

Digital Pueblo Project – Cooking Out Loud

Mature Animation with Beginning Level Helpers

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Introduction:

The Digital Pueblo Project (DPP) is building an art and technology environment in New Mexico that includes animation and computer graphics for film, television, immersive projection, arts, music and dance. The goal of the project is to create an atmosphere that will foster innovation and economic opportunity in New Mexico and reverse the drain of talented and innovative people.

The DPP is funded by an NSF grant, and is administered through the Arts Technology Center at UNM, affiliated with the School of Computer Science and the College of Fine Arts.

The Method:

The DPP method is to provide students with hands on experience with animation productions by allowing them to participate in real world projects. In the first year and a half, our students and teacher animators created works for local television, live projection with the UNM Chamber Orchestra, portions of the opening show for the new Eugenides Planetarium in Athens Greece, a Flash website for ISTEAC, (Ibero-American Science and Technology Education Consortium) as well as multiple projects for the LodeStar Domed Theater in Albuquerque.

The Challenge:

Of course, the challenge in such an endeavor is to maintain good quality in the final production while still allowing the students to fully participate and to get their hands on the actual work. Secondly, it can be very challenging to keep a production on schedule and still teach the beginners the process.

Many of our students have been high school or even middle school age, and classes are generally held in the evening, so it is difficult to keep them focused and learning, while maintaining production progress.

The Solution:

Our teams are made up of a teacher, one or two “mentors” (generally UNM students with 3D animation experience), and 2 to 6 students. These students have ranged in age from 13 to 65,

but have been primarily aged 16 to 23. Many come to us through partnerships with special programs in local high schools.

The lead instructor (Hue Walker) had to “invent” our method, to figure out how to keep tired teen-agers on track, learning and producing, and to maintain a high standard of production in the process. We generally devote the first 3 or 4 class periods to learning the language of animation as well as introducing the software.

Once the students have the basics, we then identify the different tasks needed in the projects, and which ones can be performed with a little instruction. We often do what we call “cooking out loud”, which is to work on a part of a project while students watch and we explain every step, keeping up a dialogue with them as we go. When doing a job which requires repetition of steps, we do the first 2 or 3 instances, then let the students take turns “driving” while we watch to make sure it is done correctly. The kids are surprisingly patient when asked to sit and watch, and do a great job when invited to participate. We learned early on that close supervision is a must if we are to be able to make use of their actual work.

This is a slow and laborious process, and projects tend to take about twice as long as without “kids underfoot”, but we have several great projects to show, and a troop of kids who have a great head start on the process of learning animation.

The most involved project to date is a 17 minute full dome animation which is nearing completion and is expected to premier at LodeStar Planetarium Fall 2004. This piece is based on the sketchbooks and glass sculptures of internationally known LA artist Gronk. Having taken us over a year to complete, this project involved more than 2 dozen student participants, and a 3.5 minute version was seen June 2004 in the 3rd annual International DomeFest.

Although the character animation in the piece was done by the advanced participants, the kids were allowed to play with the models and to build the animated environment surrounding them. In just one of the arched cactus models, the kids learned primitive modeling, keyed extrudes, motion paths, non-linear deformers, keyed curve motion, simple shading, timing, and good old squash and stretch.

We like to think of the Digital Pueblo Project as an “Animation Headstart”, where folks get a chance to dabble without big expenditures, fear of bad grades, or job loss.

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