Machine Learning 2018: Virtual instruction: A new approach to educating the 3D artist- Benjamin J Rosales-Terra State Community College

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This presentation will address the incorporation of new methods, technologies, and tools for a more accessible and streamlined system to train the next generation of 3D artists. It will compare and contrast traditional tools and methods with new and emerging ones as well as highlight the pros and cons of each. It will also demonstrate why these changes are not only necessary, but will become mandatory in the future. Virtual instruction can be defined simply as instruction given through a live online video feed without the instructor being physically present, or in some cases, without the student being physically present. While virtual instruction is not new to education, there are new concepts being introduced to make virtual instruction even more accessible, more affordable, and of an even higher quality. The proposed virtual instruction model will open a discussion about the challenges of companies hiring well-trained employees with less student loan baggage, the challenges of schools attracting qualified industry professionals to teach animation courses at their campuses, and the challenges of students striking a balance between quality and affordability in animation programs. These challenges make for a very promising environment to implement the next phase of virtual instruction. The idea of implementing the virtual instruction model across time-zones will also be discussed. This presentation will have several examples of instructional tools developed by the presenter, including personal and student projects. These examples will give compelling evidence of the effectiveness of the virtual instruction model, which is the goal of the presentation. irtual reality can be used to enhance student learning and engagement. VR education can transform the way educational content is delivered; it works on the premise of creating a virtual world — real or imagined — and allows users not only see it but also interact with it. Being immersed in what you're learning motivates you to fully understand it. It'll require less cognitive load to process the information.Here are just a few properties that makes virtual reality in education so powerful.

Better sense of place When students read about something, they often want to experience it. With VR, they aren't limited to word descriptions or book illustrations; they can explore the topic and see how things are put together.

Thanks to the feeling of presence VR provides, students can learn about a subject by living it. It's easy to forget that VR experiences aren't real — a body actually believes it's in a new place. This feeling engages the mind in a way that is remarkable. It's a well-known fact that people learn best by doing; however, if you inspect modern education, you'll see how little learning actually happens by doing. Students are focused on reading instructions rather than using them in practice.

VR in education provides an experience anchor to the instruction. With VR education, learners are inspired to discover for themselves. Students have an opportunity to learn by doing rather than passively reading. Having virtual reality in education is useful not only for content consumption, but it's also great for content creation. By giving students powerful tools such as Tilt Brush, you help them boost their creativity.Visual learning A lot of people are visual learners — VR is really helpful for this group of learners. Instead of reading about things, students actually see the things they're learning about. Being able to visualize complex functions or mechanisms makes them easier to comprehend.Users are ready to embrace new technology The first idea that pops into anyone's mind when they think about VR technology is an entertainment experience. Many designers see VR as an extension of the gaming industry. It's true that VR has historically been dedicated to gaming, but things are changing. According to a recent survey conducted by Greenlight VR, desire for education outweighs desire for gaming content — 63.9 percent vs. 61 percent.

Biography

Benjamin J Rosales is a Graduate of Ringling College of Art+Design's renowned Computer Animation program as well as Texas A & M University's College of

Architecture. He also spent a year at Carnegie Mellon's Entertainment Technology Center. He moved to Iowa in 2011 to help create the computer animation program at Southeastern Community College in West Burlington, IA. While there, he guided two animation teams in the production of their award-winning shorts at the national Business Professionals of America animation competition last year. He shares with students the knowledge and skills he continually gains from his own experiences in the animation industry. Prior to teaching, he worked as a Character Animator at Reel FX in Dallas, TX on Sony's "Open Season 3". While at Reel FX, he also did clean-up work on Open Season 3, Looney Shorts, Webosaurs, and DC Universe as well as managed the Render Farm at night.

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