
Interview

An Interview with Dr. Mark Viner: Learning to Design, Designing to Learn

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Abstract

Currently, Dr. Mark Viner is an Associate Professor of Educational Technology at Eastern New Mexico University (ENMU). At ENMU, Dr. Viner educates undergraduates and graduate students in integrating technology into classroom practices. In addition, his experiences include working extensively with K-12 administrators, principals, and teachers in providing sustained professional development in technology integration. Dr. Viner has a passion for Project-based Learning and Inquiry-based learning environments using technology. Specific areas of expertise include web literacy and assisting teachers in developing effective technology lessons for the classroom.

1) Dr. Viner, you recently had a chapter in a book edited by Wally D. Thompson and Debra J. Coffey. What was your chapter about?

The chapter was about learning in context or situated cognition and how technology can be utilized to promote effective teaching and learning in the classroom. Initially, the chapter breaks down some essential concepts/theories that connect to situated cognition and technology, such as Distributed Intelligence, Person Plus View of Learning, Higher Order Thinking Skills, and Designing to Learn. Next, the chapters lay out possible designs when using technology to implement situated learning projects within the classroom. Finally, it provides some practical technology applications and lessons that incorporate situated cognition and or learning in context with technology.

2) Designing technology for the vast number of different students in our schools must be a challenge. What are some of the main issues?

We need to give teachers and teacher candidates experiences teaching in a design environment. It does not happen all at once. Both the teacher and the student need to be comfortable in the process. The design approach requires that the teacher starts with smaller projects to learn the process of designing to learn. For example, in my undergraduate courses, I begin by having students create smaller projects or artifacts to learn the technical skills of creating a presentation and collaborating with technology. Early on, teachers should provide models to the students on what a project should be like, but still understand that individual projects can look different. In this regard, students can assist the teacher in developing criteria for a grading rubric. This approach will give students a buy-in and let them know their projects can be different while still meeting standards. In addition, students should continually revise their projects based on peer feedback and reflections.

3) Most students are somewhat "tech-savvy," but what instructional challenges have you found with in-service or pre-service teachers?

I have found that while most pre-service and in-service students are "tech" savvy, most do not know how to validate the information they find on the Internet. In addition, while they can use social media and understand basic computer applications such as Word, Excel, PowerPoint, etc., they do not know how to incorporate technology into their lessons for effective teaching and learning. I have presented

undergraduate and graduate students with various websites, and in general, they have a hard time distinguishing between valid or invalid websites.

4) "Contextual learning"- what does this mean to the average classroom teacher?

Contextual learning is simply learning in context. For example, we need to ask ourselves:

1. Why are we learning this?
2. How can it apply to my everyday life?
3. Can we make learning meaningful and applicable?
4. Are we learning facts in isolation without connecting to the real world?

By asking these questions, we can begin to tie learning to contextual experiences making learning relevant to the students. One approach is to give the students "choice" in what they are exploring and learning. For example, if you are exploring the history of the southwest, give students choices on researching various perspectives such as Native American, Spanish or European immigrants. They could also explore their ancestry and how they came to live in that geographical area. Content areas such as migrations, economics, geological locations, and social and cultural impacts can be used to engage students to make connections to their own lives or community.

5) How do you integrate HOTS (Higher Order Thinking Skills) Into a typical lesson using technology?

I would start with an inquiry-based approach where a lesson begins with an open-ended question that the students can pursue from multiple perspectives. For example, suppose you are doing social studies or science project on water rights in a particular region or state. In that case, you can have students research various perspectives, such as a town planner, a wildlife expert, or a rancher/farmer. Each will have their viewpoint based on needs. It is not a right or wrong answer but one that might take compromise and discussion. This does not mean any response or perspective is correct. It means that each perspective must be backed up by data and research, in other words, a valid perspective. Another example would be in history, where students discuss the revolutionary war. Students could research and present from several points of view, such as Native Americans, British Citizens, or American Colonists.

6) Social media and social engagement- how important are they in the big scheme of things?

I believe "social engagement" is essential for teaching and learning. It gives students opportunities to share stories or impart knowledge they have researched, explored, or learned. Platforms like Office 365 and Google Drive (in the Cloud) allow students to create, collaborate and share knowledge with others. It gives students opportunities to share stories or impart the knowledge they have researched, explored, or learned. It provides students with a voice and an audience in sharing culture, stories, and knowledge with others.

I tend to shy away from major "social media" platforms because these platforms can have a negative effect. I have known both administrators and teachers that have been fired over their social media posts. Often, they do not understand that these posts are "public knowledge" and do not disappear from view. For example, I had a teacher complain that she/he was disciplined after posting pictures of themselves on a trip to Disneyland when they were supposed to be at a conference.

7) Google Earth Pro is an excellent way for students to learn about the world. How does this fit into your instructional design?

Incorporating or designing lessons in Google Earth (GE) Pro is a great way to engage students by using geographical maps and locations worldwide. Sample lessons on Google Earth could include:

1. Literature: books like the "Outsiders" or the "Diary of Anne Frank" are good examples where students can explore contextual locations where scenes take place in movies or books.
2. History: explore local and regional areas using GE. Students can explore their hometown or geographical locations and ask inquiry-based questions such as why was our town founded in its present location. How did the landscape of the area influence its history?
3. Math: GE can be used to measure distances and elevations. It has a scale tool for measuring geological features such as the great pyramids.
4. Science: certain areas of the GE (world map) have a time feature to go back in time to view various landscapes. For example, you can view deforestation in Brazil, glacial retreats in Alaska, or water levels over time in lakes or canyons. In addition, students can create their Google Earth tours by marking locations and creating a video tour by adding pictures and text.

8) Teacher training- what do we have to do?

We need to help teachers facilitate this learning process. It is not a "top-down" approach where the teacher is the "sage on the stage". The teacher needs to learn to adjust based on formative assessments and feedback continually. Formative assessments can be as simple as walking around the room and asking questions or using a checklist to ensure students are on target and progress through the design process. They are multiple components to learning to design, and it takes time (2-3 projects) for both the student and the teacher to be comfortable in their roles.

9) What have I neglected to ask about your chapter or the book overall?

I think you have done a nice job of hitting the main points of importance!