

Meeting The Challenges of Game Art Production

A Discussion with:

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The Good News

- **The Demand for High Quality Art is Soaring.**
- **The Consumer:** Expectations of what is possible continue to rise. Visually stunning, real-time experiences fuel the market place.
- **The Tools:** Computational power has become inexpensive and the animation software is increasingly user friendly.
- **The Artists:** There are more artists with animation training available than ever before.



The Bad News

- Any holes in an Artist's skills, knowledge or production flow are magnified.
- The demand for quality artists is exceeding the supply.



Challenges



Challenges to Game Art Education

- Existing Arts Education
- Social Attitudes toward Art
- The Complex Skills of Animation



Challenge 1: Existing Arts Education

- **K-12 Arts Education**
 - Doesn't exist in any systematic way.
 - Extreme variability between students entering college. So extreme that we cannot assume any baseline.
 - Virtually no theoretical knowledge of why what they are doing works or does not. When compared to knowledge in Math, the best High School artists have about a 6th Grade understanding of their craft and most are considerably worse.



Challenge 1: Existing Arts Education

- **College Arts Education**
 - Focused on Fine Art or Trade.
 - Fine Art has limited emphasis on professional production and almost no emphasis on representational drawing for communication.
 - Trade School training focuses on the end product but provides almost no theoretical understanding. Students learn a grab bag of techniques but rarely any cohesion between them.
 - Many of the teachers never learned the skills necessary to animation. The number of drawing instructors without anatomy knowledge is rampant.
 - Many schools still operate as if K-12 arts education was healthy.



Challenge 1: Existing Arts Education

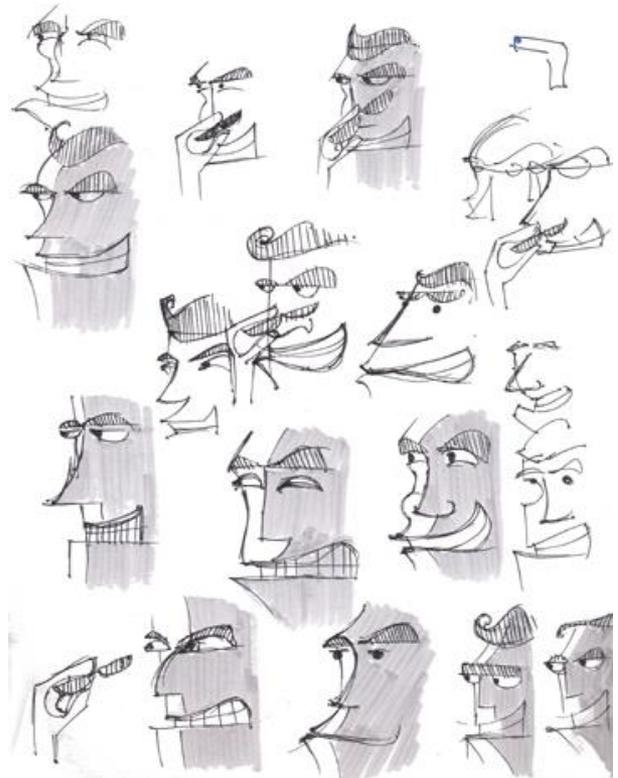
- **The Impact on Students**
 - No distinction between **Drawing as a Language** and **Drawing as an Art**. How often do you use English to make Art? How often do you use English?
 - Limited understanding of **Art Practice vs. Finished Art**. They attempt to create finished work with every piece.
 - They don't realize the relationships between **Goals and Process**. When you change goals you may need to change how you draw.



Practice Vs. Polish



Process Vs. Polish



Challenge 2: Social Attitudes Toward Art

- **Art viewed as a Gift**
 - The word “Talent” is used as a description of mystical powers bestowed at birth instead of describing someone whose persistence and passion have driven them to earn a skill set .
 - Parents do not hold their education systems accountable for Arts Education. Imagine the outcry that would arise if most parents received notes telling them that their children didn’t have a gift for reading and should pursue other interests.



Challenge 2: Social Attitudes Toward Art

- **The Starving Artist**
 - Few people understand why starting a career in Art is difficult. Essentially there are two issues:
 - Entry level skill sets are higher up the learning curve for the Arts than most professions. A factory worker may be able to launch their career simply by mimicry or following an instruction manual. Art skills must be integrated before an Artist has something with market value.
 - Because Art is a profession where you get to do what you love, the competition is stiff.
 - Many parents struggle with doubt when their child decides to enter the Arts or Gaming.



Challenge 2: Social Attitudes Toward Art

- **Instant Gratification Society**

- Pressure to succeed at a young age conflicts with the long growth curve of art skills.
- We are programmed to be impatient. Students get frustrated easily and struggle with their emotions as well as their skills.
- We celebrate the rewards but rarely discuss the costs. Any criticism is viewed as an attack and is attached to the student's personal sense of worth.
- 30 years of emphasizing small goals has come at a cost. Too often the scale of the reward hasn't related well to the goal. We've addicted ourselves to the rewards without significant cost. This doesn't translate well in the professional world. Most real world goals with any real value require enormous effort. Globalization is magnifying this issue.
- Passive learning modes dominate the student culture.



Challenge 2: Social Attitudes Toward Art

- **Innovation at All Costs**

- We are driven to innovate rather than modify. Our society puts only limited value on modification and tradition.
- Art is one of the oldest and broadest fields of human study. The archeological record indicates that it is twice as old as war and as much as four times as old as farming. Before an artist can innovate, they must first come to grips with an enormous historical foundation. Blind luck still exists in the Art world, but it faces a much stiffer challenge.
- This love for innovation has also fueled a love for technology. Many students pursue art education when what they really love is technology. As the demand for quality increases, technophiles find themselves on the outside looking in. Their passion drives them to play with the toys rather than to think of the technology as a tool to solve art related problems.



Challenge 3: Complex Skills of Animation

- **Multiple Skills Required**
 - Story
 - Drawing
 - Acting
 - Animation
 - Technology
 - Commercial Professionalism



Challenge 3: Complex Skills of Animation

- **Global Skills**

- Almost all of the skill sets required in animation are Global skills rather than Linear Skills.
- Global skills require a working knowledge of all of the components before someone can become proficient in any single component. Linear skills, on the other hand, are acquired in a linear progression.
- Global skills acquisition challenges the student because there is a period where they must flounder.



Challenge 3: Complex Skills of Animation

- **Multiple Global Skill Sets Amplify the Problems**
 - Each skill is difficult by itself. Animation requires that they be linked and different types of animation have different problems. Game animation, for example, requires real time responsiveness that plays havoc with the animation principle of anticipation.
 - If students are put in a situation where all of their global skills are in the early stages of learning concurrently, the emotional trauma can be dramatic.
 - This takes time. In some cases, students may be looking at as much as a 20 year growth curve.



Solutions



Better K-12 Arts Education

- Lobby in your communities.
- Market Arts Education as a Language skill and an Art form.
- Put the emphasis on problem solving.
- Volunteer
 - Mentor
 - PTSA
 - Community Centers
 - Senior Projects



College Admissions

- Insure that students possess the basic skills necessary to succeed in a particular program. (This is not the same as competitive admissions.)
- Match the student's interest to the program.
- Drive, discipline and desire are more important than talent in determining student success. The only native ability that matters is fascination.

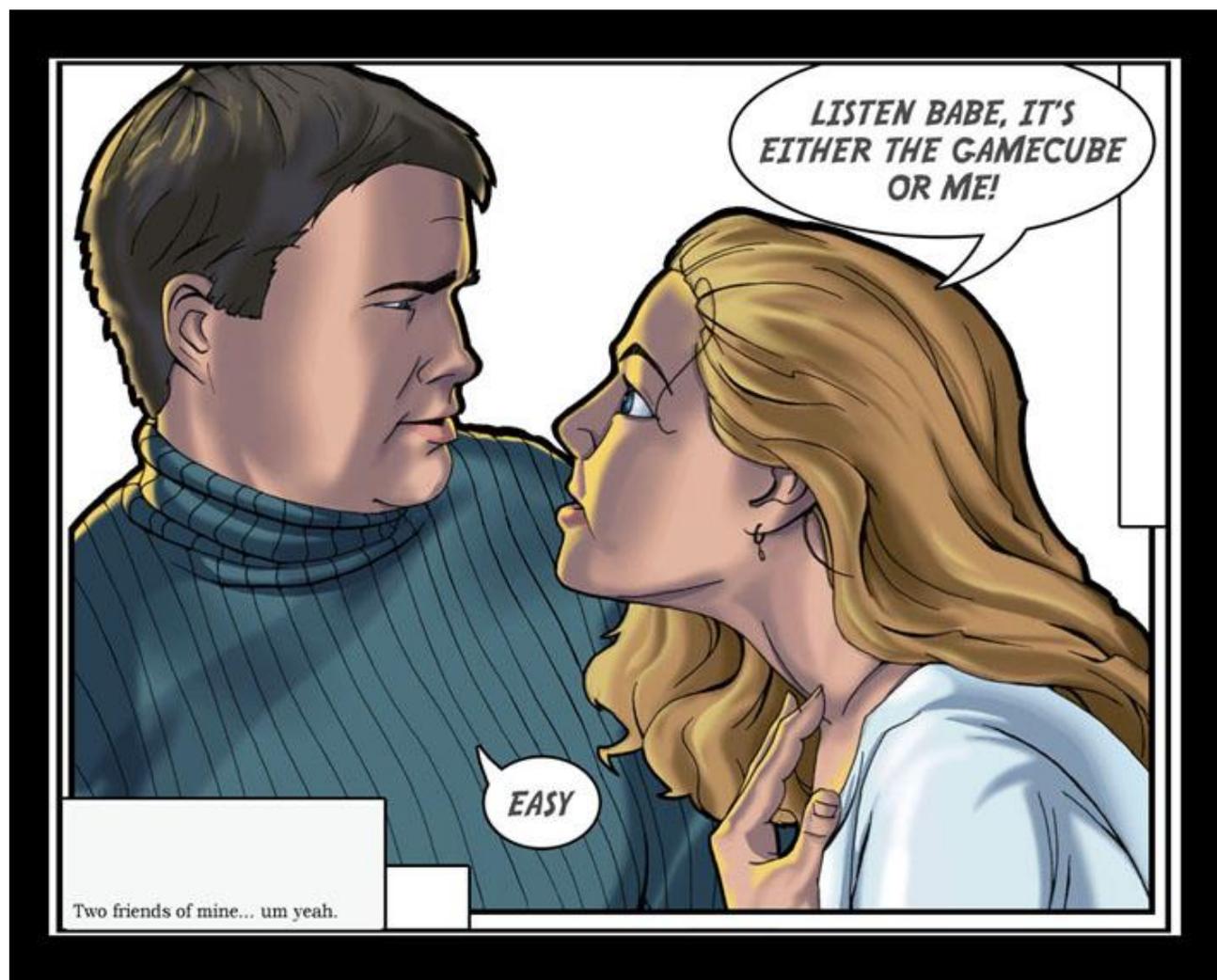


Collegiate Education

- Art isn't a Recording of Reality.
It is a commentary.
- Storytelling:
 - Oral
 - Written
 - Visual



Storytelling



Collegiate Education

Drawing

- Language skill
- Different goals
- Difference between Practice, Polish and Process
- Foundational Grammar
- Specialized needs of Animation



Practice vs. Polish



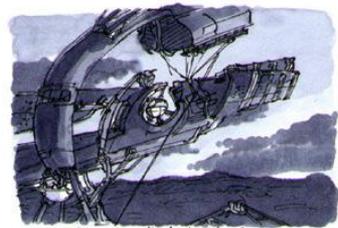
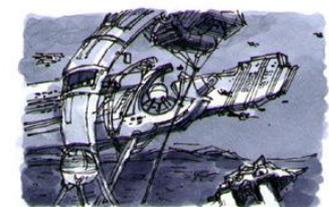
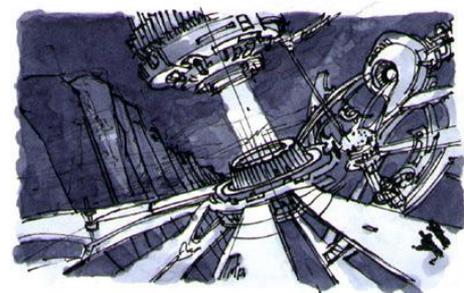
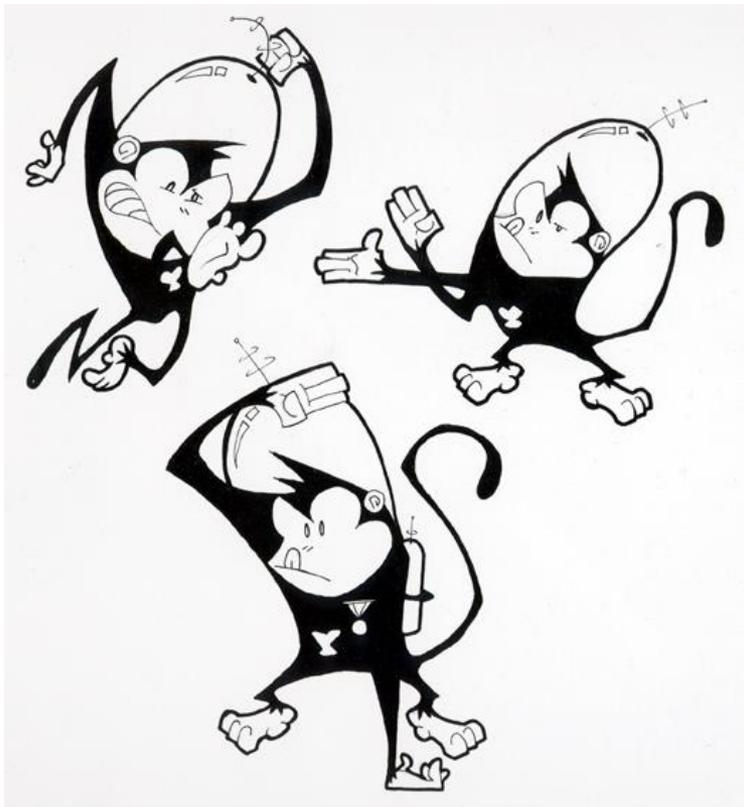
Collegiate Education

Animation

- Basic Principles
- Timing and Anticipation
- Learning improved by using hand drawn animation
- Animation for Games



Drawing for Animation



Collegiate Education

Technological Knowledge

- Tool not a substitute for ability
- Critical thinking skills
- Separate underlying principles from format of software
- Methods for keeping abreast of technological evolution
- Basic skills



Collegiate Education

Acting and Film

- Basic Acting
- Acting through an Interface
- Voice Acting
- Film Analysis
- Cinematography
- Post Production
- Motion Capture



Collegiate Education

Professionalism

- Production pipelines
- Specialization
- Social role of the Arts
- Time management
- Compromise and Balance
- Quality
- Complexity
- The Roles of Experts and Scholars



Industry Involvement at the Collegiate Level

Guest Speakers

- Internships
- Adjunct Faculty
- Recruiting
- Sponsor Scholarships
- Program Advisory Boards



Continuing Education

Keeping Current

- Filling Holes in Foundational Knowledge
- Continued Personal Growth
- Possibilities

Workshops

Weekly Labs

Retreats

Distance Learning



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