

Emfinger - Discussion Topic 4

1. Define and explain the idea behind using that type of technology

CAD – Computer-assisted design and 3D modeling = a tool that produces graphics ranging from a 3D image to a 3D simulation. This tool can also manipulate images as well through a process called morphing which basically transforms one image to another.

2. Find at least three resources either discussing the category or as an example of the technology type.

[Trimble SketchUp](#) – This is a 3D tool where students and teachers can create 3D environments. It is powered through Google. (Free with the option to buy pro)

[Alice](#) – This is a program that teaches computer programming. Students and teachers can create interactive games or video. It is geared for an older student ranging from middle school and up. (Free)

[LDraw](#) – This is a CAD program that creates LEGO models and scenes. Students or teachers “can use it to document models you have physically built, create building instructions just like LEGO, render 3D photo realistic images of your virtual models and make animations.” (Free)

3. How can it benefit teaching and learning?

CAD's are of great benefit to teaching and learning. In a digital, technology-enriched society teachers can create meaningful representations for lessons. Students can participate in creating their own animations and environments. Teachers can create lessons in which students can use this technology to present their work or show their learning. There is an abundance of CAD technology for educators to access that is free.

4. Does it fit best in one specific learning approach? Which one? And why?

This technology can best be used in a constructivist's classroom; however, I think it could be presented in a way that would be used in an objectivist's classroom. I believe it fits the constructivist's approach best because it is a great tool that can foster group work. Students can also explore and create thus fostering their own learning.