



Examples of Authentic Assessments with Emerging Technology

Discipline	Assessment/Technology
Archaeology	Students use 3D printing technology to restore damaged artifacts from collections. Tool: 3D printer
Architecture	Students use The Sims software as both a simulation software and social connection site for architects. Players are issued a request for proposal by a fictitious client and must respond, conduct meetings with the client and team, and then propose a solution. IBM created a performance scorecard that evaluates the player’s communication, architectural methods, and more. Tool: Sims 4 (Sims Architect)
Art (Illustration)	Students use their iPad with an illustration app to produce drawings that can be played back as video to reflect and discuss the drawing process and highlight and correct any bad habits. Tool: Adobe Brush
Astronomy	Students plan a mission to Mars. Part of the project is the use of 3D printing technology to create a working space rover or rocket that will be tested on the final day of the project. Tool: 3D Printer
Biology/Chemistry	Diagram how a process works, indicating what happens if X occurs. Tools: Lucidchart , MindMeister , PowerPoint, or MS Visio
Business	Students explore micro-business concepts through product development and workflow analysis using 3D printers to rapidly prototype ideas, explore product design, and learn how to market their goods. Tool: 3D Printer
Business	Students record business “pitches,” Shark Tank style. Classmates give feedback on the pitches in a collaborative word processing document. Tools: Flipgrid , Microsoft Word (SharePoint)



Computer Science	Students troubleshoot a questionable piece of code and/or develop a website/app to solve a particular problem and/or meet a set of criteria. Tools: Google Sites , Weebly , Wordpress
Engineering	Provide engineering students with a problem asking them to propose their own solution along with a timeline and proposed budget. Tools: Flipgrid , MS Office Timeline , Lucidchart , Excel
English	Students record themselves reading and discussing passages instead of submitting written work. Tools: LMS recording tool, Flipgrid , smartphones/devices, etc.
English/History	Students record a podcast on a story/historical character, e.g., Julius Caesar or Lady Macbeth. Tools: Flipgrid , Audacity , Podbean .
Geology	Students use their tablets to collect and share data on indigenous rocks. Students take and annotate photos of the local terrain. Tools: ThingLink or their computer's photo editing software (e.g., Preview in Mac)
History	Record a role play of a particular event in history. Describe what might have happened if one element of a historical event had changed. Tools: Flipgrid for short videos (up to 10 minutes) or tablet, laptop, smartphone, etc. for longer videos
Journalism	Students use apps on their laptops or tablets to create multimedia news stories from happenings on campus and in the surrounding community. Tools: Flipgrid , Stellar , or iBooks Author
Laboratory Course	Allow students to upload a video of themselves doing a lab procedure in lieu of an exam. Students can also author a professional-style protocol document as their assessment. Tools: Flipgrid , smartphones/devices, etc.
Mathematics	Students use Geometer's Sketchpad to understand



	how theorems are developed. Tools: Geometer's Sketchpad
Physics	Professors can take students on virtual tours at different places around the world while explaining the concepts of physics at the sites of important discoveries in world history. Websites: CERN virtual tours or virtual tours of the USDE National Laboratories
Science	Instructors share images from their digital microscopes with students'. Students annotate and capture the images for future use. Tools: ThingLink or their computer's photo editing software (e.g., Preview in Mac)
Sociology or Human Development	Ask students to solve problems or create opportunities in their everyday social and family lives. Students create a technology-based social resource of their choosing, such as a family tree, a social bookmarking site, or a poster for a community fair. Tools: FamilySearch , MyHeritage , Diigo , Pinterest , PowerPoint