com.

Next month, we will learn how augmented and mixed reality are being used in education. @

pating students' needs and preemptively adding key content to support ease and facilitate learner growth.

With these benefits in mind, I developed two online books for my courses: *Human Relations Organizational, Social, Inter and Intra Personal* and *Becoming a Self-Directed Learner: Experience, Logic, Application, and Innovation.* Both books are a self-contained learning module, not requiring that they be embedded within a learning management system. They can be accessed from a desktop, laptop, tablet, smartphone, or e-reader.

If you decide you would like to publish an online textbook, selecting a publisher is a very important first step. I have worked with and enjoy the publisher Great River Learning (GRL). GRL is a higher education publishing company focused on developing engaging publications. GRL offers great author support and helps with distribution. However, if you prefer a more "do it yourself" publishing approach, there are eBook publishing companies like Lulu, Smashwords, and CreateSpace. First, Lulu allows authors to create their own books, with a specific branch, Glasstree, for creating academic books. Lulu's distribution options include Kindle Bookstore on Amazon.com. Smashwords, listed as the world's largest eBook distributor of self-published authors, offers a publishing process that is fast, free, and simple. Smashwords will distribute books to Apple iBookstore and Barnes & Noble. The CreateSpace platform offers instructions that allow authors to "publish your words, your way." CreateSpace can distribute to Amazon.com, Kindle, and Amazon Europe to name a few. Regardless of the publisher you select, there are consistencies that remain when publishing. Make sure the final product offers a professional presentation, seek peer feedback prior to publishing, know your research, and know your audience.

Another important consideration is the currency of the content. Print textbook content often becomes out-of-date after a few years. The online book can be updated every semester, every week, or even daily if needed. In my own case, I find that the theories I cover stay constant over time, but I update the examples with the most current events. Thus, I have designed the book with a mind towards conceptually separating sections into what remains constant and what will be updated. This allows me to easily make updates without rewriting the whole work.

Finally, the power of online books is in their ability to be interactive, and so the instructor should make use of interaction whenever possible. For instance, each in-chapter exercise has questions that facilitate student reflection and response. The response is sent to the instructor's email and, if needed to support learning, the instructor can engage in discussion on each individual student's in-chapter reading exercises. Each chapter also contains quizzes that allow the students to reflect on readings. Quizzes are graded immediately upon completion by the computer and students receive rapid feedback. Finally, all the chapters include videos and exercises that provide an expert dimension and practical application of content.

Online books align with the needs of the online learner for content that can be accessed from a variety of devices, and provide the interactivity that is missing from traditional print textbooks. These can be a valuable addition to any online course.

References

Gende, D. (January, 2012). How to create your own textbook—With or without Apple. *Mindshift.* Retrieved from: https://ww2.kqed.org/mindshift/2012/01/25/how-to-create-your-own-textbook-with-or-without-apple/
Kelly, J. (March, 2016). The benefits of using eBooks by students. *Teacherswithapps.* Retrieved from: https://www.teacherswithapps.com/the-benefits-of-using-ebooks-by-students/

Jillian R. Yarbrough is a clinical assistant professor of management at West Texas A&M University. @

seminars are provided to allow students the possibility of social interaction and relationship development with the other members of this class. The group project was designed to further enhance the quality of social interaction by adding the element of collaboration. For the group project, students analyzed Paulie, the one-year-old nephew of Maria, to report about his current level of development. Similarly, a case study could be used for a group project in other courses.

OGG Gamification

Gamification is a good way to build student engagement in a course, and OGG incorporates two gamified elements. One is an individual badging spy game that is laid down on top of the narrative, and the other gamification element is a cooperative superordinate goal that requires class cooperation to help Gilbert graduate.

The individual element is a spy gamification (thus the name Operation Graduating Gilbert) where students participate in a spy adventure embedded on top of this student narrative. In this game, live dramatic videos cast each week's homework assignment as a secret mission, with the student acting

as an *operator* to solve the week's mission. Students earn medals (badges) for completing course work, increasing rank as they build up medals. Students begin with the rank of *mole*, and can earn the rank of *director general* if they complete all coursework.

A second, innovative gamification element in the OGG course was the inclusion of a 'superordinate badging system.' Superordinate goals are group goals that require the cooperation of group members for successful completion, and are helpful for building a sense of community in a group of people. For this gamification element, the students are told at the beginning of the semester that they are responsible for working together as a class to help Gilbert complete 10 steps toward graduation. Each week that 90 percent of the class completes all coursework (assignments, quizzes, discussion posts), Gilbert will take one step toward graduation. The class' performance, and an update on Gilbert's progress is then provided to the class in a weekly announcement.

We surveyed students at the end and found that they were interested in the weekly narratives and wanted to see Gilbert graduate. They also enjoyed the gamification element and wanted to earn the badges.

Adapting Gilbert

OGG, or a similar design, can easily be adapted to fit your subject matter, as weekly narratives could be written about college students taking courses in any subject. For instance, a similar course for engineering students might focus on the struggles these students have with learning the math of the field and the resources to help them with these struggles.

Badges can provide a gamification element to just about any course. Badges can be earned for completion of assignments or for achieving a specific score on assignments. Instructors can create ranking systems to increase competition and highlight students who earn high ranks. A group goal can also be adapted based on the narrative's storyline, but the theme of reaching graduation could be applied to all subject areas.

References

Dweck, C. S. (2006). *Mindset: The new psychology of success.* New York: Random House.

Chris Roddenberry is an associate professor of psychology, Shelley Evans is an instructional designer, and Cynthia Bowers in an instructional technologist at Wake Technical Community College. @

in order to find the best option for my students. But instructional designers were able to help with browser compatibility issues.

Decision trees can be useful for teaching students procedures in a

wide range of subjects besides the sciences. Education courses can use them to teach how to address different classroom situations, and any course involving fieldwork can use them to teach procedures before students get into the field. Consider branching scenario options

for teaching procedures in your courses. I am confident that your students will thank you.

Sarah McLean is an assistant professor of physiology and pharmacology at Western University. @

with disabilities but will benefit any student who may not be aware of these settings, may be concerned

about their privacy, or who has not checked these settings in a while. Next month, we will learn how to address accessibility considerations with social media tools.

Kathleen Bastedo is an instructional designer at the University of Central Florida. @

Schoology as an Alternative to the Learning Management System

Tiffany Moy

The traditional learning management system is designed more for centralized control than maximized learning. I instead wanted one that more closely aligned with the social media systems that were most familiar to my students. After extensive research, Schoology was the clear winner due to its user-friendly platform and similarity to Facebook's platform.

With only four tabs, navigation is seamless. Instead of being centered around static course content, such as lessons, the system is designed around dynamic user contributions, similar to how the landing page in Facebook is comprised mostly of the new postings by one's friends. Schoology's homepage allows the student and instructor to post updates, as well as see updates from others. To the right of the Recent Activity and Post options are reminders for the instructor of assignments yet to be graded and upcoming calendar events and assignments for students.

Schoology also mirrors the "appified" world we live in where instead of being given a large system with many features we may or may not want, the teacher is given basic features and then can choose to add whatever features he or she wants as apps. In order to install these free apps, all that has to be done is go to the "Resources" tab, select "Apps," then "Install Apps." Unlike the closed learning management system, these apps often connect to outside resources, such as YouTube, Vimeo, Microsoft OneDrive, Khan Academy, Google Drive, Dropbox, or Evernote, and the apps are now available for use. There is even a "Suggested Apps" box that directs teachers to apps that may be useful to them. Thus, Schoology is designed to make the resources of the world available to be used in a course, rather than wall a course off from the rest of the world.

Another helpful feature of Schoology is the ability to allow collaboration between students in different courses. The instructor can create a group such as "Research Paper Discussion" and allow students from any course who want to get input on their research papers to post to the group. This might be especially helpful among graduate students who are trying to develop work for publication. If a number of faculty in a particular department use Schoology, then all those who teach a particular course with it can allow collaboration between students in different sections of the course. There is even access to public groups that allow for collaboration with users around the world.

The quiz option is excellent for creating both formative and summative assessments. Quizzes can include multiple choice, true or false, short answer, essay, fill in the blank, or matching questions. In tune with the theme of integration with outside sources, the instructor can import quizzes made on Google Forms or Microsoft OneDrive. Once students take these quizzes, the grading is done automatically as scores are assigned based on the answer key that is created. This became the most efficient way to buy back class time as I used these online quizzes as items that may be in need of remediation, and also saved me from grading manually.

While course set-up is normally done by instructional designers, Schoology set-up is easy enough that anyone can do it in a matter of minutes. You simply create a new course, and can give it a name, section, subject area, and learner level. It is also easy to archive a previous course. Once created, the instructor sends students an access code and they go to Schoology's website to join the course.

An instructor can use the basic version for free, while an institution-wide version has a charge for additional features. I have the basic version, which does very well for my needs, such as the ability to develop, manage, and distribute course materials, create auto-graded quizzes and tests, give students activities and their progress, and allow student collaboration.

Faculty often default to their institution's learning management system for any technology enhancements to their courses, but Schoology provides an option that many will find more flexible and natural to the student. It might also be the case that the social media-based design encourages more student participation and enthusiasm. An instructor might want to start by using just a few functions as a companion to their course, and then add functions as added apps as they see more and more possibilities to enhance student learning.

Tiffany Moy is an English teacher at Proviso West High School. @

NEXT MONTH'S TOPICS

Addressing Accessibility Considerations with Social Media Tools

Incorporating Augmented and Mixed Reality into Your Teaching

Online Classroom Simulations

Promoting Active Learning with a Game-Based App