

2D/3D Animation Advisory Board Meeting
October 21, 2015
11:00 AM

Members in attendance:

Justin Marshall, Kyle Green, Plural Sight- Creative Division; Alain Viesca, Viesca Digital Designs; Mark Rains, Jason Gonzales, KeyBridge Technologies; Ben Ortiz, Skyline Ink.

The 3D Animation & Visual Effects program has continued to experience growth primarily due to Advisory Board input. Consequently, a 2D Character Design & Illustration program has been added this year to serve student demand. Both programs share a common foundation during the first year, which focuses on applied theory related to color, design, storytelling, 2D and 3D animation, and motion graphics. Students are predominantly high school and/or young adults. For students desiring additional training beyond the first year, they may elect to continue training for a second year, allowing for specialization in modeling, animation, or motion graphics. During the second year, students are extended more flexibility regarding the tools used and projects completed, depending on demands of internships, future goals, etc., although a recommended structure outlining competencies to be attained is provided for guidance.

Advisory Board members were asked the following questions and/or comments were made regarding the following areas.

What training should we be looking at right now, or at least by next year, in order to prepare students for the jobs of tomorrow?

- How to approach a project, breaking it down into a series of steps, for production. For example, when asked to model an object, what is the student's approach? Do they know how to break a model down into geometries and then model it?
- Ability to quickly adapt to new technologies and use them in day-to-day problem-solving.
- Modeling & designing for 3D printing in art, industry, etc.
- For organic modelers, instruction focused on art; less emphasis on technology aspects.
- Reality capture photogrammetry.
- Communication skills, including the ability to ask good questions, speak and write clearly, and determine the desired outcome.
- Continuing the learning process.
- Unity 3D.
- Get a Specialization.

- Professional Development: Portfolio, Job/Communication Skills, Career Goals, Background Checks, etc.
- More Unity.

How does your organization classify the training we offer, and/or that you need related to this area? Who are you hiring?

- 3D Modeler.
- Motion Graphics Artist.
- Multimedia Developer.
- Game Developer.
- We need game developers.
- We need students with programming skills.
- We are hiring positions related to 3D Modeling.
- We need employees with foundation elements of environment and building design.
- We are hiring students that understand concepts vs what buttons to push, and can translate that knowledge to other packages.
- Troubleshooting and flexibility are key skills.
- Some familiarity with the toolset in that industry, i.e., traditional 3D platforms (Max, Maya, etc.).
- Non-traditional tools: ZBrush, etc.

Comments/Suggestions/Techniques to reinforce the training we provide:

- Flexibility – being able to change direction at a moment's notice is very important.
- Written communication skills, (email, reports, etc.)
- Make sure students know: your background/criminal record is not secret, nor is drug use. Don't make decisions you might regret. Be able to pass federal background checks.
- Consider having working professionals come in and teach these soft skills.
- Troubleshooting is one of the most valuable skills a technical artist can have. If someone understands the "process" of testing variables, and identifying the causes of the problem, it is a skill that can be applied anywhere.
- How to handle tough situations and create win/win solutions for all parties involved.
- Though it would be tricky, training how to think outside the box.
- Using tools diversely.
- Problem-solving using creativity and common sense.
- Group projects with real deadlines and hand-offs can help introduce a taste of the real world.
- Learn to manage projects efficiently. Scope is important when planning projects.

What are your training needs? What emerging needs should be addressed relative to the field?

- 3D Modeling strengths.
- Approach and study of a design, breaking it down for modeling needs.
- Skills in organic sculpting.
- Better to have a person that has a very specialized path. We need a person that knows a lot about one thing, not a little about a lot of things.
- We want people who are very specialized, willing to think outside the box, who want to be really good at something, not just the basics all over the place.
- Training should evolve around concepts and techniques vs software specific.
- Being able to adapt is important.
- Artistic skill is just as important as knowing “how to use the software.” We see this frequently in job applicants, where they clearly know how to use the software, but artistic outcomes leave much to be desired.
- Always continue learning.
- Not only is classroom learning important, but also equally important is the ability to adapt to the environment and people you interact with.
- For organic modelers, there could be more focus on organic sculpting either in 3D platforms (Maya/Max), or ZBrush.
- For hard surface modelers, building architectural assets.
- For organic modelers: clothing, anatomy, hair, muscles, etc.
- For hard surface modelers, when asked to model tanks and machine guns, do they just take it to the simplest point? Often employees with little direction tend to simplify. Ask questions – perhaps don’t just provide a simple tank, but should it rotate, etc.? How is it used? Where are the details? The project is often not task specific. Is it front and center on the screen or will it be on the side of a scene? Did it take three days to model a simple tank that’s just in the background?
- Plan and storyboard first to know what needs most attention.
- Possess the skill of understanding the process - what is the problem? Find a problem by tracing it back - what is breaking?
- Too many employees will ask, does this work? Well, have they tried it? What have they tried? Troubleshooting skills are critical. Know when to ask a question and when to Google it!

What are the primary applications used in your industry?

- 3DS Max
- Unity, CryEngine
- ArcGIS City Builder
- Modo
- Cinema 4D
- Mudbox
- Maya (three replies)
- ZBrush (two replies)
- V-Ray
- Unity 3D (two replies)
- Photoshop (three replies)
- Illustrator
- 3D Digital content for FX, game content, and the game industry.
- Software is important but how do you approach it? How do you break it down? Basic geometry.
- Knowledge of concepts and being able to troubleshoot and apply concepts to different tools is critical—much more important than being good at pushing buttons in on application.

General Suggestions/Comments:

- Asset creation – don't do your own thing; learn to use someone else's asset and match that look with your own – learn to composite different styles together. Animate it.
- Don't give students too much freedom. When working with a client, you are given something you must build, no changes are allowed.
- Interviewing Practices: We ask the applicant to sit down at computer, we give applicant a picture, and then give them one hour to model with the expectation that the product should look like the picture. Applicants should be quick, flexible. We also utilize situational questions in interviews. What would you do in the following situation?
- Research and take time to be aware of tendencies and environments where you are headed. Some are more methodical; there are different personalities. Understand yourself in the workplace. Have confidence and skills.
- Be able to work with a challenge – when you are on your own and no one can explain or answer a question, what do you do? When you finish a task and/or have a question do you sit there waiting for more instruction or do you have the initiative and drive of a problem-solver? People with this skill can apply it to anything and adapt to any software. It is very valuable.
- When solving problems, start with a fresh scene, cubes and spheres – does problem still exist? Is first inclination to ask rather than try? When someone asks a question, we ask first: Have you tried it? What did you do to figure it out? Can you work backwards to figure something out?

- Organic modeling is very challenging! Can you do a shirt? Where should the muscles go? Know anatomy! Even if a client or the target audience isn't an expert in anatomy, they will know if something looks off—little things people see every day. Working with fantasy models – can it be real? Is it correct?
- Often we see a lack of professional development: checking, writing, and responding to emails; looking presentable; knowing when to talk; punctuality; usage of cell phones, Facebook, social networking. To keep a job, you must learn to manage distractions properly. Employees need to show initiative--don't just do as little as can be done.
- Students should establish 1, 3, 5, and 10-year professional goals. What about your career? Why are you here? Dress appropriately. These seem like black and white issues, but there is often a disconnect. Common sense does not always prevail. Even if students are talented enough to get the jobs at Disney/Pixar, they still have to hold on to those jobs with professionalism. While it's true that artists are different, they still need to conform to certain standards. Be proactive, and don't wait for me to tell you. Learn something new that will help you get better at what you do if there is nothing else to do.
- Freelancers – need a business course! There is a structure, it's not as creative as one may perceive. There are professional expectations, taxes, etc.
- You can make up for a lack of talent with professionalism. Every day is an audition/job interview.
- As a general rule, organic modeling is a more advanced skill. Stay away from human realism – use stylized/cartoonish styles if you need a character. People see humans on a daily basis, if you are off just a little on the depiction using a realistic human style, everyone will notice—very challenging to pull off.
- Government is increasing its use of Unity. However, you must pass a federal, (which is different from a state,) background check. Nothing is hidden from background checks – even information that has been redacted. Be aware what you do now matters. Credit is also a problem. Pay loans, avoid anything negative.
- Be able to combine soft skills with technical skills. Structure is important along with creativity and flexibility. Creatives need to be able to handle a business environment – you can't lose your cool!
- When asked about your work or what you are doing, how do you talk about what you do? “I'm just modeling...” or is there a good explanation that demonstrates your passion and understanding? Great talent doesn't trump a basic work attitude. Does your attitude and reply reflect professionalism and passion as well as pride in your work?
- If you always say – just tell me what to do, then this is not the right place for you. Be efficient. Take initiative, Problem-solve. Know how your skills tie

into others. Specialize, but be willing to think outside the box. Generalists also are in demand. Do ALL the basics very well. Don't skip over foundations of design, color theory, principles of animation – we want to hire the best.

- It's a small world if you screw up. NEVER burn a bridge or it will come back to you. Watch your usage of social media. We always check out backgrounds, social media usage, and transcripts along with your portfolio. To get the interview, all must be stellar. Put up with stuff - don't burn bridges.

Portfolios:

- Applicants MUST have a portfolio. We won't consider an applicant without a portfolio. The portfolio rules. Who uploaded course work versus who did more? Who went above and beyond and applied skills at a personal level? Are grammatically correct comments and a brief description provided? Help employers understand your work process.
- Did you take ownership of this? Or did you make a generic model based off of a cool Google image you found? This isn't direct plagiarism, but if the look can be pulled off another site, and the primary difference is textures – you should instead build your own model.
- Quality is always better than quantity. Provide 2 – 3 strong pieces as opposed to more pieces that are just average. Don't pull models into your designs that are not your own or original.
- If it's a demo reel, within the first 5 – 8 seconds, an employer will know whether they will continue watching. We are tired of dragons, knights, orbiting planets, spaceships, standard things. If you spend 5 seconds orbiting a planet, and nothing else happens, you've lost me. If you do start with a spaceship does it turn into a taco truck? That's better, and someone may continue to watch. Along the same lines, if you spent all that time on a "cool" 10-second intro, you've lost the audience.
- Storytelling is equally important. Rather than just watching random pieces, which is something everyone will submit, what will be different about your portfolio? Think outside the box and be creative. Provide a strong concept; Keep my attention – the story is key! Your demo reel should be limited to 1 – 2 minutes.
- Start with the story. Your art is an expression of the story. The computer is just a tool to tell the story. But the most important thing is the story.
- Turntables are now standard, and have no story element. Share references, profiles, storyboards and be sure to develop them first. The portfolio will make or break your ability to get an interview in this field.
- It's challenging to demonstrate organic, softer skills, including anatomy, animals, trees, fabrics. An art foundation is important and will overcome any weakness in organic sculpting and/or real anatomy depiction.

- Architectural projects and design have the opposite challenge: you need demonstrate technical skills. Identify WHY you draw a character. Is it in proportion, size, details, etc. Use notes with your portfolio, especially in Behance. Include Why/Techniques you used. Walk the viewer through the animations, based on blueprints. Speak to why something was done a certain way. You will have some creative freedom, but WHY did you do it that way—was there a purpose other than you just thought it would look neat? Most importantly, how does your work fit into the bigger picture?
- For a portfolio challenge, build something someone else designed - it has to match. You should be flexible and work quickly.
- For another portfolio challenge, build piano on a stage - as much as possible inputting your own personality with an explanation of WHY it was done a certain way. Explain if model was based of off something real or actual. How does what you're modeling fit into the bigger picture - how it will be used
- There should be an emphasis on storyboard - again, how does what you are showing fit into bigger picture – did you spend 3 days modeling something that will be on the edge in the background?
- Sketchfab and/or Marmoset Viewer are good tools to use. They allow a user to upload model with layered comps, allows viewer to turn off wires and ultimate provides a more complete picture of the model and techniques used.