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Teaching Statement

The field of game design, especially in an academic sense, is an infant bleating for attention and wetting its diaper. The twenty billion dollar industry is also a golden child that provides 58% of the American population with an influential entertainment product that has become an engrained part of our culture. When I went through school many years and generations of gaming hardware ago, there were no courses in game design for me to take, Photoshop was just released, and Pixar, one of the most renowned animation studios, was feverously rendering out frames for its first release, "Toy Story". This prologue is important because it relates why becoming an expert in the field of Game Design and teaching in it now cannot follow a typical path, for there was no educational yellow brick road for me to follow to where I am now as a professor of Game Design. A BFA in painting plus 15 years of professional experience as a game artist and art director has formed my knowledge of the field with each project I was on, each studio I labored for, and each artist I worked side by side with as we crafted the best artwork and games possible. Today that experience allows me to teach with the perspective of a battle veteran, filled with anecdotes, wisdom that can only be gained in the trenches, and a passion that comes from any long relationship and my love for game design certainly is relational.

Back to my initial analogy, game design is a young discipline that only in the past decade has matured enough to form its own scholarship and pedagogy in the more traditional sense. It is my privilege and fairly unique position to be on the vanguard of the maturation of game design as a discipline. My George Mason Game Design colleagues and I are only SCHEV approval away from forming one of the few MA programs in Game Design in the world. All of this "newness" means that teaching game design in an ever-evolving industry takes a great deal of energy, research, and a facility for discovering the best way to teach a subject that has never been taught before. I cannot pass on the philosophy of my teachers in game design, for I taught myself. Books on game design are improving, but most have a naïve rawness, not honed and refined by experience in the industry and the classroom. My generation of game design instructors do not have degrees in Game design, but perhaps those we are teaching now someday will.

With the state of game design instruction and my own origin story summarized above, I can relate my teaching approach with some context. The courses I teach are in 3D modeling and animation for games. This means students must learn how to use multiple pieces of complex software, they must learn how to see as an artist does—with accuracy and understanding, and they must learn how to problem solve. Everything they build is a riddle they must answer, and the instructional challenge is getting their artistic and technical brains working together to conquer it. So my teaching focuses on building proficiency in fundamental skills, and more importantly, confidence. These are key ingredients for self-empowered learning. I want students to crave more knowledge—to be seduced by the results that come from applying themselves.   I want positive, transforming growth to feed their hunger for more learning. As an example, students start the introductory course in game art by making simple boxes, but by the end of the course they have created animated characters in a 3D game. It's a huge task, but it's also a very rewarding accomplishment. Students look at what they have done and feel pride, satisfaction, and they want more. So I push and challenge my students—giving them work on the knife's edge of their

knowledge, compelling them to problem solve, to explore, to research, to step out over the precipice, and to discover that, with effort, they can create amazing things. Students that embrace the challenge always seek more, in advanced courses and independent studies, because they have full confidence in me—that I will push them, that I will ask them the right questions, and that I will give them every ounce of energy that they give me and more.

I firmly believe that one learns the most when watching a master at work. Beyond thousands of hours of practice, there is no substitute for watching a master artist draw, mix colors, dance their eyes from subject to surface, and then ask questions while they work. I have learned so much as an artist watching other artists work. I model that in my classroom and I fervently feel that there is a lack of this kind of teaching in education today. In my courses, instruction begins in the classroom via exercises. As I demonstrate at my workstation, the class follows along. I lead the students through the workflow, showing them step-by-step how to work the software to achieve the goals for that day. If any student has trouble, a raised hand quickly summons me to their side so I can get them back on track. Throughout this process, I pause to point out *why* we are doing things a certain way and relate the importance of such details to improve proficiency. It is a keystone of my teaching—students must know the why as much as the how. The internet and Youtube is full of the "how", but my students will know the why. The assignments I give help build an understanding of how and confront students with decisions that force them to know the why.

I also teach student the "why not's" just as much. I show students the wrong way of doing things and say why they are wrong. I force them to experience things gone wrong or ambiguous situations on purpose so they can avoid the issues themselves, but also so they can build more thorough understanding of the nature of their tools and process. One of the greatest hurdles of learning something as technical as 3D modeling, is getting stuck or messing up. Such mistakes are puzzling at best and ruinous at worst. With me there guiding them through the techniques, they can quickly master complex tasks because they don't waste time getting lost or confused.

Since class time is limited, instruction doesn't end there. I have recorded my own video series for my courses, offering over 40 hours of instruction across dozens of videos. Students can watch step by step, even frame by frame as I explain topics and walk them through exercises. These videos reside on my own website where material is broken up into chapters. The material duplicates and augments class lectures depending upon the topic, allowing students to learn, practice, and remediate at their own pace and need offline. Some of the videos even guide students through assignments step by step, depending upon whether the assignment is a medium for cultivating new learning or a tool to assess aptitude and progress. Regardless, the videos are well-received and appreciated by the students, because they are a positive force on so many levels. They are digital instruction in digital times. My students are products of the 21st century. They don't want to read books—they want to watch videos. We don't use text books in my classes because the static pages of a book are an awful way to teach 3D game animation. Students today are more comfortable browsing the web and watching videos than flipping through the brain-numbing pages of an instructional text, no matter how eloquent its prose may be. It's a generational thing—it's how they are wired, and it's how I try to reach them—in the place where they

are comfortable learning. These videos are a great medium to teach the material, and because they take so long to produce, they show that I care—and students appreciate that perhaps most of all.

In any visual art, the critique is a core tool for fostering growth and it is no different in 3D modeling. Students need feedback on their creations. There is no "test" for drawing and there are no tests in my courses because feedback cannot come in the form of a simple score. My students learn a great deal in a short time because I give them a great deal of verbal feedback and I give it quickly---praising good approaches and correcting bad ones. My courses typically have 8 to 10 assignments during a semester and that pace requires me to generate substantial, meaningful critique in less than a week of time. With so many students and projects, we could never manage that and still have enough instructional time to introduce new material. We would become mired in critique sessions. My solution for this is to record videos critiques for each student's assignments that they can view on their own outside of class. In these videos I load up their work in the software and show them what they did well and demonstrate issues in their work and how to overcome problems. This is a time consumptive process—I'll record 3 to 4 hours of video per class for each assignment. Armed with these videos, students can see where they need to improve—and it's so much more effective than a rubric alone, as I can really dive in and explain the process, pull up examples, and cater my responses to their needs. I've done critiques as long as an hour before because a student needed to see step by step how to overcome their knowledge gap. This allows students to overcome challenges, and apply their learning to the next assignment, as each assignment incorporates previous topics, only at a more difficult level. Many students have told me they learn more in my classes than in the sum of their entire academic career. Now I consider that to be a flattering exaggeration, but it shows how much they learn and how much they appreciate my efforts. Hopefully when they see me, a former art director, giving so much, they cannot help but model that same passion and effort. To distill this example down into my philosophy, it shows that demonstration and modeling are keys to learning and that I am willing to sacrifice a great deal of my own time to ensure my students learn. Their dreams are at stake after all.

And, yes. We have fun in the classroom too. With all of this hard work, my teaching style is relaxed, yet passionate, jovial yet determined. I strive to keep things humorous as appropriate. We brainstorm hodge-podge mashup games together and have team competitions and projects in class. I try to keep things light-hearted. We create 3D models of Nerf toys, LEGO, super-heroes and other "cool stuff". We do some serious learning too though, we are making game art after all, not solving world peace, but then games do reach across boundaries—cultural, religious, racial, gender, age, and many more.

All of this philosophy supports my goal to maximize their chances of getting a job in the industry. As an industry veteran, I have a great deal of institutional knowledge to offer them. I have "made it" and I can tell the tale, and students have a huge appreciation for that fact. Everything in my approach seeks to teach them the quintessential skills needed to succeed, without the cruft. I know exactly what they need to know and I structure exercises and assignments to build their skills to be competitive. They can use these skills in future classes, on their own projects, in the Mason game design club, GADIG, at their internships, and hopefully, someday, on the job.

My lessons do not remain static either. Every semester I evaluate my material and seek ways to improve it. I survey my students throughout the semester via SurveyMonkey, so I can react to that feedback and adjust my plans accordingly. A great deal of joy is to be had when a lesson goes over well—and all students, no matter what their skill-level, learn more than the semester before. There is no bible for teaching game art, so the burden falls on the pioneering game faculty at GMU and elsewhere to develop this curriculum –and to continually refine it as the industry evolves. So I spend a great deal of time developing lesson plans and even new courses, to ensure I am providing the most effective instruction possible. I have completely remade the curriculum for both of the 3D modeling courses, and have made a special topics course to be branched into 2 elective courses hopefully in 2015. It's a lot of work—a ton of lesson planning, research, and preparation. I do this work because it is what the students need to be challenged.

But it's not all about "press this button" or "do this, then that". I am not just teaching software. I am teaching students how to think creatively and problem solve. We do numerous brainstorming and lateral thinking exercises throughout my courses, because we need innovation not regurgitation. I also stress that students ask the "why", and not just the "how" so their knowledge is founded in truths and principles, not just process. I also show them how to be constructively passionate about their work. I look them in the eye and tell them they have to want it. I tell them that it is great fun, but it's a hell of a lot of hard work. I show them the best work of past students and tell them they can do better. I tell them that there is a ton of competition out there, so they have to want it more than everyone else. I am a straight shooter and tell it like it is so students know I am honest, consistent, fair, yet understanding.

In the end, most of my teaching philosophy comes naturally to me because it's centered on my passion for games, art, creativity, and the desire to help bridge the gap between my students' skills and their dreams, until they can become one.

How do my students respond to my teaching and how in turn do I respond to them? Students have said that that I am one of their best teachers because my dedication and efforts are incredible. They also say that my courses are fun, but hard and require a ton of work. I believe that is a fair critique. I know my courses are hard, but I also know that I learned the most in my professional and education careers when I was pushed. Growth in a visual art takes practice, patience, and passion and I seek to teach students how to tap into all three of these quintessential qualities that will serve them no matter where the yellow brick road goes.