

Team Tactics: Using Industry Workflow Standards in 3D Curriculum

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The Solo-Flight Model

Aspiring animators – especially student animators – are often solitary creatures. Coincidentally, animation curricula are highly focused on the ‘solo-flight’ model of instruction where one student conceives, designs, and completely produces an animation project.

Solo-flight projects are needed as part of the 3D learning process and students should do several such animations at the beginning of their academic careers. They help students understand narrative, the interlocking nature of all the steps of the animation process, and that using the technology is secondary to the resulting design, aesthetic, and narrative output. When a student produces every aspect of a project he learns all of the steps of the 3D process and more importantly, sees how they all fit together.

While powerful in some ways, the solo-flight model also allows students to get into the habit of sloppy object naming, poor file organization, inappropriate rigging shortcuts, and a host of other “...but *I* knew what it meant,” practices that are fatal in a team production environment.

Industry Workflow

With very few exceptions, studios work in collaborative teams. The complexity and time restrictions require artists to specialize so that multiple aspects of a project can be worked on concurrently. While modelers are modeling, texture artists are texturing; while riggers rig, the animators are animating the same project. Each person is feeding the next team member files to work on.

Being able to communicate with other artists, animators, and programmers is absolutely essential to studio success. Properly documenting and preparing files becomes not only an issue of convenience but of survival. Animators must be able to fold their artistic vision into the vision of the whole. Working within a team paradigm is standard in the industry.

The Complaint

The message from industry to animation programs has been, “They know the technology, but don’t understand how to work as a team.” It’s easy to find animators looking for work that lost their early positions because their produced files were impossible for the rest of the team to work with – costing time and money.

Solutions

It is clear that working in teams at some point in the curriculum is an important part of every 3D animator’s training. Without it students are simply unaware of the issues involved. But teams are tricky; students put into teams to create a single project often have one student doing 90% of the work while the group as a whole takes the credit. More damaging, is that one student does all the learning, while the others simply flounder. Or, even if everyone works, the division of labor becomes problematic when if one person does the modeling, what does that person do during the rest of the production cycle once the modeling is complete?

At the University of the Incarnate Word, we have developed a course called “Animation Production.” The goal is to provide students with a team-work experience that keeps them engaged throughout the semester and maintains accountability.

The way it works is this: Students are divided into teams of four students. Each individual develops a concept, design (in the form of sketches and style sheets), and storyboard of a narrative project. This student is considered the Director of his project. After the conceptual development process, the Director passes his sketches and storyboards to another student (who was a director of his own project) to model while he receives a project to model himself. This continues with the student also acting as Texturer for shift three and Animator for shift four. For each shift, the student is working with a different project.

These four projects cycle through each of the team members. Each team member plays a different role on each project including Director, Modeler, Texture Artist, and Animator. This means that throughout the semester they direct, model, texture and animate different parts of four different projects. They are consistently working on a different point of the production process and always on a different project

Quickly students realize that proper naming, file organization, and effective communication is vital to getting the result they want. They learn communication, reliability, and efficient feedback. If they fail to communicate in proper sketches or verbal feedback, the repercussions are quick and clear.

We’ve found the results of this class to be immediate and dramatic. The importance of key issues of teamwork, proper communication, motivation and project management come into clear focus; and students finish with a much clearer idea of industry practices.