

**Digital Animation  
& Game Design (DAGD)  
Program Review  
2010**

**Prepared by  
David Baker  
Program Coordinator  
8-12-2010**

# Contents

<b>Dean’s Statement and Assessment</b> .....	<b>i</b>
<b>SECTION 1: PROGRAM OVERVIEW</b> .....	<b>6</b>
<b>PROGRAM GOALS</b> .....	<b>6</b>
<i>Program Overview</i> .....	6
<i>Mission</i> .....	6
<i>Core Values</i> .....	6
<i>Vision</i> .....	7
<i>Customer Value Proposition</i> .....	7
<i>Organizational Environment</i> .....	7
<i>Organizational Relationships</i> .....	7
<i>Competitive Environment &amp; Strategic Challenges</i> .....	8
<i>Explanation of How and By Whom the Goals Were Established</i> .....	8
<i>DAGD: A Brief History</i> .....	8
<i>Preparing Students for the Workplace</i> .....	10
<i>Alignment with Divisional Strategic Plans</i> .....	12
<b>PROGRAM VISIBILITY AND DISTINCTIVENESS</b> .....	<b>14</b>
<i>Unique Features</i> .....	14
<i>Quality Students</i> .....	17
<i>Competition</i> .....	22
<i>Competition in Michigan</i> .....	23
<i>Competition Outside Michigan</i> .....	26
<b>PROGRAM RELEVANCE</b> .....	<b>28</b>
<i>Labor Market Analysis – Digital Animation and Game Design</i> .....	29
<b>PROGRAM VALUE</b> .....	<b>38</b>
<i>Program Benefit to University</i> .....	38
<i>Facility and Personnel Benefit to Students</i> .....	39
<i>Value Assessment</i> .....	39
<i>Community Benefit</i> .....	40
<b>SECTION 2: COLLECTION OF PERCEPTIONS</b> .....	<b>43</b>
<b>SURVEYS</b> .....	<b>43</b>

<i>Graduate Follow-Up Survey</i> .....	43
<i>Employer Follow-Up Survey</i> .....	43
<i>Graduating Student Exit Survey</i> .....	43
<i>Alumni Survey</i> .....	44
<i>Student Program Evaluation</i> .....	44
<b>FACULTY PERCEPTION OF PROGRAM</b> .....	<b>45</b>
<b>ADVISORY COMMITTEE PERCEPTIONS</b> .....	<b>51</b>
<b>SECTION 3: PROGRAM PROFILE</b> .....	<b>52</b>
<b>PROFILE OF STUDENTS</b> .....	<b>52</b>
<i>Student Demographic Profile</i> .....	52
<i>Quality of Students</i> .....	55
<i>Employability of Students</i> .....	57
<b>ENROLLMENT</b> .....	<b>62</b>
<i>Fall Enrollment for DAGD 2006 - 2009</i> .....	62
<b>PROGRAM CAPACITY</b> .....	<b>66</b>
<b>RETENTION AND GRADUATION</b> .....	<b>68</b>
<b>ACCESS</b> .....	<b>72</b>
<b>CURRICULUM</b> .....	<b>73</b>
<i>Course Descriptions</i> .....	73
<i>General Education Requirements</i> .....	77
<i>Proposed Course Schedule Breakdown by Semester</i> .....	79
<b>QUALITY OF INSTRUCTION</b> .....	<b>83</b>
<b>COMPOSITION AND QUALITY OF FACULTY</b> .....	<b>90</b>
<i>Faculty</i> .....	90
<i>Professional Activities</i> .....	91
<i>Workload</i> .....	92
<i>Reward Structure</i> .....	95
<i>Graduate Instruction (If Applicable)</i> .....	96
<i>Non-Tenure-Track and Adjunct Faculty</i> .....	96
<b>SERVICE TO NON-MAJORS</b> .....	<b>99</b>
<b>DEGREE PROGRAM COST AND PRODUCTIVITY DATA</b> .....	<b>101</b>
<i>Assessment and Evaluation</i> .....	101
<b>ADMINISTRATION EFFECTIVENESS</b> .....	<b>104</b>

<b>SECTION 4: FACILITIES AND EQUIPMENT</b> .....	<b>106</b>
<b>INSTRUCTIONAL ENVIRONMENT</b> .....	<b>106</b>
<b>COMPUTER ACCESS AND AVAILABILITY</b> .....	<b>110</b>
<i>Computers and Equipment</i> .....	<i>111</i>
<b>OTHER INSTRUCTIONAL TECHNOLOGY</b> .....	<b>112</b>
<b>LIBRARY RESOURCES</b> .....	<b>114</b>
<b>SECTION 5: CONCLUSIONS</b> .....	<b>115</b>
<b>RELATIONSHIP TO FSU MISSION</b> .....	<b>115</b>
<i>Program Overview</i> .....	<i>115</i>
<i>Mission</i> .....	<i>115</i>
<i>Core Values</i> .....	<i>115</i>
<i>Vision</i> .....	<i>116</i>
<b>PROGRAM VISIBILITY AND DISTINCTIVENESS</b> .....	<b>117</b>
<b>PROGRAM VALUE</b> .....	<b>118</b>
<b>ENROLLMENT</b> .....	<b>119</b>
<b>CHARACTERISTICS, QUALITY AND EMPLOYABILITY OF STUDENTS</b> .....	<b>120</b>
<b>QUALITY OF CURRICULUM AND INSTRUCTION</b> .....	<b>121</b>
<b>COMPOSITION AND QUALITY OF THE FACULTY</b> .....	<b>122</b>
<b>APPENDIX</b> .....	<b>123</b>
<b>Appendix A - Faculty Resumes</b> .....	<b>123</b>
<b>Appendix B – Competitor Programs</b> .....	<b>133</b>
<i>CMU Program</i> .....	<i>133</i>
<i>Full Sail Program</i> .....	<i>134</i>
<i>Northumbria University</i> .....	<i>135</i>
<i>USC Program</i> .....	<i>136</i>
<i>UTS Program</i> .....	<i>137</i>
<i>WPI Program</i> .....	<i>138</i>
<b>Appendix C – Faculty Survey Results</b> .....	<b>140</b>
<b>Appendix D - Graduate Follow-Up Survey Results</b> .....	<b>168</b>
<b>Appendix E - Employer Follow-Up Survey</b> .....	<b>174</b>
<b>Appendix F– Alumni Survey Results</b> .....	<b>193</b>
<b>Appendix G – Current Student Survey Results</b> .....	<b>202</b>
<b>Appendix H – Faculty Survey Results</b> .....	<b>223</b>

<b>Appendix I – Advisory Committee Survey Results.....</b>	<b>250</b>
<b>Appendix J – IGDA Curriculum Framework.....</b>	<b>274</b>
1 Introduction.....	276
1.1 Purpose of This Report .....	276
1.2 Scope of This Report.....	277
1.3 Background and History.....	278
1.4 Guiding Principles.....	279
2 Games Discipline .....	280
2.1 What are Games .....	280
3 Core Topics.....	281
3.1 Critical Game Studies.....	282
3.1.1 Game Criticism.....	283
3.1.2 Media Studies .....	284
3.2 Games and Society.....	285
3.3 Game Design.....	287
<i>Practical Game Design</i> .....	290
3.4 Game Programming .....	292
3.5 Visual Design .....	295
3.6 Audio Design.....	296
3.7 Interactive Storytelling .....	297
3.8 Game Production.....	299
3.9 Business of Gaming .....	302
4 Degree Programs and Expectations of Graduates.....	304
5 Institutional Considerations.....	304
6 Next Steps.....	305
7 Further Information.....	305
8 Thanks.....	306

# SECTION 1: PROGRAM OVERVIEW

## PROGRAM GOALS

*“Building a World Class Animation and Game Design program is a daunting task. While many educational institutions are developing programs in these areas, the success ultimately will be found in the quality of student portfolios and who is being successfully employed. As faculty in the Digital Animation and Game Design Program at Ferris State University, we aspire to become one of the top ten programs in the United States. We believe that by looking at our past successes, listening to the industry and developing strategic planning we can achieve this goal. “*

*- David Baker, DAGD Program Coordinator*

## Program Overview

The Digital Animation and Game Design (DAGD) program at Ferris State University Grand Rapids offers students a well-rounded education as they earn their Bachelor’s of Applied Science, while giving them the depth of technical skills needed to compete in the fast-paced world of interactive technology. Graduates of the DAGD program are able to enter into a growing field of job opportunities that isn’t limited to just entertainment and video games, but offers possibilities in legal simulations, corporate training, architectural flythroughs, education, biomedical visualization, and a host of emerging opportunities as more and more industries see the advantage of engaging their customers through interactive and animated applications.

## Mission

DAGD will provide high-quality education at a reasonable price to students seeking to gain technical expertise in interactive and animated applications, and instill skills that are valued and relevant to the workplace.

## Core Values

- Quality instruction by teachers who have a proven track record of industry success.
- First rate response and customer service.
- Leading hardware and software for lab use and instruction.
- Relevant industry involvement in classroom projects.
- Progressive strategy for implementing evolving curriculum and classroom content.
- Expanding base of opportunities for students to showcase abilities to and interact with industry.
- Growth and diversification of student population and industry opportunities in Digital Animation and Game Design for South-Western Michigan.
- Outreach programs to high school and junior high schools designed to stimulate interest and awareness for Digital Animation and Game Design.

## **Vision**

To be recognized as one of the leading educational institutions in animation and interactive technologies not just in Michigan, but in the nation. Students will see us as a high quality program for a good value, and feel confident in the skills that they will learn and the opportunities for which they will be qualified when they graduate. Industry will see us as an institution that provides skilled, talented, and employable graduates. Faculty will find this a challenging and rewarding place to teach.

## **Customer Value Proposition**

Students are our primary customers and will seek out FSU/GR DAGD because they will recognize the caliber of education they will receive without having to leave Michigan. As a state institution, it's reasonable to expect (at least initially) that the majority of the students will come from in state. Students will come to this program at first because it is the only program of its kind in Michigan and later, as similar programs begin to appear at other institutions, they will come because it will be an exceptional value of top-notch education at a reasonable cost. Additionally, students will see the emerging list of employers of DAGD graduates grow and increase their confidence in the validity and capability that a DAGD degree will bring them. In summary:

- The program remains unique to Michigan
- The program offers high quality Digital Animation and Game Design education
- The program is reasonably priced
- The program successfully prepares students for a strong and growing industry

## **Organizational Environment**

The DAGD Department interfaces with a growing list of individuals, groups and organizations. It is through this networking that DAGD will ensure the success of the program and its students. The primary workforce includes a Program Director, three full-time instructors, and 4 part-time or adjunct instructors. Provided that DAGD continues to prove successful, additional faculty will likely be added. DAGD also works in conjunction with a supervising administrative department (Dean, Assistant Dean) that includes a marketing staff, and an administrative assistant support staff and an Information Technology (IT) staff. DAGD resides within FSU/GR's office space as leased from Grand Rapids Community College, maintains faculty offices and equipment, and utilizes two computer labs/classrooms equipped with leading-edge computers, software, and digital projection. DAGD has access to additional non-computer classrooms as needed and often spills over into two more computer labs.

## **Organizational Relationships**

DAGD has a growing list of individuals and organizations with which it interacts. On the front end, DAGD works with high schools and junior high schools to promote the program and industry. Students entering the program provide the foundation for the program's existence and

are the primary focus. DAGD needs to deliver results based on expectations set by the Administrative Department. DAGD also continues to develop industry relationships for professional portfolio reviews, developing and screening/judging class projects and Program Review offering internships, and hopefully employing graduates.

## **Competitive Environment & Strategic Challenges**

DAGD was unique in Michigan upon inception but that is changing. This type of program is starting to pop up all over the country due to its popularity with students just graduating high school. With more schools realizing the potential enrollment benefits that a program like this brings, more will get over the stigma associated with the word “game” and start their own programs. DAGD will need to stay ahead of the competition, constantly cultivate and recruit new students, and continue to grow opportunities for its graduates. DAGD works with community colleges to setting up 2+2 programs encouraging articulation of transfer students.

## **Explanation of How and By Whom the Goals Were Established**

The original goals for DAGD were established by founders, Don Green, Tracy Powers and Marty Lier. Goals were determined from real time experiences of Marty Lier and curricula from established programs such as Full Sail in Orlando Florida and Digipen in Seattle Washington. They talked to industry people, looked at what was working and what could be done better.

The Independent Game Developer Association (IGDA) game development curricula endorsed at the 2003 Game Developer’s Conference in San Jose was the cornerstone for the Ferris DAGD curricula design. This seminal document was created over a two year period from advisors from industry professionals and educators creating what would be the foundation for the majority of game design curricula in the United States.

## **DAGD: A Brief History**

Original expectations were to partner with Kendall College of Art and Design to leverage the expertise of design found at Kendall. “We wanted to do the technical and do the art at Kendall.” (H. Martin Lier, 2005) However, the partnership never developed fully as administrative goals and fiscal considerations at Kendall made the union impractical. Instead, a partnership with Grand Rapids Community College was developed to create a strong articulation of liberal studies to fulfill the general education requirement of the B.A.S. degree.

The original curricula was a combination of existing classes found at GRCC, Ferris Graphic Design Classes from the main campus, and the creation of several new courses focused on animation and game design. The blend of classes featured highlights typical of ‘New Media’ skills of computer programming, two and three dimensional design, computer aided design (CAD), game design and theory and user interface design. Additionally, courses in entrepreneurial concepts such as contracts and sales, marketing and project management would help give students an advantage on starting their own businesses should the need arise. Using successful established classes, Ferris DAGD began running classes in the fall of 2003.



Hans (Marty) Lier was the first Program Coordinator to run classes. His strength was in industrial design, 3D modeling and animation and project management. He hired adjuncts Roy Pereira and Cory Heald to help run classes in animation and programming to accomplish the first two years of the program.

By spring of 2005, enrollment was encouraging enough to bring two new faculty members on board. Ward Makielski, an established game designer and animation artist from Los Angeles, who had recently moved back to his home state of Michigan, was hired as a new Program Coordinator. Additionally, David Baker was hired in the Summer of 2005 to leverage his professional animation and design skills honed from over 20 industry years and five in the community college system. With three fulltime faculty, and now over 80 students, DAGD was fully operational.

As students matured and curricula developed, it became apparent that a new ‘checklist’ with a clear pipeline of classes was needed. (See Appendix, Checklist 2005) Using data from industry contacts, classes were now brought to fruition or developed to accomplish specific goals. The game curricula was up and running with not only programming, but with solid theoretical and design concepts in place. Graphics classes that were originally tuned for the publishing industry were now guided toward game design and 3D texturing artists.

General education classes were suggested during advising sessions that helped to enhance what was being offered in the DAGD curricula and advising students became a standard procedure and task of the entire full time faculty.

The student population continued to grow with about 120 students actively pursuing a DAGD degree. It became apparent that the original criteria that required students to have only a 15 composite ACT and a 2.2 GPA were problematic. Few students who had lower academic skills and no art or programming background struggled and were no longer pursuing the degree after two years. Better students thrived, though, and it was decided to improve the incoming student population at the expense of growing enrollment. DAGD altered its incoming freshmen requirements to a minimum GPA of 2.5, a composite ACT score of 19, and the initiation of a portfolio requirement.

Portfolios are required of all the upper level art and design schools. It helps the school determine, outside of a GPA, whether a student has been pursuing or achieved a certain quality in their work. It is also used as a ‘self filtering’ technique that reduces the amount of completed applications as non-motivated students fail to fulfill the requirement. DAGD employed this technique of filtering to bring in only the motivated student. The portfolio requirements were loose in comparison to most design schools. It asked for ten samples of work, whether it be art, programming, music or any other animation or game design discipline. It has been effective, although it temporarily flattened out enrollment. The typical DAGD student comes in with a passion not shared by all in the earlier years.

By 2007 it became apparent that game design was playing a greater role as a draw to the program. More than half of the students applying voiced more of an interest in game design than in animation. Our only game design instructor, Ward Makielski, who was program coordinator, could only teach two classes per semester which limited his scope. Additionally, adjunct professor Roy Pereira gave notice that he would be leaving the state in the Fall. It was decided

that we needed a full time faculty member that would concentrate on game design in addition to Ward. Joshua Freney, a freelance game programmer and designer and graduate of Full Sail, an art and media institute in Florida was recruited to teach classes that Roy Pereira would be vacating. He was added as term faculty in January, 2008 to deliver the classes left open by the new development.

With more schools offering degrees online, the department felt it wise to start developing the program ‘virtually’ to serve students across Michigan. In December 2007, Ward Makielski was given the opportunity to develop the DAGD ‘online’ portion of the program. A ‘cross curricula’ approach was used to allow this starting with DAGD 100, a basic intro to 3D class, DAGD 103, an online drawing class, DAGD 300, an upper level game design class and DAGD 499, or our senior level ‘capstone’ class. With this approach we could reach beginning students, those at community colleges or students who are working professionally. Additionally, Mr. Makielski had been training on Ferris Connect, our online curricula delivery platform and achieved the rank of ‘Black Belt’, a level that qualifies him to teach others. With this background, a blended online delivery became ‘live’ in January, 2008.

Ward delivers the class ‘on the ground’ the first week of classes in a semester and once again the last week of classes wrapping up the semester. This allows for a personal contact with younger students and the advantages of virtual work.

Faculty member David Baker was asked to assume the vacant ‘Program Coordinator’ position and began training for the new position which he assumed in January, 2008. His position of Internship Coordinator was passed onto Marty Lier.

As the curricula matured, other classes began to be offered in the ‘elective’ category. These were topic specific classes that provided the opportunity to investigate industry standard tools such as Maya, SoftImage XSI and Z brush. DAGD alumni, Robert Evans was contracted as an adjunct to deliver the ‘DAGD 380 Digital Sculpting’, (also known as Z Brush) course.

The faculty began another review of the DAGD check sheet as our students began requesting more directed classes. It was determined that students should be allowed to direct their own career goals earlier in the program. With industry guidance, we created three concentrations or ‘tracks’ of 18 credit hours that allowed students to pursue more rigorous work in animation, game design or media generalist. No extra classes were created to allow this pursuit. Students could focus on their interests. In January of 2009, a third version of the DAGD check sheet was presented and well received by students. Students could move their credits to this check sheet or maintain their original direction. This update has been well received by students and will allow for new classes to be created as the need arises and directed by industry.

## **Preparing Students for the Workplace**

*How do the goals apply to preparing students for careers in and meeting employer needs in the community/region/marketplace?*

The DAGD program is designed to prepare students for careers in the animation and game design fields. This pursuit is a major focus and we actively develop strong relationships with

people and companies in the industry. As curricular designers, and professionals working in the field, we looked at what we learned in the field and asked ourselves; “If we could have done it all over, we would...”

This is the foundation of our goals. *“Focused, real world skills that are needed in industry supported by a liberal approach to learning that accommodates how students learn.”*

George Lucas, the director and executive producer of the Star Wars series has developed ‘edutopia’, a foundation that supports new learning approaches. It proposes a theory that students learn by doing. This is supported by six core concepts: Integrated studies, Project Learning, Social and Emotional Learning, Technology Integration, Comprehensive Assessment and Teacher Development. ( <http://www.edutopia.org/core-concepts>).

DAGD is coincidentally built around much of this learning theory. By immersing students in ‘real world’ challenges, and building skills to meet these challenges, students learn how to build animations and games much like they would in the real world. The goal is to have students ready to hit the ground running when brought into a company.

Additionally we work with students to develop the people skills that keep them working. Our students often have highly developed internet and computer skills at the cost of their social skills. We acknowledge this and continually work on these skills by utilizing teamwork, critique and peer interaction. We create a supportive environment, and teach students how to properly interact with each other in a creative environment; a prized skill in the industry.

As faculty we work on developing and maintaining industry relationships. Faculty are encouraged and supported to attend industry events such as SIGGRAPH and the Game Developer’s conference in San Francisco. Faculty respond by attending week long events sometimes on their own time during the summer or when the conference falls during spring break, otherwise release time is provided to faculty members. We also encourage students to attend the same conferences and support them as they present portfolios at career fairs.

***DAGD 491 Internship*** is one of the tools we use to promote our goals. Students are required to secure an internship with our help or approval. This immersive 400 hour experience is in place to help students make the transition from student to professional. Feedback from the internship sites help provide us with data on how well our students are prepared for the workforce. Students are permitted to take DAGD 491 after their capstone course to potentially secure a position after graduation.

Other real world experiences we offer students can be found in DAGD 340 Junior Project. In this class, small student groups are matched with industry professionals who are looking for media work. The professionals come to the classroom, ‘pitch’ their project and enlist a student group to work with them during the course of the semester. The students create work goals and are held accountable for them as part of their grade. Professionals meet with the students during the semester to critique the work and accept or reject the project at the end of the semester.

***DAGD 220 Sophomore Portfolio*** is designed with multiple goals in mind. First, is to create an industry quality portfolio presentation that develops assets such as websites, job reels, resumes, promotional pieces such as business cards and industry ‘swag’. Additionally, students are charged with discovering, attending and interacting at industry events locally, regionally or

nationally. The final of the course is a 10 minute ‘pitch’ of their work to an industry panel. This panel judges them on delivery as well as content. This course is also designed to have the student consider “Why am I here and what can I add to this industry?”. As this is designed to give students a realistic picture of the industry, we hope that students will continue to grow their portfolio throughout their junior and senior years.

**DAGD 499 Capstone** is the final class a student would ultimately take. In it, students self direct a portfolio level project. The goal is for the student to take all the skills they have learned and apply them to a project that can support their career start-up. Students have chosen many directions: documentaries, games and game levels, animations and special FX short films. Seniors also participate in a ‘Capstone Presentation’ that requires them to ‘pitch’ their project in front of their peers, professors and invited industry professionals. This is designed as a way to have students rehearse their own ‘pitches’ as they job hunt. Additionally, the Capstone presentation is a ‘one-stop shop’ for industry people to recruit new talent.

***Have the goals changed since the last program review? If so, why and how? If not, why not?***

This is the first program review for DAGD.

***Describe the relationship of the program goals to the University’s mission, and the departmental, college and divisional strategic plans.***

The mission of Ferris State University:

*Ferris State University prepares students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society.*

The DAGD program is aligned with the mission of Ferris State University. We focus on the growth of students in career skills, civil involvement and lifelong learning. We teach our students how to learn and offer it in a professional context that demands rigor. We also bring teamwork into many of our classes by requiring projects to be produced with a group of likeminded designers. We see ourselves in the context of a global economy and understand the stewardship with which we have been entrusted.

## **Alignment with Divisional Strategic Plans**

DAGD aligns well with the Goals of the College of Professional and Technological Studies (CPTS). CPTS’ mission is:

*The College of Professional and Technological Studies will be the preferred choice for students through the development of innovative career oriented degree programs, dedicated instruction brought to students at a distance, the creation of strategic partnerships, creative technology applications and convenient instructional models.*

DAGD was created with these goals in mind. We look at how we can serve students better through innovative curricula and teaching methods including distance learning. We work across

the curricula to see how we can partner with fellow faculty and other programs such as Software Engineering, Graphic Design, Television Production and even Kendall College of Art and Design. We work on forming strategic partnerships with internal departments such as the College of Pharmacy and external clients such as St. Mary's health systems. We work with community college faculty from across Michigan to actively develop transfer plans.

Our curricula is developed to be real world and to leverage the capabilities of our partners. Along with supporting community colleges and technical schools such as ITT, we are looking to help develop animation and game design programs in Hyderabad, India and China.

Don Green, our Vice President was central in helping to develop DAGD around the CPTS goals and we continue to support this outstanding initiative.

## **PROGRAM VISIBILITY AND DISTINCTIVENESS**

Ferris Grand Rapid's Digital Animation and Game Design (DAGD) program is a high profile program that is creative, distinctive and rigorous. We are focused on developing the next generation of animator and game designers.

DAGD is designed as a multidisciplinary degree. Disciplines covered include 3D animation, programming, design and business and liberal studies. Students study for careers in animation, design, simulation, and programming. The digital animation concentration builds on the existing B.A.S. format. This format includes a required concentration for depth, an elective section that offers greater breadth in the discipline area, and general education requirements targeted toward courses serving employees in digital technology.

Using state of the art technology, professional grade software and innovative teaching approaches, Digital Animation and Game Design delivers an education that students will need to succeed in a highly competitive business. Built from the ground up and designed by professional media experts and game designers, students work with some of the most experienced and respected professionals in the Midwest.

### **Unique Features**

*Describe any unique features or components of the program.*

#### ***Dual Enrollment with Grand Rapids Community College***

Part of our appeal is our partnership with community colleges. We are located on the campus of GRCC and share in the Applied Technology Center that was built in 1991. Our classrooms are modern, accessible and located close to amenities such as the GRCC field house, cafeteria and parking ramps.

Students who start out at GRCC can transfer over with a strong transfer plan or start their career at Ferris and blend classes seamlessly with their DAGD curricula. Our faculty is familiar with many of the classes offered at GRCC and can advise appropriately according to student interests. GRCC's class offerings are very broad and the diverse population allows our students to fully experience a university-like setting.

One of the most appealing aspects of a GRCC/FSU collaboration is the tuition advantage a student enjoys. With up to 60 credit hours transferable to FSU, Kent county resident students essentially get a 40 credit hour scholarship to FSU. This is significant for parents who are often helping to finance their student's education and students who are often holding a repayable student load at the end of their time with us.

Students who attend private Colleges such as Ringling School of Art and Design are charged \$30,000 or more a year for tuition. A student with us can achieve their BAS four year degree for what about what one year at another school would charge.

Ferris' DAGD program is an amazing value in the educational world partly in thanks to the taxpayers of Kent County. Additionally, our consortium arrangement with GRCC's financial aid department allows students to receive financial aid from Ferris for classes they are taking at both institutions.

### ***DAGD Summer Camp***

The Digital Animation and Game Design Summer Camp is a one week day camp that introduces high school students to a career in animation and game design. Students are brought into the classroom and tutored in software tools and game design principles.

During the summer camp week, students have the opportunity to learn from instructors and students in the fields of Digital Animation and Game Design and Software Engineering. Learners are exposed to the latest software tools used by industry professionals. They are challenged to push their minds and technical skills to heights greater than they may have thought possible! Students end the week with either an interactive 3D game level they have created or a 3D animation. Those who find the introductory week to their liking are encouraged to take the second 'advanced' course to take things to the next level. All profits from the summer camp are added to a scholarship fund to help DAGD students obtain their educational goals.

### ***IGDA Student Chapter***

The IGDA student chapter is FSU's own chapter for the International Game Developer's Association. This organization is key to helping students get connected in the game design world. "The International Game Developers Association is the largest non-profit membership organization serving individuals that create video games. The IGDA is committed to advancing the careers and enhancing the lives of game developers by connecting members with their peers, promoting professional development, and advocating on issues that affect the developer community." (Essential Facts about the Computer Game Industry. Entertainment Software Association 2008 - retrieved from <http://www.theesa.com/> February, 2010)

Our chapter has about 30 members who meet on Friday afternoons after class. They work on a yearly collaborative game that allows students to develop games outside of class. After the organization's meeting at 4 pm, dinner is usually pizza followed by playing video games until the facility closes at 10 pm. It's a good bonding event for students who are usually working and focused on course work. Yearly, the IGDA student chapter helps to manage and sponsor a trip to San Francisco to the Game Developer's conference. Upper level students help mentor the lower level classmates in this outstanding weeklong adventure.

### ***Industry Day***

At the end of the semester in May, the faculty invite companies and producers to an "Industry Day" event. This career day is designed to showcase our students and in particular our graduating seniors in a day-long event with shows and portfolio display opportunities. It starts at 9 AM with a faculty showcase displaying 'the best of the year' including animated music videos, multimedia games, video documentaries and short films.

We break for lunch and invite our industry guests to mingle with students, faculty and administration in a tasty barbeque on our patio.

From 1 to 3 pm we have “DAGD Capstone Presentations” that open the floor to our best and bravest students for ten minute presentations. From 3:30 to 4:30 the day culminates with “The Doggies”, a ‘best of show’ that will bring together some of the finest projects in the department.

During the day, the atrium at the Applied Technology Center is abuzz with our DAGD Trade Fair. The Trade Fair features students who pitch their work with laptop ‘poster’ presentations, and they have handouts and business cards for industry attendees. Employers may find the perfect summer media intern at the fair or perhaps their newest employee waiting for that first big break.

The day wraps up with ‘The Doggies’; a 45 minute Oscar like award ceremony that celebrates our student achievements for the year. Categories such as Best Level Design, Best Character Design, or Best Short Film, bring to light all the good work presented. ‘The Golden Doggie’ is a coveted prize that students enjoy receiving.

### ***Faculty ‘End of Semester’ Wrap-up***

At the end of the semester in December the faculty get together and show each other student projects from the fall. Every class is reviewed and critiqued in this event. We are able to examine the content and suggest how we can leverage projects from one class to another. Using this information we have been able to have more of a continuity and collaboration between all classes. We also use this time to assemble the best work for the semester for our library. This informal event helps improve student project quality.

### ***Frag Fest***

Once each semester, DAGD administration and the IGDA student chapter, sponsors ‘Frag Fest’. This 24 hour modeling and level design competition is open to all DAGD students. It starts at 1 pm on Friday with a ‘themed challenge’ for contestants and ends at 1 pm on Saturday where projects are collected and judged by faculty. Students can either produce a 3d model including promotional assets or a 3d level playable by the student body. Past themes have been ‘Ghost Story’, ‘Steam Punk’, and ‘Future Past’ among others. After judging the levels, the students join in on an ‘Unreal Tournament’ event where teams play against each other in the winning game environment.

For those who don’t wish to participate in the challenge, students are invited to play games ranging from ‘Guitar Hero’, ‘Mario Smash Brothers’, tabletop card games or role playing games such as ‘Dungeons and Dragons’.

Faculty stay the night supervising and participating in the challenge. CPTS student services supports this event, by providing treats, pizza and other diversions to keep the students happy and working. Many pull ‘all nighters’ to attain their goals of best of the best.



### ***Online Delivery and Virtual Faculty***

As a support to the many community colleges in Michigan and a way to expand our offerings and availability to students, we offer four of our courses mostly online in a mixed delivery format. These include DAGD 100, Introduction to Computer Animation, DAGD 103, 3D visualization – Drawing and Sculpture, DAGD 300, Game Design and Theory and DAGD 499, Capstone. These course offerings are presented through Ferris Connect, the online course delivery system of FSU. Students typically meet twice in the semester. The first class outlines the course objectives and how to use Ferris Connect in context of the class. The final class is used to wrap-up the class. The rest of the course is delivered online with weekly turn-ins and deliverables. Besides readings, assignments and quizzes, students are included in discussion boards and other interactive tools that help build community even when online. We plan on expanding these offerings with DAGD 310, User Interface Design, DAGD 335, 3D Animation III, DAGD 420 Visualization and Simulation and DAGD 460, Multimedia II for the 2010-2011 school years. As the program grows, we look forward to delivering more courses virtually to serve students in Michigan and ultimately globally.

### ***Professional Faculty Roots***

All of our faculty have industry roots. We have all worked in the business world before venturing into education. Professional experience includes working at companies such as Disney and Sierra Online (Ward Makielski), Classic Animation and Lawrence Productions (David Baker), Sheepdog (Marty Lier), Dots in Motion and Design Vox (Cory Heald) and AOL and Creative Capers (Joshua Freaney). The net result is that our curricula and teaching is based on needs in the real world. We can speak from experience and point to major industry projects that we have produced professionally. We maintain our relationship with our industry contacts and all have retained internships for students based on these contacts.

### ***Speaker Series***

The DAGD speaker series is an effort to bring in professionals who are in the game design and animation industry. The program has brought in such renowned individuals such as Mark Kistler of the Imagination Station, Tony Benedict, animator from Disney and Hanna Barbera, Allan Turner of Breakaway Games, Instructor Martin Murphy of Midway Games, and Sue Shakespeare of Creative Capers. All these speakers have added color and life to our program. Sue Shakespeare, in particular, has been a great supporter of DAGD, sits on the program's advisory board and regularly takes in student interns.

## **Quality Students**

### ***Describe and assess the program's ability to attract quality students.***

When DAGD was first initiated, we had entry requirements of a 2.2 GPA and a combined ACT score of 15. While the modest entry level requirements served students who were looking to get into college, it allowed students who were unprepared for the rigors of animation and game design into the program. This had the net effect of screening quality students after they got into the program. Higher than acceptable attrition rates, poor quality projects and upper level classes

having unprepared students made good quality work spotty. In our view, we found this unacceptable from the perspective of a quality program and the perspective of parents who were likely funding much of the students' education. We decided to increase the entrance requirements to the program.

In 2006, after a year of classes with three full-time and three adjunct faculty, we made the decision to increase the entry requirements to a 2.5 GPA from high school or Community College, a 19 ACT composite from high school. This would cull academically challenged students from our freshman class. Those who had the ambition to 'increase' their GPA, could attend the community college, with our guidance and successfully re-apply to our program with little or no loss of transfer credit.

In addition, we surveyed additional schools admired in the industry including Ringling School of Art and Design, Savannah College of Art and Design, Pratt Institute and Kendall College of Art and Design and found that the "portfolio" was a common application asset. However, we also were aware that many of the students who were applying to our program would likely be limited in 'art' during their academic career. How were we to balance a 'best practice' and the need to see students from a multiple intelligence perspective with students who likely have had little exposure to traditional 'Art' classes.

In 2007, the program chose to add a 'portfolio submission' to the application process. With this portfolio, we could determine if students want to pursue this program as opposed to 'fill in the application' as required by many high school programs. We also get to see what the student is about by what they believe is their best work. We accept more than 'art' for a portfolio as game design and animation is more than 'art'. We allow writing samples, programming samples, evidence of community work and anything the students feel describe themselves as artists. On our website, the following discussion is put forward to help students craft a portfolio.

***I understand you need a portfolio to apply. Why is that?***

*The reason we ask for a portfolio is that you will be asked for one when you go for a job. We want you to start thinking 'portfolio' early and that everything you do should be focused on this important tool. We also want to see if you can follow directions and do an assignment! You will be doing many assignments in our program and completely filling out an application and creating a portfolio is Assignment Number One!*

*You will find later that when you go for a job, company websites will lay out the criteria of what you are to submit. Remarkably, they are looking to see if you do what they ask as much as anything. They want to see if you can follow directions. We want you to develop this skill early.*

*A portfolio can be many things. We are looking to see who you are and what your passion is and portfolios help us do that. We ask for ten samples of things you have done. It could be artwork, programming samples, simple games you have made, photography, music, short films and even writing samples.*

*Take these ten examples and burn them onto a CD or DVD-R and send them in. Please send it to:*

DAGD Portfolio Submission  
Ferris State University  
151 Fountain NE  
Grand Rapids, MI, 49503

Students who have the GPA, the ACT scores and have submitted a valid portfolio will very likely get into DAGD. As we mention on our website;

“You don’t have to be great to get in. That’s why you are joining us. We’ll help you become the designer or animator you want to be. “

DAGD has been steadily getting more attention in the Grand Rapids area. Our aggressive marketing stance that includes billboards, newspaper ads and community activism is gaining the attention of the region as being the up and coming game design and animation degree.

We compete nationally and encourage our students to join character design competitions such as ‘Game Artisans’. Three students from DAGD placed in the top 10 of this international competition in the summer of 2008. In May, 2009, a team of Ferris DAGD students participated in the globally renowned ‘Cartoon Challenge’ at the Kalamazoo Animation Festival International and placed well in the pack.

### ***National Advertising***

We are at a potential threshold for DAGD. As we approach our goal as a ‘Top Ten’ animation school, we will be competing with schools such as Full Sail, Savannah and the Art Academies. All said schools have aggressive advertising campaigns to help attract the best students available. We should consider following their lead and placing directed advertising in national trade magazines such as Gamasutra and Animation Magazine. Just as effective is placement on strategic websites as AWN.com. Not only do we attract the attention of potential students, industry professionals see these ads and when resumes of Ferris students cross their desks, they will have an established view of the Ferris DAGD brand.

### ***Summer Camp***

DAGD summer camp is a one week experience for high school students that are designed to give them insights into an animation or game design career. Students prepare game levels or a character animation for demonstration at the end of the week. Advertising is done through the college and departmental websites and local newspapers such as the Grand Rapids Press and the Advance. Most students enjoy the experience and many come back for the third week of summer camp that covers more advanced topics. We have discovered that around 30 percent of the students who attend summer camp apply to DAGD.

### ***KCTC Relationship***

One of our strongest educational relationships is with Kent County Technical Center also known as KCTC. They offer a two year – four course sequences that is articulated in Ferris as nine credit hours of college work. The courses cover print design, interactive and web design and animation and game design. One of the teachers, Amy Badovanic has all students apply to

DAGD as a requirement of her course. Not all students can get in and not all students ultimately attend Ferris, but application is a significant first step. KCTC students tend to be exemplary with good technical, creative and business skills already in place.

**Website** <http://dagd.ferris.edu>

In 2006 we created a small departmental website for DAGD which was embedded into the CPTS website. In 2009, we rebuilt the website and created a domain for it so it could be found independently by search engines. This optimization has greatly improved communication between Ferris and potential students. With the addition of Google analytics we can see the effect of events and other promotional efforts from day-to-day. This year, applications are up over 100 percent. While we will not attribute this specifically to the creation of a specific DAGD website, we certainly see its effects on communication. When interviewed by parents and students, we have tools we can point to while we discuss assets of the program. Additionally, the website now lets us create a ‘corporate image’ that enhances our image of a world class animation and game design program.

### ***FSU/GR recruitment team***

The Ferris GR recruitment team is a cut above. Bill Foster leads the ‘on the ground’ charge supported by September Howet, and Jennifer Amlotte, the marketing director for Ferris. The team is supported by graphic designer Mary Dilley who tirelessly and cheerfully executes first class imagery for the college. We are fortunate to have such direct access and enthusiastic support by this team. The team holds dynamic recruiting events, open houses, visits high schools and community colleges and pursues new strategies for delivering our message that everyone can improve their lives through education.

### ***High School Visitations***

DAGD is involved with many of the area high schools in promoting high tech careers such as animation, game design and other new media pursuits. We work with high school event coordinators and attend career days as much as possible. With career days, students attend sessions they are interested in. During a typical career day, we can present three sessions of twenty to thirty people per session. Multiply this by 20 to 30 visits a year, and we have an opportunity to promote Ferris as the school of choice for animation and game design.

Additionally we participate in area portfolio reviews as found at the Kalamazoo Institute of the Arts. Typically 200 to 300 art students attend these events during the day. We look at portfolios, talk to students, hand out promotional flyers and have our own demo reel running during the event.

### ***Kalamazoo Animation Festival International***

In May, 2009, the Ferris DAGD ‘Flying Bulldogs’ participated in the Cartoon Challenge; a four day animation challenge at the Kalamazoo Animation Festival International. Ten teams worked together in this event creating 30 second Public Service Announcements for the festival. Over 35 teams applied for the challenge internationally and only 10 were selected. The team from DAGD was one. All ten teams worked together, ate together and slept (occasionally) at the

Center for New Media in downtown Kalamazoo. After the challenge was done on Thursday night, our team enjoyed the feeling of stardom as they were honored guests of the festival.

More about the festival can be found at <http://kafi.kvcc.edu>.

### ***GRFF Involvement***

In summer 2009 Ferris DAGD was a sponsor of the inaugural Grand Rapids Film Festival. This three day festival was presented as an alternative ‘family friendly’ event that attracted hundreds of participants to Celebration Cinema on the northeast corner of Grand Rapids. Additionally, DAGD students staffed the sponsorship table and played video games for two days straight. While some may smile at such a concept, the DAGD students attracted many other students into their world and were a center of activity for the festival.

### ***SMARTfest Involvement***

For two iterations, DAGD was involved with SMARTfest or the Student Media Art Festival sponsored by the Community Media Center and the Open Concept Gallery. Students submitted animations to the festival and were rewarded with free seminar tickets for being entrants. We also became a local venue for the SMARTfest in 2008 with a remarkable audio installation at the Applied Technology Center.

### ***Mark Kistler Summer Art Camp***

Mark Kistler is known nationwide for his ‘Imagination Station’ Public Broadcast System television shows. These half hour shows are design to teach young children how to draw in ‘3D’. His warm engaging style has taught thousands of children how to draw.

In summer 2008, Ferris partnered with Mark to create 25 half hour episodes of the Imagination Station for free distribution on Public Television. Ten DAGD students were enlisted as interns that summer doing everything from designing virtual sets, creating animated openings, creating animated bumpers, working on sets, preparing lighting, manning HD cameras for the show, assistant directing and editing the show itself. This very interactive experience took three weeks to prepare for, a week to shoot and five months of post production to achieve this professional quality show that exceeded expectations. In May 2010, we were informed that Mark’s Imagination Station created at Ferris in 2008 won a regional “Emmy” for educational programming in the San Francisco market.

The shows are currently being aired across the country including WGVU in Grand Rapids. Throughout the whole show, Ferris is credited with many attributes of the production. While there was a significant investment for the college, it will pay dividends for years as the show is repeated and Ferris’ name is carried on. Remarkably, Dreamworks director Rex Grignon (Shrek) and Tim Miller (the Simpsons) were involved with producing elements of the show and were able to see the good work that our students produced.

In 2009 and 2010, Ferris sponsored Mark’s return to our auditorium in the ATC to stage his summer camp again. Hundreds of young students were able to walk through our doors to enjoy Mark’s directive to ‘Draw, Draw, Draw!’ While not produced for TV in 2009 and 2010, we

hope that someday, we will be able to help Mark produce more episodes and teach more children about the joy of Art.

### ***Community College Relationships***

Throughout Michigan we are establishing relationships and transfer plans for digital animation and game design. These two-plus-two arrangements allow for the efficient transfer of credit from one institution to another. Colleges we have created the plans include Grand Rapids Community College, Lansing Community College, Macomb Community College, Kalamazoo Valley Community College, Muskegon Community College and Northern Michigan College, Southwest Michigan College and West Shore Community College. We plan on adding to this list of colleges in the coming years. We believe that by partnering with the community colleges; we can lift the educational bar for many potential artists and be a center of animation and gaming in future years.

### ***YouTube***

With the unexpected and phenomenal growth of websites such as YouTube, we are able to reach our audience worldwide without the cost of distribution. One project we have mounted on YouTube has received over 1.3 million hits. We now regularly post our projects on the web with a 'Ferris DAGD' tag that is easy to search.

## **Competition**

### ***Identify the institutions that are the main competitors for prospective students in this program.***

While we are one of the few programs in Michigan that offer both animation and game design, a number of schools have elements of both. We have identified a number including:

### ***Competition in Michigan***

- College for Creative Studies
- Kendall College of Art and Design
- Michigan State
- University of Michigan
- Northern Michigan University
- ITT Technical Institutes
- Davenport University
- Kalamazoo Valley Community College,
- Lansing Community College
- Muskegon Community College
- Macomb Community College

### ***Outside Michigan***

- Savannah College of Art and Design
- Digipen

Full Sail  
Ringling School of Art and Design  
Rochester Institute of Technology  
Bowling Green State University  
DePaul  
Purdue  
Indiana University  
Carnegie Mellon

***How are these programs similar and different from the FSU program?***

The similarity shared by the colleges mentioned is a respect for a liberal concept of education. All give heed to language arts, science, math, cultural enrichments and social awareness concepts. This commonality underscores the efficacy of a broad educational base. Media arts are by definition an art with intent to communicate. By exposing students to the depth of our human experience we enrich the work produced.

The majority of the programs also create a broad base of design understanding based in drawing. Many high school students have not been trained to draw as other educational demands are put on them. The discipline of drawing allows for students to study a subject and investigate the basic nature of something with observation. It is notable that most of the institutions remediate this deficit and provide training in this area.

Another commonality is found in the computer. All the schools listed produce their animation and game work though digital means. Industry demands it and students want it. Most students entering programs now grew up with computers and most never knew the world without the internet. They were born ‘surfing’. However, with all the technical knowledge they have, students must learn the nature of this as a tool. Most of the schools understand that computers are a means to an end and have designed their curricula as such.

***What can be learned from them that would improve the program at Ferris?***

Process drives excellence. We continue to study what makes these schools excellent and incorporating the best elements into our own curricula. One theme seen in the best programs is a focusing in on final senior projects that allow students to synthesis all of their experiences into one outstanding portfolio piece.

## **Competition in Michigan**

***College for Creative Studies***

- Reputation built from years of continuity and experience attracting top talent
- Dedicated faculty that live and breathe animation
- Articulations and transfer programs with community colleges
- Outstanding website makes research into their program easy and appealing
- Fine Arts live side by side with career/technical arts

The College for Creative Studies has a balanced approach to Animation. They train students in the fundamentals of drawing before they advance into computer animation. There is also an emphasis on storytelling and the animation history. There has been a recent emphasis on ‘nuts and bolts’ skill building as competition for entry level jobs demand more. There is little game design at CCS which provides DAGD a competitive advantage. CCS does have developed relationships with a number of Community Colleges and is generous with the amount of articulation they allow.

### ***Kendall College of Art and Design***

Kendall College of Art and Design is a direct competitor with DAGD. Kendall students tend to come from an art background or have the ‘art’ gene as ours tend to be more diverse. Because of this, higher level design students gravitate towards them and benefits Kendall greatly. However, the ‘virtual reality’ Labs (floor 3) of Kendall struggles with some of the qualities with which we excel. Remarkably, our students tend to compete more with the higher level ‘electronic illustrators’ found on floor 4. Kendall’s emphasis on design and the history of art is a strength that we struggle with. The foundation classes of drawing, color and design prepare the Kendall student with attributes we could only hope students gain on the street.

Another strength Kendall has is its facility. While the Ferris GR facility is first rate in many regards, it is not a ‘creative’ environment. One walk down Kendall’s halls exudes creativity. Student work is always on display and celebrated. You feel you have entered an art gallery. This anticipation is palpable. Additionally, Kendall freely brings in National level speakers and recruiters from Nickelodeon, Disney and other big name studios creating a ‘National’ level appeal. Additionally, people often confuse Ferris’ DAGD program with Kendall’s 3D program.

### ***Michigan State***

The Michigan State University Game Design ‘program’ is essentially a cluster of classes that are game and programming related. It has not fully gestated into a full national level game design program. Remarkably, four years ago, it played host to a Midwest game conference called ‘Future Play’. Hundreds of students, educators, game designers and company representatives gathered on MSU’s campus. However, this opportunity was squandered as MSU did not follow through with establishing itself as the Michigan resource for game design. We have made inroads and are gaining the national reputation that MSU has not been able to gather. The lesson to be learned from this is to *follow through*. If you call yourself a game design program, design games.

### ***University of Michigan***

The University of Michigan has been attempting to develop an animation program for close to twenty years. While they have a strong graphics program, and many students work inside of media applications inside it, they do not have a cohesive program. Weak leadership has not allowed the program to flourish. Faculty hired has had academic credentials, but little professional experience. Art has been the main driver of the program. However good Art has a strong cultural and communication undercurrent and this is seemingly ignored.



### ***Northern Michigan University***

NMU in Marquette has one of the stronger programs in the state. The reason is found in leadership. It is staffed by award winning animators turned instructors. Short films coming from this small but energetic program are delightful and well staged. Students are given a well rounded education in design, animation history. Students are given good tools and are taught strong skills. The lesson to be learned from NMU is that process, skill and art can coexist successfully if it is led well.

### ***ITT Technical Institutes***

ITT is a significant competitor to FSU in the Grand Rapids Market. ITT has nationally developed a curriculum that is grounded in the IGDA curricular framework of 2003. Instructors are given 'what to teach' and very stringent guidelines as to what is acceptable in the classroom. Portfolios that are produced at ITT are capable but not remarkable. The Grand Rapids Campus offers an associate degree in animation. Articulating credits from ITT is difficult because of its quarters system. The classroom consists of one instructor station, a projector and computer. Students have to go to the lab after the lecture to get hands on with software. With the high cost of tuition, it is remarkable that anyone would consider attending ITT in Grand Rapids. It does thrive, however and pulls students from us.

ITT sell their statistics and national reputation to students. Television marketing implies high career placement and satisfaction. What we can learn from ITT is that consistent process does produce consistent results. Additionally we see how marketing is key to customer perception.

### ***Davenport University***

Davenport University, a private business college has seen the opportunity to cash in the desire for students to learn game design. They have assembled a number of computer 'IT' courses, added a couple with 'game design' in its title and called it a gaming program. In reality, students learn strong computer IT and programming skills and can compete well with other programming students. Davenport also has a strong foundation that offers scholarships to exceptional incoming freshman. The lure of free tuition brings the students in.

### ***Grand Valley State University***

While not a direct competitor, GVSU has a thriving film production department with Animation being one of the arts promoted actively. Animation students from GVSU are working professionals in the media field because of their broad base of education with a whole world perspective the college promotes.

### ***Eastern Michigan University***

A new entrant into the field, the Simulation Animation and Game Design program at EMU is much like DAGD in the early days; a collection of programming and other classes that are labeled as 'game design'. They will draw from the community colleges on the east side of the state and will be a significant competitor as they grow.

### ***Community Colleges such as Kalamazoo Valley Community College, Lansing Community College and Muskegon Community College***

The Community College system is well developed and a significant competitor to our lower level classes. Quality programs driven by quality instructors deliver students who are highly motivated to succeed. Associate programs are designed to provide the basics of design. CC's have the advantage of being funded by local property taxes. Students typically have 25 percent of the tuition cost and are able to get over half of their credits to a four year degree at Community College rates. Four year institutions are encouraged to take all credits in for articulation which can seriously erode the foundation courses offered at FSU. Additionally, the poor post collegiate employment climate in Michigan has encouraged some community college faculty to send students out of state to fulfill their education. There is an unspoken implication that anything in Michigan is a distant second to schools such as Savannah College of Art and Design, Ringling or Digipen.

The Community Colleges have also waved the game design flag to bolster enrollments. They have started gaming and animation programs to encourage students to enroll at home. After granting them an associate degree in animation or game design, these students find that very few opportunities are available to them as it takes many more years of study and experience to gain the needed well rounded skills to succeed in the business.

What we can learn from the community colleges is to attempt to partner with them, acknowledge their programs but try to identify and advise students as soon as possible as to good transfer plans. As students look toward the future after Community College, we need to show them the significant advantage of an education with Ferris State University.

## **Competition Outside of Michigan**

### ***Savannah College of Art and Design***

Savannah College of Art and Design in Georgia is considered one of the top animation and game design schools in the country. Over 10,000 students attend SCAD. They have a master's degree along with industry partners that visit the school.

### ***Digipen***

Digipen is one of the first 'Game Design Schools' in the world. They began as a technical academy and have done the good work of becoming a full college that offers a BA degree in Game Design. A rigorous course of work that requires over 145 hours of credit to complete, they are considered one of the top game design schools. They are located in Seattle and have close ties to Microsoft and Nintendo.

### ***Full Sail***

Full Sail in Orlando Florida also started as a private technical academy in response to the lack of quality media programs in the United States. They too have done the good work to become a College offering Bachelors and Master level educations. While not initially considered a quality solution, their aim and dedication to quality education have made them one of the higher sought institutions in the industry.

### ***Ringling School of Art and Design***

Ringling School of Art and Design is considered one of the top animation schools in the world. They have consistently improved their curricula and brought attention to themselves by creating short films that are award winners at festivals such as Ottawa Animation Festival and SIGGRAPH. Companies such as PIXAR, Disney and Dreamworks recruit top new talent from this respected school. Ringling School of Design is exemplary in the animation education world. Top students are recruited directly into major studios. Films from Ringling are used as inspiration and often win top honors in festivals. In studying their curricula and discussions with faculty, we discover that their success comes from talented students. With over 600 applicants to the program and only 60 being accepted, faculty can choose the best artists and sharpest minds to work with them.

- Focus on artistic basics first before technical skills.
- Emphasis on final capstone project
- Capstone project started in Junior year
- Supportive faculty who are mentor/advisors
- Skill building supported by experienced technical artists in faculty

### ***Rochester Institute of Technology***

Similar to other schools, RIT blends the art of animation with technical aspects of the industry. Founded by Kodak and one of the better schools that emphasis storytelling, this history is evident in their productions. The original founder of the program, Marla Schwep, tirelessly worked animation festivals worldwide establishing itself as one of the best schools to do animation. Furthermore, RIT is one of the few schools in the United States that has a master degree in animation allowing upper level students to create short films as their thesis films.

### ***Bowling Green State University (Ohio)***

Bowling Green University is likely most like Ferris State University in many ways. Its animation department is very career oriented like DAGD yet appreciative of art like Kendall. It has a dynamic leader in Bonnie Morris, the animation professor, who is active worldwide in promoting her students in the program.

## PROGRAM RELEVANCE

***Provide a labor market demand analysis: This activity is designed to assess the marketability of future graduates. Reports from the Department of Labor and from industry are excellent sources for forecasting demand on graduates.***

*“In 2005, US retail sales of computer and video games exceeded \$7.0 billion.<sup>2</sup> US consumers play video games on game players (usually called consoles) such as the Sony PlayStation 3, the Microsoft Xbox 360 and Nintendo Wii. Video games are also played on personal computers (PCs) and on mobile video players such as the PlayStation Portable “PSP,” the Game Boy Advance and the Nintendo DS. Finally, video games are played “online” over the Internet and other proprietary online networks. Software game developers frequently design games to be played on many of these “platforms.”*

According to industry statistics, US sales of computer and video games grew from \$2.6 billion in 1996 to well over \$7.0 billion today.<sup>3</sup> In the same period, unit sales of video games rose from 74.1 million in 1996 to more than 250 million in 2006.

- The US entertainment software industry directly employs more than 24,000 people in 31 states.
- In 2006, these employees received total compensation of \$2.2 billion.
- The total US employment, both direct and indirect, that depends on entertainment software now exceeds 80,000.
- For the four-year period 2002 through 2006, direct employment in the US entertainment software publishing industry grew at an annual rate of 4.4%.
- In 2006, average compensation per employee (wages, salaries and employer contributions for pensions, insurance and government social insurance) was \$92,368.
- The US entertainment software industry’s value added to US Gross Domestic Product (GDP) was \$3.8 billion.
- The real annual growth rate of the US entertainment software industry exceeded 17.0% in the periods 2003-04 and 2005-06. During the same years, real growth for the US economy as a whole was below 4.0%.
- The entertainment software industry makes a disproportionate contribution to real growth for the US as whole. In the periods, 2003-04 and 2005-06, the industry’s contribution to real growth exceeded its share of GDP by more than four to one.

*(Siwek, Steven. Video Games in the 21st Century: Economic Contributions of the Entertainment Software Industry. Entertainment Software Association. 2007)*

*Analysis supplied by Ferris’ Library Academic Support Resources*

## **Labor Market Analysis – Digital Animation and Game Design**

### ***Job Outlook – Multimedia Artists and Animators***

The Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2010-11 Edition, characterizes the projected market demand for multimedia artists and animators (under the broader category of Artists and Related Workers) through the year 2018 is about as fast as the average [employment is expected to grow seven to thirteen percent]. Competition for jobs is characterized as keen [fewer job openings compared to job seekers] because the interest in this career will continue to exceed the number of available openings (U. S. Department of Labor, OOH, 2009).

Employment of multimedia artists and animators is expected to grow 14 percent through 2018, a net increase of 11,200 jobs. “An Increasing reliance on artist to create digital or multimedia artwork will drive growth.” (U. S. Department of Labor, OOH, 2009) “Because of the level of technical expertise demanded, multimedia artists and animators also need a bachelor's degree.” (U. S. Department of Labor, OOH, 2009)

“Demand for multimedia artists and animators will increase as consumers continue to demand more realistic video games, movie and television special effects, and 3D animated movies. Additional job openings will arise from an increasing need for computer graphics in the growing number of mobile technologies. The demand for animators is also increasing in alternative areas such as scientific research and design services. Some lower priority animation has been off shored, negatively affecting employment of animators.” (U. S. Department of Labor, OOH, 2009)

“Multimedia artist and animators should have better job opportunities than other artists but still will experience competition.” (U. S. Department of Labor, OOH, 2009)

It is uncertain what job opportunities will be created, but the government subsidies, grants, and tax breaks offered by state governments to the film industry often also include the same opportunities to game developers. Michigan’s film production credit, for example, also applies to video game production (Remo, 2009). “Our state incentive also applies to video games, webisodes, interactive games, digital animation, or an interactive website.” (Michigan Film Office, n.d.)

The projected job growth for multimedia artists and animators in Michigan is 15 percent through 2016. (U.S. Department of Labor, Career, 2010 and Michigan Department of Labor, n.d.)

### ***Need for Baccalaureate Education***

With this positive job outlook, predicted nationally and within Michigan, it is important that Ferris State University provide educational opportunities to contribute a well-prepared and available workforce to this area of employment.

Over 40 percent of multi-media artists and animators aged 25 to 44 have at least a bachelor’s degree, according to data found on the Career One-step’s occupational profile of Multi-Media Artists and Animators (U.S. Department of Labor, Career, 2010).

According to the salary survey (with a 95% confidence level) published by Game Developer in July 2009, there is a clear wage advantage to having a bachelor's degree over an Associate's degree and no college at all.

	Bachelor's Degree	Associate's Degree	High School Diploma
Programming	\$82,867	\$76,196	N/A
Art	\$66,516	\$74,521	\$67,500
Design	\$67,387	\$55,500	\$52,045
Production	\$83,598	\$59,643	N/A
Audio	\$73,214	\$59,643	N/A
Quality Assurance	\$34,737	N/A	N/A

(Duffy, *The entry-level*, 2009)

A formal education is a very clear path to a career in digital animation and game design. Students who hold a degree have “clear ways of showing whether they meet the required skills in a job ad” and “earning a degree in computer science or game programming is often a very good investment toward getting a job in the game industry.” (Duffy, *Beat*, 2009)

A formal art education provides artists and animators with an opportunity to collaborate with non-artists and prepares them with a flexible career applicable “not only to games, but film, television, has advertising, and other commercial ventured, too.” (*Beat the Catch-22*)

### References

Duffy, J. (2009). *Beat the catch-22*. *Game Developer*, 16(7), 9. Retrieved from Academic OneFile

Duffy, J. (2009). *The entry-level game developer salary survey*. In *Game Developer Career Guide Fall 2009* (pp. 32-38).

Retrieved from <http://gamedeveloper.texterity.com/gamedeveloper/2009fall/#pg1>

Michigan Department of Labor and Economic Growth. Bureau of Labor Market Information and Strategic Initiatives. (n.d.). *Arts, Design, Entertainment, Sports, and Media Occupation, Employment Forecast, 2006-2016*. Retrieved from [http://www.milmi.org/admin/uploadedPublications/710\\_occ\\_g27.htm](http://www.milmi.org/admin/uploadedPublications/710_occ_g27.htm)

Michigan Film Office. (n.d.). *Digital Media*. Retrieved from <http://www.michiganfilmo f fice.org/Made-in-Michigan/Digital-Media/Default.aspx>

Remo, C. (2009). *Land of opportunity*. *Game Developer*, 16(11), 7. Retrieved from Academic OneFile.

### ***Emerging Issues***

Describe and assess how the program responds to emerging issues in the discipline, changes in the labor force, changes in employer needs, changes in student needs, and other forces of change.

Emerging Issues: The faculty in DAGD lives on the cutting edge of technology. We have grown up with it, helped develop it and pursue the next generation of animation and game design technology. Even better: we enjoy it.

Part of our job as a program is to help identify trends and respond to them. While students may claim that making the next “Guitar Hero” is what they want to do, we would look at what is behind a certain game trend and determine what really is happening. We try to separate the fads from trends and identify that what people really enjoy. For instance, in “Guitar Hero” the game is the experience of making ‘music’ publically tied to competition. The trend is performing music and we can see where this could be a long term trend such as Karaoke. We examine ‘what is fun?’ for games or ‘what is a good film’ for animation.

Admittedly, we enjoy a great film such as Avatar and revel in its technology. However, we examine it to see if using technology such as ‘motion capture’ or ‘mocap’ is the right direction for our program. Such set ups are very expensive and it takes expertise to run and instruct in them. 3D projection is becoming ubiquitous, but do we need to know and perform this at a four year degree level? To answer that question we look toward job boards. We see that there is modest demand for mocap technicians and programmers. Without a direct sponsor who would hire our graduates or underwrite our effort, we do not see a use for a full mocap studio. However, if we could find significant backing, this would be a positive strategic move.

We avoid being reactionary in our decisions, however we are proactive and look toward the industry on what will be the entry level positions for our students. We look at industry job trends by searching job posting boards and listening to industry partners. We attend career trade fairs and discuss with industry what their needs are. Every faculty member is encouraged to travel once a year to an event to scout out what the needs of the industry will be.

While the industry does change, it changes steadily and surely. We started DAGD on a sturdy base of 3D imagery. We progressed to making 2D imagery, game design and advanced the programming attributes. We look to make steady progress in what we are good at and build from there.

### ***Professional Activities by Staff***

Date	Activity	Location	Staff
2004	Autodesk University Training	Chicago, IL	Marty Lier
2005	Autodesk University Training	Chicago, IL	Marty Lier
2005	Kalamazoo Animation Festival International	Kalamazoo, MI	Ward Makielski, Marty Lier, David Baker
2005	Autodesk University 3ds Max training	Chicago, IL	Marty Lier
2006	Ann Arbor Film Festival	Ann Arbor MI	David Baker

2006	Blue Mountain Film Festival	Roanoke VA	David Baker
2006	Autodesk University Training	Chicago, IL	Marty Lier
2007	Game Developer's Conference	San Francisco CA	David Baker
2007	Autodesk University Training	Chicago, IL	Marty Lier
2007	IUAUP Assessment training	Indianapolis IN	David Baker
2008	Advising Conference	Chicago, IL	David Baker
2008	Game Developer's Conference	San Francisco CA	David Baker, Marty Lier
2008	Siggraph	Los Angeles, CA	Cory Heald, Josh Freaney, Ward Makielski
2009	Game Developer's Conference	San Francisco, CA	Marty Lier
2009	Game Con	Indianapolis IN	Cory Heald, Josh Freaney
2009	Kalamazoo Animation Festival International	Kalamazoo, MI	David Baker
2010	Game Developer's Conference	San Francisco, CA	Cory Heald, Joshua Freaney

***How do you discover emerging issues?***

We discover emerging issues through our advisory board, the movies, trade shows, game festivals and the internet. We pair this with examining job growth and recommendations from our advisory panel. We also get feedback from our interns who present to classes on their internships. With feedback from many sources, we can see what will be needed in the workforce in the short term. Additionally, faculty are encouraged to maintain outside projects to keep them in tune with current trends.

We all have different perspectives in the department. At our monthly departmental meetings, we discuss different strategies and directions for the future. One emerging issue we found is the need to deliver more curricula online or in a mixed delivery format. Community Colleges have been requesting articulation with DAGD and the CPTS mission is to bring university education to local colleges. We have responded by developing an animation and game design concentration in the BIS degree that allows a 300 level 6 course sequence that is delivered online at the community college.

We listen to all our partners and try to develop strategies on how to serve them.



## ***How do you see the changing labor force?***

### ***Rise of the Creative Class***

In Richard Florida's much heralded book, "The Rise of the Creative Class" he speaks of a new group of workers called the 'Creative Class'.

*The Creative Class is a class of workers whose job is to create meaningful new forms (2002). The Creative Class is composed of scientists and engineers, university professors, poets and architects. The Creative Class also "includes people in design, education, arts, music and entertainment, whose economic function is to create new ideas, new technology and/or creative content" (Florida, 2002, p. 8). (Florida, Richard, The Rise of the Creative Class, Perseus Book Group).*

In this book, Florida discusses how cities that have embraced this ethic are thriving and that those who are not, are waning. We see creative occupations as a growing career that offers both economic advantage and creative growth.

The Creative Class is not a class of workers among many but in reality it is the class that will bring any country who has them to great economic power and growth. The main advantage to a creative class is that it creates outcomes in new ideas, high-tech industry and regional growth. Even though the Creative Class has been around for centuries, the U.S. was the first large country to have this Creative Class that deals with information technology in the 1960s and 1970s. In the 1960s less than five percent of the U.S. population was part of the creative class which is now 26 percent. Seeing that having a strong Creative Class is vital in today's global economy, Europe is now almost equal with America's numbers for this class. Competition has developed as to who can attract the creative class to their cities.

The US government department of labor and statistics sees the projected growth of animators and media artists to be 14% to 19% for the next ten years. (retrieved from <http://online.onetcenter.org/link/summary/27-1014.00> March 2010). It is considered a top industry for self employment. (retrieved from <http://online.onetcenter.org/find/industry?i=94&j=27-1014.00> March 2010 ).

One of the most significant developments in recent years is the loss of manufacturing jobs in Michigan. Between 2006 and 2010, we have lost close to 50 percent of our auto manufacturing jobs. As a national economy, we are shifting from an industrial economy to an information economy. While painful for our state, we can embrace this opportunity and train the next generation for an exciting and creative career. However, animation and game design is currently not a large industry in Michigan. There are only half a dozen game companies in Michigan. San Francisco alone has over 150 and California is resident to over 40 percent of all game design employees. Statistics for animation are similar. We have a thriving animation community in Michigan, but major studios are elsewhere.

"Approximately 75% of the employees in the US entertainment software industry are located in one of the six states of California, Washington, Texas, New York, Massachusetts and Illinois. California is the largest employer of entertainment software personnel accounting for approximately 40% of the total number of employees in the US as a whole."

### ***Siwek, Steven – Video Games in the 21st Century***

As faculty and working professionals, we have understood this for years. While we celebrate the capabilities of artisans in Michigan, we are realists and encourage all our students to consider going where the work is. While many parents groan at the thought of their children leaving Michigan, exploring possibilities elsewhere is a noble tradition of young adults. We hope all our students can thrive and help them with this transition by opening up new roads for them.

One bright spot is the Michigan Film Incentive (<http://www.michigan.gov/filmooffice/0,1607,7-248-46457-186660--,00.html>). This bill, sponsored by Representative Bill Huizinga from Zeeland creates incentive rebates of up to 42 percent to producers who spend media production money in Michigan. While controversial, the bill has spawned a number of projects. Clint Eastwood shot the highly acclaimed ‘Gran Torino’ in Detroit and a remake of ‘Red Dawn’ has begun shooting in Lansing. This year in Governor Granholm’s State of the State address she announced a new studio opening in Northwest Grand Rapids called ‘Hanger 42’. This facility will be over 500,000 square feet and be the largest sound stage in Michigan. Once the company is up and running, they anticipate 1000 jobs to be created surrounding the film industry. Since virtually every frame of popular film is touched digitally, we can anticipate that many of the jobs created will be for animators and film technicians. The future for animation in Michigan could be bright indeed.

### ***How do you react to changes in employer, student and other needs?***

We listen to students and employers. Our advisory board is helpful in determining what skills will be needed for their company in the future. However we are careful not to react to fads but carefully assessing what the need for students will be. Once we identify a trend, we examine how best to anticipate and serve it.

### ***Changes in Employer Needs***

With guidance from our advisory council and feedback from our placed alumni, we examine how our curriculum impacts the hire-ability of our students. We examine what entry level employees may be called upon to do in a media setting and direct our curricula to address these needs. For instance, most media companies either have or need a website. We train our students to be able to produce websites as a matter of course in many of our classes. Our students can say ‘no problem’ when asked to create projects for the web. Additionally, we have all students take at least one course in digital video which comes to bear in many projects or promotional media for companies. We are constantly looking to see how our students can ‘fit in’ best by teaching them a broad range of skills and finding specific talents for each student.

Every year we send at least two faculty members out to either the Game Developer’s conference or SIGGRAPH to assess what is currently needed for employees in the industry. Both these conferences have ‘career fairs’ that look to attract the best and the brightest talent in the industry. At GDC alone, over 40 companies secure trade show career booths and speak to thousands of potential employees. As faculty, we informally interview the principles of these companies and gather data on what jobs they have available. Upon returning from the GDC, we spread the information we have gathered around including contact information and promotional materials from the companies. For students that attend the conference, internships sometimes are the result

as was for DAGD student Robert Vaughn who worked at the Television channel G4, during the summer of 2009. (<http://www.gdconf.com/events/careerpavilion.html>)

### ***Changes in Student Needs***

Students often enter DAGD with one goal and work exploring the available career paths. After some exploration, they may discover that they have a particular talent that was heretofore unrecognized. We help students identify this talent and direct them in ways that would be most beneficial to them. Student advisors look at their body of work and point out positive directions for their lives. We craft individual plans with students to help them achieve their goals.

Part of the Mission of CPTS is to reach out to student populations who cannot attend Ferris's Big Rapids Campus. One initiative we are developing is the online delivery of our curricula. We currently have four classes delivered online and have an additional two that are being delivered in a blended format. We plan to have a total of six 300 and higher classes available to be taken online or mixed delivery by Spring semester 2011. This will allow students to work toward a full four year degree.

We listen to Community Colleges across the state as they work on animation and game design curricula. Students from these colleges are encouraged to decide early what their career goals are and take appropriate actions. We have developed transfer plans that help students make a smooth transition if they decide to apply to Ferris.

### ***Assess why students come to FSU for the program. Summarize the results of the graduate exit survey and the student program evaluation.***

Students come to the program for mainly two reasons. First, they are looking to get into the computer animation industry and work on film projects such as Star Wars, Avatar and Shrek. Secondly they are drawn to DAGD to become game designers. In the informal interviews we have with parents, more often than not students express an interest in 'animation' but when probed, animation in the context of gaming is a primary driving motivator.

Some students had a high drive to enter DAGD as a first choice program and desire to be a game designer or animator. Others start at GRCC and take an entry 3D course, CO 250 and get turned on by the media. A few are turned down for advanced classes by the Graphic Design department of Ferris or find that Kendall is not technical enough and turn toward our degree. We have had a number of very successful students enter DAGD from this pipeline.

The Kent County Technical Center (KCTC) is another pipeline we encourage. We get five to ten students a year from this resource. Usually, we receive 30 applications and portfolios a year from KCTC, however, this is also used as a professional exercise for students.

### ***Why do students come to the FSU program?***

Students come to Ferris's DAGD program for a number of reasons. When first interviewed, one-third want to become game designers, one third digital animators with the remaining open to either direction. Guidance councilors have been a great resource in terms of helping students discover DAGD. As we have become more known around Michigan, students are being referred to us by community college partners and even competition such as ITT. Our

relationship with Kent County Technical Center is most beneficial. Students can achieve nine college credit hours at KCTC that are inside the DAGD degree.

We have outstanding support staff members that are very active in the community supporting CPTS's efforts. Bill Foster travels extensively to area high schools and cheerfully offers information about our program. Our graphic designer, Mary Dilley happily helps us with professional quality design and print support. Judy Elsey, our career support coordinator travels to schools helping them find their 'true colors' and often points them our way.

To help promote the program, we create a yearly DVD 'yearbook' that celebrates the best work of the year. We create 1000 for distribution to area schools and other events. Laid out on a table, these are snatched up quickly.

The internet seems to have motivated students as well. While we can't attribute growth in our numbers to the launch of our website in September 2009, our numbers in applicants have more than doubled from 2008 to 2009. Many people use the web to explore college opportunities and a website is a 'must have' for a high tech program. We do get frequent calls now that attribute hearing about us from our web site. They often comment on the importance of information and how we its helped shape their decision to attend Ferris.

#### ***How well does the program meet student expectations?***

We can see from the student surveys (pg 132) that students are reasonably pleased with the quality of education that they received at Ferris. While there is plenty of room for improvement, we have started something that not many have.

#### ***How is student sentiment measured?***

#### ***Student Assessments of Instruction***

We measure student sentiment by the Student Assessment of Instruction every semester. Part of the assessment allows students to give feed back with comments. Our classes have benefitted greatly from this information and we continually improve what we do. All classes are assessed and we encourage students to provide comments to improve the class. This provides semester by semester feedback that lets us respond quickly and affirmatively to improve class content or fix problems.

#### ***Advising***

We assess our efforts with advising appointments. We ask students informal questions about courses they have taken and get an overall picture what they have been successful at in our program. This is a very hands-on approach that helps us understand the dynamics and problems in the student lives. We assess students and how they are meshing with the program, their peers and their instructors. If there are problems, we try to work solutions that are accessible to all.

Advising appointments allow us to get feedback on general education experiences at GRCC. It helps us find the quality courses that support our efforts.

### ***Social Networking***

We stay close to our students by using social networking sites such as Facebook. (<http://www.facebook.com>). While not all faculty participate, we ‘friend’ students in our classes and use their everyday comments to understand their joys and frustrations with the program. We use this tool to quickly assess student sentiment. Students have created their own ‘groups’ that critique DAGD. These groups are their ‘turf’ that allows them a place to ‘vent’ about frustrations and perceptions. This also allows us to respond to students on their ground. We seek to be understanding but firmly declare our own justification of issues or offer insights the students may not have been aware of. We have found that students are willing to listen if we are willing to listen.

# PROGRAM VALUE

## Program Benefit to University

*Describe the benefit of the program, facilities, and personnel to the University.*

DAGD is a high profile program. Positioning ourselves as more than a new media degree, aiming at the highly competitive and visible worlds of animation and game design invites both supporters and detractors. We are specifically channeling ourselves to develop students who will be able to compete and be successful in the Digital Media world.

Animation, game design and media careers are considered some of the hottest jobs for the coming generation (U. S. Department of Labor, OOH, 2009). Having a quality program that develops students who are employable in this realm is a great asset to Ferris. No other University in Michigan has such a robust program that is gaining the attention that DAGD has.

Projects we have produced include:

- The ‘Mark Kistler Imagination Station’ drawing series that has been aired nationwide on PBS television.
- Competed successfully in international competitions such as the ‘Cartoon Challenge’ at the Kalamazoo Animation Festival International (KAFI).
- Created games for local industry and films such as ‘Gofers’ being produced at the Center for Entrepreneurial studies.
- WOOD TV’s Miranda’s youth segments about new media.
- ‘Rocumentaries’ featured on WGRD’s website that garnered hundreds of thousands of hits.
- ‘Reveal Michigan’ video campaigns for the upcoming West Michigan Film websites.
- Summer Camps that have successfully introduced hundred of teens to the world of game design.

Our facility, a partnership between Ferris and GRCC is relatively unique for a university. More than just a classroom or two, we are a fully operational environment with its own distinct personality. Our proximity to GRCC helps to gain exposure to the thousands of people who come to conferences, expos and even the Heritage restaurant within our walls. The ATC auditorium plays host to kid audiences with the Mark Kistler Imagination Station Summer Camps, media professional groups such as the West Michigan Film and Video Alliance, public campaigns such as the Barack Obama political rally in Fall 2008 and the center of activity for the GRCC computer gaming club. This significant public traffic, with DAGD classrooms across the hall is helpful in promoting our program.

The computers we have are a cut above the standard classroom computer. They feature dual core Pentiums with 4 gigabytes of ram and high end graphics cards. Dual monitors show students what they are doing and they are packed with state of the art software. Quality classroom projectors and full stereo sound systems make the students’ work shine during critiques. Potential Ferris candidates are impressed when they see our classrooms. We

occasionally add banners to walls as events allow and utilize the rear pushpin boards to display students work.

The faculty of DAGD is unique. Pulled from industry and then trained as teachers, all faculty have years of professional experience behind them before walking into the classroom. This gives credibility to the program as few programs have. Additionally, there is diversity within the group as all have come from different dimensions of the game design and animation industry. The benefit to the University is credibility, experience and professional focus. When parents and potential students talk to us, we can speak to them from our professional experiences. We are grounded in reality and help students see things from that perspective.

Our faculty survey helps illustrate our perspectives (see *Appendix C – Faculty Survey Results*).

## **Faculty and Personnel Benefit to Students**

***Describe the benefit of the program facilities, and personnel to the students enrolled in the program.***

We built DAGD for the students. We looked at what we believed would be a credible animation and game design environment and brought it, with the support of the University, into fruition. We are here to support the career paths with these good tools.

Facility: The Applied Technology Center at Ferris/DAGD is a versatile building that serves students adequately. Shared with GRCC, we have two restaurants/classrooms, a large atrium, patio, student lounges and classrooms all within walking distance of a vibrant urban landscape. Administration is convenient and help is just a few steps away for students. Faculty offices are in direct proximity and the auditorium space is immediate to our classrooms. Students have short walks to GRCC classes that make up their general education requirements. Two frequent complaints from students is that there is no ‘communal’ space that is ‘Ferris’ and that the classrooms can get overheated as the computers tend to use significant power.

Personnel: Besides having exemplary faculty, DAGD has the privilege to be served by a skilled and dedicated administrative staff. Receptionists can help students book appointments, direct traffic and most importantly make people feel at home. Financial aid councilors are available by appointment or by ‘drop in’ subject to availability. Students need not go any farther than their own halls to get advice on financing their education. Registration also is immediately available as is a student service councilor and career service councilor. Students are cared for and helped quickly and politely by the first rate staff.

## **Value Assessment**

***What is the assessment of program personnel of the value of the program to employers?***

The DAGD teaching faculty have all had industry careers before becoming faculty at Ferris. We are here for a number of reasons that reflect the different ages of the members. One commonality that we all share is the desire to have students succeed in this industry. Being the

case, and having the unique opportunity to start ‘from the ground up’, we have crafted all the courseware in our program to be a reflection of something students will need to succeed in animation or gaming. We are training students to be employable as we often had to discover employment on our own.

We believe we are developing a generation of animators and game designers that we would hire. In some cases, we have hired students to assist us in professional projects that we produce. We have also followed the careers of a number of our students as they grow professionally. We are pleased with the students that have followed our direction and forged new directions of their own. Examples of our student work and progress can be found in links on our website at

<http://dagd.ferris.edu/activek/content.asp?s=&catid=13&tid=17>

***Explain how this value is determined.***

This value is determined on street level. Many of our students stay in contact with us via social networking sites such as Facebook and Linked In. We often hire our own students during the summer to help us with projects. This provides value for our students and the industry as students are given real world projects to work on. We stay in close contact with our alumni and follow their successes and join in on their frustrations. Employers are part of our network and we hear from them often. We are now experiencing the satisfaction of having alumni calling us for our best students to help them out on projects. The cycle is becoming complete!

***Describe the benefit of the program, faculty, staff and facilities to entities external to the University (services that faculty have provided to accreditation bodies, and regional, state, and national professional associations; manuscript reviewing; service on editorial boards; use of facilities for meetings, etc.).***

DAGD teaching faculty are involved professionally, improving the climate of animation and game design in Michigan.

The West Michigan Film and Video Association SEMAFX – Ward Makielski has presented Flash Game Design at Smart Fest

Josh Freene is reviewing a Flash Text as a technical editor

We use our auditoriums for professional associations like WMFVA, ASIFA, IGDA and MCAI. We have held a number of events in our hallways bringing professional media people into our world. The ATC auditorium is a quality facility that is in demand for organizations such as this.

## **Community Benefit**

***What services for extra-University general public groups (e.g., presentations in schools or to community organizations) have faculty, staff or students provided? Describe how these services benefit students, program, and community.***

DAGD faculty members are involved with the community. We embrace the opportunity to be part of the animation, game design and media community.



**David Baker** Kent County Technical Center Advisory Chairperson 2008 - 2010

- High School Career Path presenter 2007 – 2010
- Jr. Achievement presenter
- Ann Arbor Film Festival Judge
- Blue Ridge Film Festival special guest and presenter 2006
- KAFI Cartoon Challenge Team initiator and sponsor
- Founding member of West Michigan Film and Video Association
- Member of ASIFA – the international independent animator’s society
- West Michigan Film Board Task Force
- SmartFest founding board member
- Community Media Center sponsor
- Summer Camp coordinator
- Producer for Ferris’s contribution for Mark Kistler’s Imagination Station on PBS
- Member of IGDA, the International Game Developer’s Association
- Guest speaker at Ferris Big Rapid’s summer camp

**Ward Makielski**

- KCTC Advisory Board Member and Co-Vice President
- Junior Achievement Presentations – 2005 – 2007
- WMCAT - Ran after school camps, brought in guest speakers
- GR Leadership Seminar Series - Sat on panel at the Music Society just down the street
- Guest Speakers - Organized and brought in numerous professional guest speakers, open to the public including Mark Kistler of the Imagination Station and Tony Benedict of Hanna Barbara studios
- Brought Sue Shakespeare of Creative Capers into our world who has been a significant contributor to DAGD’s internship efforts
- Summer Camps - Launched and operated summer DAGD camps for high school students 2005 - 2007
- Speaker at ‘SmartFest’ 2006

**Josh Freeney**

- Guest Speaker at Flash Fest in Detroit 2008
- Faculty advisor for Ferris Student Chapter of the IGDA at the Game Developer’s Conference in San Francisco 2010
- Guest speaker at Ferris Big Rapids’ Summer Camp in 2008, 2009 and 2010

**Cory Heald**

- Faculty advisor for Ferris Student Chapter of the IGDA at the Game Developer’s Conference in San Francisco 2010 and school year.
- Guest speaker at Ferris BR computer summer camp in 2010

***Marty Lier***

- Faculty advisor for Ferris Student Chapter of the IGDA at the Game Developer's Conference in San Francisco 2009
- Visited High Schools from 2004 to 2008 presenting game design career seminars.
- Supported the CIS department summer camps with day seminars.

# **SECTION 2: COLLECTION OF PERCEPTIONS**

## **SURVEYS**

The survey sections must include, among others, a discussion of techniques used in collecting the information, difficulties encountered during the surveying process, number and percent of respondents, and analysis of data in accordance with established methodologies. The survey instruments must be designed and distributed, in consultation with Institutional Research and Testing, to reflect general aspects of program review as well as the specific nature of the program itself. All comments should be included, but the names of individuals mentioned should be deleted.

### **Graduate Follow-Up Survey**

The purpose of this activity is to learn from the graduates their perceptions and experiences regarding employment based on program outcomes. The goal is to assess the effectiveness of the program in terms of job placement and preparedness of the graduate for the marketplace. A mailed or e-mailed questionnaire is most preferred; however, under certain conditions telephone or personal interviews can be used to gather the data.

*(See Appendix C – Graduate Follow-Up Survey Results)*

### **Employer Follow-Up Survey**

This activity is intended to aid in assessing the employers' experiences with graduates and their perceptions of the program itself. A mailed or e-mailed instrument should be used to conduct the survey; however, if justified, telephone or personal interviews may suffice.

*(See Appendix D – Employer Follow-Up Survey Results)*

### **Graduating Student Exit Survey**

Graduating students are surveyed every year on an ongoing basis to obtain information regarding quality of instruction, relevance of courses, and satisfaction with program outcomes based on their own expectations. The survey must seek student suggestions on ways to improve the effectiveness of the program and to enhance the fulfillment of their expectations. This survey is mandatory for all program graduates.

*(See Appendix E– Graduating Student Survey Results)*

## Alumni Survey

*(See Appendix F – Alumni Survey Results)*

## Student Program Evaluation

Current students are surveyed to obtain information regarding quality of instruction, relevance of courses, and satisfaction with program outcomes based on their own expectations. The survey must seek student suggestions on ways to improve the effectiveness of the program and to enhance the fulfillment of their expectations. This survey should be conducted during the year before the PRP report is submitted.

The following Student Assessments of Instruction (SAI's) are compiled from the start of DAGD. These are the composites for all the classes.

DAGD 100 = 4.4	DAGD 310 = 3.9
DAGD 101 = 4.2	DAGD 330 = 4.3
DAGD 102 = 4.3	DAGD 335 = 4.2
DAGD 103 = 4.4	DAGD 340 = 4.0
DAGD 150 = 4.2	DAGD 355 = 4.2
DAGD 180 = 3.9	DAGD 375 = 4.3
DAGD 185 = 4.4	DAGD 380 = 4.3
DAGD 200 = 4.4	DAGD 385 = 4.2
DAGD 210 = 4.4	DAGD 390 = 4.2
DAGD 220 = 4.1	DAGD 400 = 3.8
DAGD 230 = 4.3	DAGD 420 = 3.9
DAGD 255 = 4.7	DAGD 430 = 4.4
DAGD 260 = 4.2	DAGD 460 = 4.2
DAGD 290 = 4.4	DAGD 490 = 4.1
DAGD 300 = 4.4	DAGD 490 = 4.2
	DAGD 499 = 4.2

*(See Appendix G – Current Student Survey Results)*

# FACULTY PERCEPTION OF PROGRAM

The purpose of this activity is to assess faculty perceptions regarding the following aspects of the program: curriculum, resources, admissions standards, degree of commitment by the administration, processes and procedures used, and their overall feelings. Additional items that may be unique to the program can be incorporated in this survey.

Our perception survey asked the following questions - instructors were asked to provide honest answers to them.

## *How can do things better as a department?*

- I think we really need to ask "why?" much more than we do. We like to take action but having good reason and assessment of risk and reward would cut some of the wasted effort from our work plate.
- Produce more games!
- Produce more short films!
- Continued 'laddering' of courseware where DAGD 100 links to 230 to 335 etc
- Do more than just the minimum requirements of the job. Go the extra mile
- Continue mentoring students by being available for students/advisees all year not just during the semester.
- More precise assessments and frequent feedback.
- Emphasis on creating quality original work
- Other than research, material grabbed from the web should not be used in class work. We need to respect copyright laws by setting a good example.
- Customer service
- Making sure we are keeping up to date on current software and techniques both specific to our classes and more global industry changes. Be more honest with what is working and not working and more honest with students. Ways to evaluate the growth of faculty so we do not become stagnant.
- We can have more collaboration between classes to ensure a "complete" and "solid" core that is being taught to our students. With collaboration we can better understand exactly what skills each student should be bringing to the table at the beginning of each class. Have department meeting times that work within each instructor's schedules.
- Overall, I'm still very pleased with how our department runs and I'm proud to be a member of our faculty. The past couple years saw some challenges as restructuring of roles created some minor rifts. However, I believe that with time and communication, those rifts have lessened and we're operating better as a cohesive body. The key to successful operation is communication. I believe the DAGD staff meetings that have been running with some regularity have been the greatest boon to our department. It's my hope that even though nobody likes having meetings, we continue to meet on a monthly basis.
- Things we can do better as a department is to have regular scheduled meetings. We could also do things as a group or even with spouses. Mostly due to low enrollment, lack of real increases, and job instability.

### ***Personal faculty goals for the next two years***

- *Make all of my classes online-ready. Have students who are capable of making 3d games for capstone. Increase student numbers in the game design track of the program.*
- *Continue working with regional schools and community colleges*
- *Continue with TQM courseware in advanced masters program*
- *Create and direct more short films*
- *Develop overseas project*
- *Put all classes into a Hybrid\Online format*
- *Provide more feedback to students*
- *Fill in weaknesses in areas such as custom rigging and particles*
- *To help create and maintain a curriculum on the net*
- *Help to better facilitate a uniformed class delivery to both online and onsite.*
- *Take on more responsibility and teaching opportunities.*
- *Along with expanding and developing our online offerings, it's my hope to further develop my 3D skills to expand into the areas of character modeling and matte painting. While we have some departmental expertise in character modeling, I believe the more I can develop this skill, the better I can serve our foundation students in directing their processes. And, as for matte painting, I believe that to be a largely untapped discipline in our program and likely one that will become more pertinent in the upcoming years. Matte painting will include the use of Vue along with expanded Photoshop and texturing work, as well as traditional 3D tools. And, lastly, as an extension of character modeling, I'd like to increase my ability with 3D character animation. Again, I believe this will trickle down into the foundation programs and there is certainly a strong need in our program for increased character animation instruction.*
- *My personal faculty goal is to become more involved with the students and industry. I also hope to have all of my classes use Ferris Connect. I also hope to work towards my doctorate degree.*

### ***General Departmental Directions***

- *We need to make our material more available to additional student groups outside our GR campus. Also we must remain agile and forward thinking and not be scared to jump out into untested waters since this is exactly what is necessary to succeed in these industries that we want our students to get into.*
- *Continue curricula clean-up and linking*
- *More 'training' at the lower levels to provide skills for upper levels*
- *Growth to a solid 60 quality freshman students*
- *Quality instruction in all classes - No fluff busywork –*
- *Focus on DAGD 499 asset creation in both domains*
- *Make Games that work and are published*
- *Make sure we do not let standard Academic Mindset compromise the edge we need to have in order to stay current in the industry.*

- *I would like to see a shift in the curriculum to cover more video game creation: both art and programming. I would like to see us follow through with topics that are covered during department meetings/end of year reviews.*
- *I believe the important one is the one we are already undertaking – the movement to make more (if not all) of our program online. As we look to expand our student base, the most available model is online. I believe that students who will excel in our field will also excel at online learning. There are substantial crossover skill sets. That doesn't mean that we need to abandon our offerings on the ground, but we are uniquely positioned to be able to grab substantial online real estate.*
- *I think the Department as a whole needs to become more connected with other faculty people in Big Rapids. I think our department should work towards full time status and union representation. I think the new general direction of developing hybrid classes is excellent.*

***What additional concentrations and classes are appropriate?***

- 3D math class (trig / physics)
- tools programming class (importers, exporters, editors, prototyping)
- game studio class (start to finish game production in a group)
- Additional Digital FX work
- Drawing for Animation class
- Acting in 3D Animation
- Game Design Capstone Concentration
- Storytelling as English 3xx class. Develop Capstone here

**Classes:**

- After Effects
- Two classes that run together Game Art \ Game Programming
- Character Modeling and a Character Animation

**Degrees:**

- VFX and Motion Graphics
- Animation Artist
- Game Artist
- Pipeline\Tool Engineer
- More art! Painting, life drawing, art history/appreciation.
- While I'd love to see us develop concentrations in Medical/Scientific Visualization, I'm not sure if there is student or industry interest to justify. I do believe that we need to develop a Web/Mobile Application Development concentration, because there is substantial opportunity in that area. However, I suspect that that would need to be a hybrid DAGD/SENG degree to produce truly successful candidates. We also would need to find faculty support with better experience in that arena. As for classes, I'd like to see us develop a traditional animation course and a focused 3D animation course.
- I would love to see more fundamental art and animation courses in our program. I would love to see a concentration in Architecture & Mechanical Design.

### ***How we can improve retention?***

- We need to have better data about where a student is in the program so we can give them more specific input and direction. Too many students just get lost in the process and the check sheet does not stand up to modern data and process management architectures. I think if we took this system into the modern age of instant feedback and user control we would hold onto many more students.
- Customer Service
- Balance coursework loads
- Continuous feedback and critique
- Make all work relevant as possible
- Ladder all curricula. Small steps reaching high heights
- Appeal to a higher achieving, higher skilled student population
- Improve community and ‘fraternal’ feel.
- Steer people into appropriate directions earlier
- Have people feel they are part of an elite organization
- Show a proven track record for graduates. Make sure those who come into the program really want to be here
- By helping to empower students to be more active in the community (locally and globally)
- Communication is the surest way to keep students coming back. This can and should happen at the advisor/student level. Ideally, advisors should meet with every advisee every semester (or at least once a year). However, this is a logistical/scheduling nightmare and potentially very time consuming. Alternatively, there should be a better way to communicate with students. Regular monthly emails would be a good idea – potentially from the department, potentially from the advisor. However, this would mean enforcing a consistent email collection from all of our students. Nonetheless, a newsletter might not be a bad idea for the department.
- We need to be more focused on retention. We need to spend more time with our students. We should not let our students sign up for classes unless they first meet up with their advisors.

### ***How we can improve cross-class collaboration?***

- Solidifying our curriculum and having group review of class design so we can see the bridges between classes would accelerate this process.
- Have ‘course assignment schedules’ laid out uniformly and available to all faculty for inspection and review
- Improve public ‘gallery space’ utilizing pin boards and Plasma/projector space
- Keep talking among ourselves – be proactive and not secretive - teamwork
- Keep end of semester show focused on collaborative work
- Identify classes that should work together and make it happen by identifying the steps necessary to make it functional.
- I think the best opportunity for collaboration is between DAGD and SENG. I think collaborations within DAGD will be too incestuous to offer much gain. Studio based projects with a specific goal or client could be set up specifically to develop cross



discipline teams. So this is really an additional course and should be addressed in number four, above. If we want to cross collaboration, then we just need to set up courses where we make that happen. The cleanest solution for cross departmental courses would be to have each department set up a class for their students, and then have those classes work together. With that model, we could work with SENG, TVPR, or any other department. If we don't want to add a course, then I think this could happen with our Junior Project course.

- I think by having regular weekly departmental meetings we can discuss student issues & encourage collaboration between our classes.

### ***How can we achieve the goal of 'a top ten animation/game design curricula'?***

- We need to be more strict in our evaluation and acceptance of student work and progress. Those schools did not become great or at least perceived as great until they only started graduating fantastic students. Since Ferris has a mindset of being accessible to everyone I don't think we will ever be in this position because in order to get there we would have to take a stance that is definitely anti Ferris ideals. I think however that we can be known for giving job-specific skills and experience that other schools do not give which falls directly in line with what Ferris was founded to do. I think this will have the effect of having successful graduates that get jobs based on their work as opposed to our stamp of approval. Ultimately I think it is the same result and better for students.
- 'Design' should be a prime consideration.
- Sketchbooks maintained in all design classes (Ringling Website example)
- Teach 'Illusion of Life' basics of animation
- Map out career directions for students earlier
- Improve our appeal to high quality/achieving students
- Keep entering contests (both faculty and students)
- Attend conferences and promote at career fairs
- Take lessons from the top schools VFS, RIT, SCAD, Ringling, Digipen, Guildhall. - Examine
  - what they do and do it better
  - Bi – Weekly Critiques in studio classes.
  - Improved placement of internships. (It's been steadily improving)
  - Improved job opportunities and career outreach (it's been improving)
  - Provide an Associate's for those who are not capable of "high-end" work. Right now the ratio of quality artist to average artist is very off balance
  - Have department meeting times that work within all of our schedules. The use of Google docs within classes that can be viewed by all instructors as well as edited by them. Establish an open forum for communication within the department for collaboration (Google docs, etc).
- I believe we are already very close to being a top ten program, we just need to show the world who we are and what we can do. That, in turn, will attract stronger students to help us prove ourselves. We need to start advertising online at field-appropriate sites (gamasutra.com, awn.com, 3dtotal.com, etc.) and we need to start having a presence at some of the industry shows (IndieGameDev, GameDev, SIGGRAPH, etc.). People need

to know who we are if we hope to be recognized for what we've done and what we can do.

- We need proper housing for potential students, we need more collaboration with Big Rapids, We need to stop being an island by ourselves and be part of Ferris Big Rapids. Our students need the real college/university experience. So many parents do not send their children here due to this issue

***To wrap up the essay, please answer this question: “If we had to do it from scratch again, we should....”***

- I really think we should have had two programs one for 3d artists and one for game developers. Our new setup allows for this but I think we could have kept a lot of credibility intact if we had had better descriptors.
- Examine what it takes to be a great Animator and Game Designer
- Create a roadmap of how to get there
- Allow for earlier tracking
- Create a culture of excellence
- Combine Contract and Marketing class to allow for more training and DAGD bandwidth.
- Quality results come from great process. We need to continually refine our process until we get the results we desire. While creativity is essential, we need to teach how to follow good process rules so the rules can ultimately be broken.
- Prescribe all Gen-eds to be applicable to our domain where possible
- Start with the 4 programs listed above plus the current General and Game Development track.
- Find a way to partner with Kendall
- Map out the 3D Track in a better way
- Require Laptops, Tablets (for Artist Tracks), Specific HDD's and software.
- Have more art at the core.
- I do not feel that it should have been done radically different than occurred. I think if we'd known the work and challenges before it was done the first time, we might have thought twice before signing on. I'm proud of where we are and the path we have walked. I feel that we have made mostly the right decisions along the way. I would love to have a fancier facility, but that's about the only thing I'd change. The content, the meat of what we do, is excellent and I would not change that.
- If we had to do it from scratch again, we should begin with a strong 2D foundation. We should do more art & straight animation. We also should consider dropping the gaming part of the degree because it really is not happening.

(See Appendix H – Faculty Survey Results)

## **ADVISORY COMMITTEE PERCEPTIONS**

The purpose of this survey is to obtain information from the members of the program advisory committee regarding the curriculum, outcomes, facilities, equipment, graduates, micro- and megatrends that might affect job placement (both positively and adversely), and other relevant information. Recommendations for improvement must be sought from this group (combine notes from meetings). In the event that a program does not have an advisory committee, a group of individuals may be identified to serve in that capacity on a temporary basis.

Members of the DAGD advisory committee include:

- Sue Shakespeare – President, Creative Capers, Montrose California
- David Anderson – Faculty, Cornerstone University/adjunct DAGD
- Duane Loose – Creative Director - Alpha Zed Studios, Santa Monica, CA
- Amy Badovinac – Instructor – Kent County Skills Center, Grand Rapids, MI
- Peter Klein – Dean, Macomb Community College, Warren MI
- Angie Mistretta – Lighting Technical Director - Pixar, Emeryville CA
- Fred Munch – Producer - Lawrence Productions, Grand Rapids, MI

*(See Appendix H – Advisory Committee Survey Results)*

# SECTION 3: PROGRAM PROFILE

*Include Administrative Program Review document in this section. Provide the number and percentage for the variable addressed for each of the years since inception (for new programs) or the last program review.*

## PROFILE OF STUDENTS

### Student Demographic Profile.

#### *Gender*

Term	Enrolled	Male	Female
2005/08	115	103	12
2006/08	114	102	12
2007/08	140	120	20
2008/08	147	129	18
2009/08	134	120	14

#### *Ethnicity*

Term	Unknown	Black	Hispanic	Indian/Alaskan	Asian / PI	White
2005/08	39	2	1	0	1	72
2006/08	30	3	1	0	2	78
2007/08	10	6	3	0	3	118
2008/08	15	6	1	0	4	121
2009/08	12	5	3	0	3	111

#### *Average Age*

Term	Age
2005/08	21
2006/08	21
2007/08	22

2008/08	22
2009/08	22

***Residency (In-state and out-of-state)***

Term	Resident	Midwest Compact	Non-Resident
2005/08	115	0	0
2006/08	114	0	0
2007/08	140	0	0
2008/08	147	0	0
2009/08	134	0	0

***Full-time and part-time.***

*Data unavailable*

***Attend classes during the day, in the evenings, and on weekends.***

*Data unavailable*

***Enrolled in classes on- and off-campus.***

Term	On campus	Off campus
2005/08	0	115
2006/08	0	137
2007/08	0	141
2008/08	0	147
2009/08	0	134

***Enrolled in 100% on-line and/or mixed delivery courses.***

No students are 100% enrolled in online and/of mixed delivery courses.

**Blended Courses**

Term	2005	2006	2007	2008	2009
DAGD 100	Na	Na	Na	Na	Na
DAGD 103	Na	Na	Na	Na	Na
DAGD 300	Na	Na	Na	31	Na
DAGD 499	Na	Na	Na	7	Na

***Discuss how the information presented in (a) through (f) impacts the curriculum, scheduling, and/or delivery methods in the program.***

We have a ten-to-one ratio of men to women in our program. Most of the students are white and they are slightly older than the usual student population. Many work part-time and all are residents of Michigan. All attend classes at the Grand Rapids facility, but some are taking classes online to help reduce travel time or to continue attending a local community college before fully transferring to the DAGD program in Grand Rapids. We have had a few students finish their course work while employed outside of the state.

We see that there has been a 30 percent population growth over the last five years with a leveling off the last four. This has allowed us an opportunity to improve the quality of instruction and curricula rather than increase the size of our facility. Scheduling is manageable as well as we have ‘settled in’ and can create schedules that are distributed over the week to allow students time to prepare for classes.

We have also anticipated the need to distribute our work over the internet with blended format classes that include DAGD 100, 103, 300 and 499. The choice of these classes helps students who are at the beginning and at the end of their careers with us. They can choose to work away from campus to accommodate their own life needs. For our program, it frees three computer classroom sessions up for lab space or other DAGD classes.

As DAGD enters the next phase of development, we will be working with community colleges closer to offer our courseware at their schools or online so students will not have to move away from home to pursue a degree. By the next program review, we will likely be able to deliver 100

percent of our curricula as a transfer degree that can be completed at a student's community college.

We do offer some courses at night. This is more of a response to the availability of the instructor, David Anderson in DAGD 102 than an accommodation to the students. Most students are able to work schedules with employers to help them attend classes during the day.

## Quality of Students

***What is the range and average GPA of all students currently enrolled in the program? ACT?***

***Comment on this data.***

Term	GPA	ACT
2005/08	3.41	23.05
2006/08	3.39	23.24
2007/08	3.25	23.14
2008/08	3.28	23.14
2009/08	3.09	23.06

We see the average GPA is decreasing while the ACT scores remain steady. This writer would attribute this to our outreach efforts bringing in a more academically diverse student pool.

***What are the range and average GPA's of students graduating from the program? ACT?***

***Comment on this data.***

Term	GPA	ACT
2005/08	Na	Na
2006/08	Na	Na
2007/08	3.3	21
2008/08	3.48	24.71
2009/08	3.5	21.92

The average GPA of students graduating DAGD has been rising while the ACT scores have grown slightly. This writer believes can be attributed to overall improvement in student quality and improvement in instruction.

***In addition to ACT and GPA, identify and evaluate measures that are used to assess the quality of students entering the program.***

In the early years of DAGD (2004 – 2007) we examined other programs such as ours and decided that a commonality in most of the ‘good’ ones was a portfolio requirement. A portfolio helps to identify skills and intelligences that cannot be easily seen in an overall number such as a GPA or ACT score. Additionally, it has the effect of limiting the amount of completed applicants to a program to those who have the determination and drive to complete the portfolio requirement. Currently, just submitting a portfolio to the simple specifications outlined in our entrance guidelines is sufficient for entry into our program. We don’t judge the portfolio based only on quality. We see what the portfolio reflects and assess from that perspective.

We do believe as the quality of our student work grows and more people apply, we will be able to use the portfolio as a tool to admit the better design and programming students first. As space allows we will then permit the second tier of students in. As we wish to create one of the top design schools in the country, this strategy will help us bring in the best when we have sufficient quality applicants.

Identify academic awards (e.g., scholarships or fellowships) students in the program have earned. Comment on the significance of these awards to the program and students.

Scholarships: Students who participate in internships outside the state are encouraged to submit for the DAGD Scholarship. They can receive up to \$1000 to help defray tuition expenses if they accept an internship that will require travel outside of Michigan. The scholarship is funded by DAGD summer camp profits.

A number of students have participated in the Ferris ‘Presidential’ scholarship. Their outstanding performances are helping to improve the DAGD culture and mission of excellence.

Students have also applied for and received special scholarships such as TIP funds and Crones disease scholarships.

***What scholarly/creative activities (e.g., symposium presentations, other presentations or awards) have students in the program participated in? Comment on the significance of these activities to the program and students.***

Students in DAGD are participating in a number of scholarly and creative events. Twice yearly we hold ‘Fragfest’ which is a competition based in our Grand Rapids facility that is a 24 hour level design and modeling competition. Over twenty students typically throw their hat into the ring and work on the tasks presented. They discover that the pressure of competition can bring them further than just the pressure of a grade.

In 2009, our students were chosen to be part of the world renowned ‘Cartoon Challenge’ at the Kalamazoo Animation Festival International. Over thirty five teams entered to be a Challenge team with only ten being chosen. The Ferris ‘Flying Bulldogs’ were one of those five person teams. The challenge is to create a 30 second Public Service Announcement (PSA) spot in four days on a subject given on Monday morning of the Challenge. They have to deliver a final spot Thursday night at 6 pm. Our team was successful in completing the challenge with time to



spare. While San Jose State University was the ultimate winner, the Ferris Flying Bulldogs performed admirably with great teamwork and great spirit.

Every year we have a cotillion of twenty or so students travel to the Game Developer's Conference in San Francisco. This is 'ground zero' for the game development industry with over 20,000 attending. Students learn from professional seminars, attend trade shows, play new generation games in the 'Independent Game Festival' which are often produced by fellow students. Most significant is attending the career fair that typically has 80 companies looking for the next generation of game designer. A number of our students are 'conference associates', volunteers that take tickets, answer questions and generally keep the wheels turning at the conference. More importantly, these students get to network with other students who will be professionals some day. Students return from this conference with a new drive and fire seeing how the industry works.

Other students have headed off to the Ottawa Animation Festival in Ottawa Canada which provides more of an 'artists' view of the animation industry. Seminars on Russian Animation, Social issues, and animation history are just a few of the many subjects covered at Ottawa. While not a technical conference, it abounds in the latest and greatest displays. Often, unheard of animators are 'discovered' by studios such as PIXAR, Disney and Dreamworks. Students discover that animation is not just a career, but an art.

Siggraph is another outstanding seminar that is a blend of all of the above. It is the 'grand daddy' of all computer graphics conferences attracting over 40,000 animators, programmers, artists and marketing teams showing the latest computer technologies. Students see computer technologies such as 'mocap' five years before it is commercially available. Computer scientists are highly regarded 'rock stars' at SIGGRAPH and people line up to get their autographs. Remarkably, SIGGRAPH is very accessible with everyone approachable and helpful. Students are seen as colleagues and not just annoying kids looking for work.

***What are other accomplishments of students in the program? Comment on the significance of these accomplishments to the program and students.***

Students in DAGD are still discovering themselves. This writer believes that one of the greatest accomplishments of our students is how they have become nationally competitive in such a short space of time. Other established programs have been around since the early 1990's and have refined their curriculum. Our students can compete toe-to-toe with many of them We are proud of DAGD students and consider them some of the brightest and most dedicated students in the industry.

## **Employability of Students**

***How many graduates have become employed full-time in the field within one year of receiving their degree? Comment on this data.***

q1 How long has it taken for you to be employed

How long has it taken for you to be employed?		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Within six months	1	14.3	14.3	14.3
	Within a year	2	28.6	28.6	42.9
	Within three years	1	14.3	14.3	57.1
	I am not working in the field	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

*What is the average starting salary of graduates who become employed full-time in the field since inception (for new programs) or the last program review? Compare with*

**q2 Current salary**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	\$20,000 - \$39,999	2	28.6	50.0	50.0
	\$40,000 - \$59,999	2	28.6	50.0	100.0
	Total	4	57.1	100.0	
Missing	System	3	42.9		
Total		7	100.0		

*How many graduates have become employed as part-time or temporary workers in the field within one year of receiving their degree? Comment on this data.*

**q3 Work in field part-time w/in yr of graduation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	14.3	14.3	14.3
	No	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

***Describe the career assistance available to the students. What is student perception of career assistance?***

We have a career assistance councilor at our facility in Grand Rapids. She is available by appointment to discuss career options and strategies. Our methodology for career development includes mock interviews, resume writing and portfolio review as part of our capstone class. She is brought into our sophomore portfolio class to help with resume writing and career discovery.

Students recognize the support Ferris provides. However, they would appreciate more direct contact with companies and career opportunities. Ferris claims a 98% placement for students and this is not an accurate portrayal of jobs our students have retained. We also need to recognize that our career service person is spread very thin as she councils all of CPTS and is also called on to council high school students as to career direction.

As seen in the alumni surveys, the greatest help they could get is in career services.

***How many graduates continue to be employed in the field? Comment on this data.***

**q4 Still employed in this field**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	57.1	57.1	57.1
	No	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

***Describe and comment on the geographic distribution of employed graduates.***

**q5 Geographically, where working**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Detroit, Mi	1	14.3	14.3	14.3
	Grand Rapids	1	14.3	14.3	28.6
	Grand Rapids Michigan	1	14.3	14.3	42.9
	Grandville, MI	1	14.3	14.3	57.1

	Los Angeles	1	14.3	14.3	71.4
	Los Angeles, California	1	14.3	14.3	85.7
	Southfield, Michigan	1	14.3	14.3	100.0

Five out of seven alumni respondents are living in Michigan. Two are in Los Angeles, CA. We should note that the low response rate of this survey yields a data that is not accurate.

*How many students and/or graduates go on for additional educational training? (Give annual average.) Comment on this data.*

**q6 Gone on for additional training**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	28.6	28.6	28.6
	No	5	71.4	71.4	100.0
	Total	7	100.0	100.0	

*Where do most students and/or graduates obtain their additional educational training? Comment on this data.*

**q7 Where**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	71.4	71.4	71.4

	I got the internship myself the summer before I graduated. They hired me 6 months after I graduated and I've been working there since.	1	14.3	14.3	85.7
	University of Southern California.	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

# ENROLLMENT

## Fall Enrollment for DAGD 2006 - 2009

2006/2007 = 137

2007 /2008 = 141

2008/2009 = 147

2009 / 2010 = 134

### *What is the anticipated fall enrollment for the program?*

Anticipated Fall Freshman enrollment for 2010 is 50. We look forward to a total program of 150 students.

### *Have enrollment and student credit hour production (SCH) increased or decreased since the last program review? Supply a table and comment on any enrollment trends.*

This is our first program review, however the SCH for the last five years are as follows:

Term	Freshman Total	Sophomore Total	Junior Total	Senior Total
2004-05	316	78	48	32
2005-06	466	165	142	99
2006-07	477	249	164	186
2007-08	324	288	417	237
2008-09	381	282	312	395

After an initial surge of credit hours and freshman entry into the program, we are seeing a slow softening or a reduction in credit hours in the freshman column. We can follow the surge of hours from 2005 to 2008 as that class worked its way through the system.

### *Since the last program review, how many students apply to the program annually?*

The follow table represents admitted students who chose to take classes.

Term	Freshman Total	Sophomore Total	Junior Total	Senior Total
2004	44	13	9	5
2005	63	22	19	11

2006	52	27	15	20
2007	35	34	44	27
2008	39	28	32	48
2009	27	33	29	45

In 2008-2009, we had 79 people apply to DAGD

In 2009 – 2010 we have had about 200 apply to DAGD

***Of those who apply, how many and what percentage are admitted?***

We would approximate a 35 percent new student admit enrollment rate to DAGD based on 2008-2009 data. Some do not complete application by not forwarding transcripts or submitting a portfolio. Our admission requirements are very clearly laid out so many who do not meet the requirements do not apply.

***Of those who are admitted, how many and what percentage enroll?***

In 2009, we had 79 people apply with 27 choosing to enroll as a freshman.

**What are the program’s current enrollment goals, strategy, and efforts to maintain/increase/decrease the number of students in the program? Please explain.**

Our current enrollment goal is 40 quality freshman students and 30 quality transfer students. This is based on classroom capacity and anticipated graduation target of 40 students a year. Attrition is expected to be higher than average rate because of the nature of our students discovering the rigorous nature of our business. Students in our program discover early on that being a game designer is not all fun and games and move to other easier programs.

Our strategy is to increase our class to 40 and hold for three years. During this time, we will work on increasing the quality of students who attend our program based on evidence found in GPA’s and portfolio. Currently, we have a rolling admittance with a ‘first come, first served’ approach without a cap on enrollment. Once we understand the flow of application into the program, we will begin a tiered admittance that will bring in the most promising first based on GPA and the portfolio rating. Those students, who don’t make the first cut, will be moved to the next cut and so forth. However, we are a year or more away from this process. We estimate we will need an application pool of at least 300 people before we can institute such a process.

We attract students a number of ways. First is with relationships.

***Relationships***

Early on, our program founder, Dr. Donald Green saw the need to partner with Grand Rapids Community College to help create opportunity for their students and a pipeline of talent for ours. This healthy symbiotic relationship is fostered by articulation of up to 60 credit hours that can be taken at GRCC to be applied to the Ferris DAGD degree. Most of our students are GRCC students. This provides services to our students along the lines

of a University but also benefits students from a cost standpoint as it represents over a sixty percent discount for half of their degree based on current tuition rates. We continuously expand community college relationships with transfer plans that allow efficient transfer of credits.

We have a close relationship with Kent County Technical Center. Their Graphic Communication Cluster helps develop students who have a graphic career in their future. Their new 'Animation and Game Design' class is available to students who have completed the multimedia and graphic design programs. When students complete the two year sequence they have earned nine college credits that we transfer directly into our degree. We are able to attract the best from KCTC in this manner and have steadily brought in a dozen students a year with this close relationship. We share our curricula with KCTC as well so students seamlessly transition into Ferris's DAGD program.

We also visit 20 or so high schools and middle schools a year and attend 'career days'. A typical 'career day' exposes our program to sixty to seventy students who sign up for various seminars. It is common to see our website hits go up for a day or two following career days and we often get referrals to both our program and our summer camps.

By going out into the community and speaking about careers in new media, we open up their minds to the possibility that animation and game design could be a way to have a satisfying and adventurous career.

We believe placement in good jobs is part of our recruiting strategy. By claiming alumni who are working at 'A' level studios we can improve the quality of student that applies to DAGD. This strategy has a number of issues we need to satisfy for this to work. First, our students need to be trained well enough to get into the best studios. That requires that our work is superior to other colleges. While we are steadily improving, we have a way to go to be a first tier design school. Second, we need to get our students into these studios to prove themselves and that a Ferris education was part of their success.

We are at a place where our best can compete nationally. Now we need to get these choice students into companies. We need their attention and support. One approach is to attend professional conferences and 'pitch' our work to recruiters. We have attended the Game Developer's conference for the last four years with this intention and we are starting to get known as we traverse the trade show floor showing our portfolios and reels. We have considered getting a booth to present our wares to the industry in hopes of establishing the Ferris DAGD 'brand' firmly in industry minds.

### ***Summer Camp***

Summer Camp is another recruiting tool. This is a 'low risk' method of having students sit in the driver's seat and see if they want to pursue this as a career. We have seen a trend of about a third of our summer campers eventually applying to DAGD citing 'camp' as the motivating factor in their decision.

Our general goal is not to expand the program beyond what the market can absorb, but to attract and develop talent so our students have the best opportunities available.



We currently are examining our admittance process as we believe there are a number of processes that can use significant improvement. While follow up is done by the institution, we believe that a relationship needs to be established with students at this level if we are to attract the best and the brightest. By personal contact, we can help nurture a positive and creative culture that will bring talent into the program. With data and personal contact, we can help retain the student who will help propel our program to the next level.

### ***DAGD Advising Event 2010***

One improvement developed in 2010 was to offer future and recently admitted students to DAGD orientation and advising as soon as fall class schedules were available in spring. We created the DAGD Advising Event that was promoted as a special opportunity to get the inside scoop on what was to expect in the fall. Until this event, orientation and scheduling was an August event which gave us little time to react to class registration issues.

Students were emailed invitations a month before and sent postcards inviting them to this event. Students registered at the door, were given appropriate introductions to faculty and staff, given short tutorials on MyFSU and introduced them to their advisors. Candidates joined their faculty advisors in classrooms and given a freshman advising seminar. They were even invited to sign up that night! Afterward, a pizza party kicked off an evening of games sponsored by the student chapter of the IGDA or “Flying Bulldogs”. Upper classmen got a chance to mix and play video games with the incoming freshman.

The parents sincerely appreciated getting information on registration early and that their students were in good hands with caring faculty and students.

## **PROGRAM CAPACITY**

*What is the appropriate program enrollment capacity, given the available faculty, physical resources, funding, accreditation requirements, state and federal regulations, and other factors? Which of these items limits program enrollment capacity? Please explain any difference between capacity and current enrollment.*

We have two dedicated classrooms with computers to DAGD with a total of 50 seats. We also have a 120 seat auditorium and a large classroom that seats close to 40 available. Other lab classrooms at the Applied Technology Center on GRCC/Ferris campus in Grand Rapids are often made available for scheduling purposes.

The Applied Technology Center is a remarkable facility. It is located on the GRCC campus and affords a number of amenities. Our auditorium, a 120 seat stadium seating facility has a high end HD projector, a lighting and sound board with a high watt sound system. We are able to book this facility for shows and seminars providing a very inviting venue for speakers. It is ground zero for our 'Industry Day' in May where students pitch their work to the public.

Our facility is also close to student parking. Students are able to pay only 2 dollars a day for parking in the GRCC parking ramps.

Overall, our space is flexible and leverages the advantages that a community college can offer. Capacity of the program is scalable within some limits. We have chosen to keep growth modest and concentrate on core values of quality of instruction and quality of outcomes. We would rather have less quantity and be the best we can be. Program size is secondary to quality. Size will come as a result of doing things right from the beginning.

We currently support about 100 full time students with 50 others pursuing the degree. With proper scheduling, we could probably support another 50 students with our current facility.

We also have a close relationship with the Community Media Center in Grand Rapids who supply video equipment, computer editing stations, lighting and sound equipment as our students become skilled and eventually become members. Ferris now covers the cost of a year's membership for students who enroll in the DAGD 180 Digital Video course. This relationship saves Ferris' DAGD program thousands of dollars and trains our students on how to work with a 'hired' video facility as students need to 'book' time for equipment and facilities.

However, we do have some significant facility shortcomings.

### ***Communal Space***

First is the need for a communal student gathering area in our immediate area. Students enjoy meeting, playing tabletop games and enjoying lunch together at a central location near their classrooms. Currently, students use and sit on the well travelled and worn floor to gather on. While charming, this does not present a professional image to parents and prospective students as they are toured around the building.

### ***Lab Space***

Secondly, lab space is only available through scheduling classrooms as labs. Students often have a couple hours between classes and cannot get into quality labs that are networked to their animation assets. This has created the undesirable effect of allowing students to ‘squat’. While 33.5 hours of scheduled lab time was available throughout the week, it doesn’t always meet the times available for every student.

### ***Squatting***

Since DAGD does not have a dedicated open lab, we allow students to enter our classroom to work quietly on projects. While usually not a problem, students often forget they are guests and distract other classmates during a lesson. We often have to pause a class to get quibbling students to stop. Additionally, students can ‘listen in’ on instruction that they have not paid for. While we encourage collaborative learning, this goes beyond the intent of it.

We are nearing the limits to our capacity. While we have a couple more years, if growth continues, we will need to consider how to serve our students better with more usable space.

# RETENTION AND GRADUATION

*Give the annual attrition rate (number and percent of students) in the program.*

Term	Freshman Total	Sophomore Total	Junior Total	Senior Total
2004	44	13	9	5
2005	63	22	19	11
2006	52	27	15	20
2007	35	34	44	27
2008	39	28	32	48
2009	27	33	29	45

## *Retention and Graduation Rates of Full Time FTIAC Students*

Entering Fall Term	Number		Year 2	Year 3	Year 4	Year 5	Year 6
2004-08	2	% graduated by	0	0	0	50	
		% still enrolled	100	100	100	50	
		% persists	100	100	100	50	50
		% non persisters	0	0	0	50	50
2006-08	14	% graduated by	0	0	0	0	0
		% still enrolled	71	64	57		
		% persists	71	64	57		
		% non persisters	29	36	43		
2007 – 08	10	% graduated by	0	0			
		% still enrolled	80	60			

			% persisters	80	60			
			% non persisters					
2008-08		16	% graduated by	0				
			% still enrolled	88				
			% persisters	88				
			% non persisters	12				

***What are the program’s current goals, strategy and efforts to retain students in the program?***

Our goal is to retain over 60% of the students who begin in DAGD. While a worthy goal would be 100%, we believe rigor is needed to test the non-serious student. This will help with both student employability and program quality.

We do believe that to retain quality students, we need to start with quality students. Our early entry requirements were a 2.0 with a 15 ACT score. Our current requirements are a 2.5 with a 19 composite ACT. Additionally we have instituted the portfolio requirement that makes students think about getting into the program. This proactive step, while initially softening freshmen student entries will result in better retention and quality senior portfolios.

Advising is another strategy to help with retention. By balancing out a student’s workload, we can avoid burning students out. We believe a steady learning curve will result in better retention.

We have considered a number of programs and projects we can initiate to help retention. These would include:

- Articulation with the Bachelor of Integrative Studies
- Further expansion of the IGDA student chapter
- Create a Gaming Station at Kids Museum or old GR Museum
- Create and develop new game concepts
- Museum of Interactive Studies
- Ongoing Focus Tests – Sponsored by Corporations
- Classrooms that create Interactive Museum Displays
- Creating a home ‘Center for Integrative Media’ for DAGD and sister programs such as Software Engineering.
- Creating a professional game design company that feeds DAGD students into it for internships and ‘ground floor’ jobs.

***Jobs are the Key to future success in DAGD***

Hope is critical to persisting in any rigorous situation. Quality job placement for graduating seniors and quality internship placement will significantly increase retention. If students can be reasonably assured of a quality job when they graduate, they will be more likely to push through adversity. While no one can guarantee someone a job, we should be looking for ways of improving job prospects. While we do significant job training and search work, we should do more. Having a secured ‘headhunter’ for DAGD would be a significant asset. Better retention numbers would result as would faculty motivation to deliver quality instruction.

Faculty is pressed into service to retain internships. This is a huge responsibility and task as students expectations are high. While we have had success, job placement is professional work. We are being called on to teach, be on top of our game, advise and get students jobs which is a superhuman task. Students blame faculty for not having them reach their goals and faculty are caught in the crossfire. Credibility is lost for any faculty member that doesn’t deliver service that students feel are required of them.

Ferris claims a 95 percent placement rate or more for many of their programs. As seen by our lack of data on graduating seniors and a response rate of 14 percent for our alumni, we are not close to achieving the dreams of the majority of our graduates. More telling is that of the seven who responded, 40 percent are not working in the field.

***We need help.***

With a dedicated career services person who can ‘break the ground’ for our students and do the hard work of securing work and internships, we can significantly change the posture of DAGD. Many of the high end animation schools have this dedicated team.

***Describe and assess trends in number of degrees awarded in the program.***

In 2006-07, we conferred 3 degrees; in 2007-2008 we conferred 12 degrees; in 2008-2009 we conferred 20 degrees.

We are beginning to graduate people from DAGD in increasing numbers. While there has been significant attrition, we are steadily improving the retention rate through the program and producing quality graduates who are moving into media careers.

***How many students who enroll in the program graduate from it within the prescribed time?  
Comment on any trends.***

Entering Fall Term	Number		Year 2	Year 3	Year 4	Year 5	Year 6
2004-08	2	% graduated by	0	0	0	50	

		% still enrolled	100	100	100	50	
		% persists	100	100	100	50	50
		% non persists	0	0	0	50	50
2006-08	14	% graduated by	0	0	0	0	0
		% still enrolled	71	64	57		
		% persists	71	64	57		
		% non persists	29	36	43		
2007 - 08	10	% graduated by	0	0			
		% still enrolled	80	60			
		% persists	80	60			
		% non persists					
2008-08	16	% graduated by	0				
		% still enrolled	88				
		% persists	88				
		% non persists	12				

***On average, how long does it take a student to graduate from the program? Please comment.***

On the average, it takes about 5 years to retain a DAGD BAS degree.

Our typical student takes more time to graduate than a typical Ferris student. We believe this is attributable to a number of factors. First, our students tend to work part time which reduces their typical load to twelve full time hours. Secondly, many of our students are transfer students who do not have fully articulated classes so they need to take more for our program. Thirdly, our students would rather take fewer classes and do a better job. Our business is driven by good portfolios and students work hard achieving them. Fourth, our students have a 400 hour internship which is only a three credit class. This increases the amount of time it takes to graduate.

## ACCESS

We make all reasonable accommodations for students in DAGD. We acknowledge that students learn differently and have unique learning styles. Because of this, we have a variety of ways of achieving learning objectives. Four of our courses, DAGD 100, 103, 300 and 499 are delivered in a blended format. Other classes utilize online learning videos from Linda.com and Digital Tutors to cover basic ideas on streaming internet video. We also allow students to discover their own ways to getting to a solution and don't dictate just one answer. Our typical scheduling aligns with the working student. Classes typically meet once a week so students can schedule their busy weeks better. This year we are experimenting with classes that meet face-to-face every other week. They meet online the opposite week. Class time used to critique and introduce harder to grasp concepts.

This has had a significant positive impact on our program. Online delivery has allowed us to offer entry level and capstone classes. Both allow students to study away from campus and also relieved some stress for expanding our facility. With planning, students are able to finish DAGD after their internship their junior year allowing them to pursue work quickly and effectively. We also recognize that a significant portion of education will be delivered online. As game designers who play online games, we see the logic of this and embrace it whole heartedly. We imagine that some day we will be able to give students a choice to attend DAGD on the ground, fully online or have choice to do either. This will allow our program to be delivered world-wide if a student so chooses. We anticipate this will help improve our exposure to the global market and increase the market share. People will not have to incur the expense of moving to college.

Through partnerships with community colleges, we will be able to utilize their facilities to help deliver our content, save Ferris significant investment and bringing the education to the students. Ferris will stand out as an excellent value to earn a four year college degree.

While there have been some downsides to this approach, we believe it will overall end up improving DAGD course delivery. Some students have had difficulty with online delivery as intrinsic motivation is required to maintain the disciplines needed for success. In other words, students have to apply themselves without the threat of a teacher 'coming down' on them. It's easy to ignore online coursework until it is too late to recover. Some students just prefer the classroom and the social experiences you get from physical proximity and group work. Online delivery is a 'work in progress'. After thousands of years in classrooms, we are inventing this new delivery system as we go. As best practices develop, we will be helping to lead the pack.



# CURRICULUM

The curriculum review section must also contain appropriate check sheets and example syllabi, which may be attached as an appendix. Academic Program Review: A Guide for Participants – June 13, 2005 Approved by the Academic Senate Contact Person: Doug Haneline  
[hanelind@ferris.edu](mailto:hanelind@ferris.edu)

***Program requirements. Describe and assess the program-related courses required for graduation.***

## Course Descriptions

Foundation	DAGD 101	2D Visualization – Storyboards & Style Guides  Foundations of two-dimensional graphic communication are explored in what is primarily a traditional media (pen and paper) and design course. Students will learn and demonstrate fundamental design concepts, research ideas for visualization, create and manipulate images for presentation, develop concept art for production, and compile elements into a presentable format.
	DAGD 102	Story Development for Film & Gaming  This course explores the basics of storytelling and screenwriting. Topics included are the Hero’s Journey, character development, beat outlining, concept pitching, and conversations with industry professionals. Students will be required to read supporting material, view media for discussion, create and pitch story concepts, and develop a final screenplay.
	DAGD 103	3D Visualization – 3D Drawing & Sculpture  This course covers the fundamentals of creating a 3D project. Topics included are 3d computer applications, 2d visualization and drawing, traditional modeling techniques, spatial design, temporal influence, development tools, image and animation formats, and delivery solutions.
3D Animation & Visual FX	DAGD 100	3D Modeling & Animation I - Introduction to Computer Animation  Students use animation techniques to articulate and communicate sales reports, point of purchase displays, an information video, cartoon or a process simulation. Using computer animation software, students work with timing effects, from manipulation, color cycling, film loops, palette transitions, sound files and animation components.

	DAGD 230	3D Modeling & Animation II - Modeling & Animation (DAGD 100) Students use 3D modeling and animation to articulate and communicate ideas and concepts. Students produce a series of fully rendered 3D animated models. Using 3D modeling software, students work with timing, effects, creation of 3D objects from a 2D plane, materials editing, reflection mapping, and various other 3D operations.
	DAGD 335	3D Modeling & Animation III - Rendering, Lighting, & Materials (DAGD 230) This course is a study of computer rendering, lighting, and materials. Topics include techniques for light, shadow, texture, composition, materials and their proper use.
	DAGD 375	Advanced Modeling & Animation - Character (DAGD 335) This course covers advanced issues in 3D computer graphics. Topics included are modeling, texturing, rigging, animation, and 3D character development.
	DAGD 380	Digital Sculpting (DAGD 375) This is an advanced course in digital modeling, sculpting, and texturing for animation and game design.
	DAGD 385	Advanced Modeling & Animation – Vehicle and Structure (DAGD 335) This course emphasizes advanced modeling, texturing, and animation techniques for rigid body objects such as vehicles and buildings.
	DAGD 430	Digital FX (DAGD 335) This is an advanced course exploring techniques for creating Digital FX with a focus on merging 3D and live video.
Gaming	DAGD 150	Introduction to Game Design & Development This course covers foundations in designing and making interactive software. Explore the entire game creation process to develop a successful game. Topics included are brainstorming, story boarding, scripting, game balancing, player motivation, level design, non-linearity, input/output, play testing, interactive game history and types of games.
	DAGD 300	Game Design & Theory (DAGD 150) The process of game design is studied along with the production models involved in developing digital games. Students develop and present design concepts and design documents. Students will explore various game engines and platforms and have the opportunity to develop original and applied games.
	DAGD 310	User Interface Design (DAGD 150, GRDE 216, DAGD 260) An introduction to the concepts and practices associated with user interface and input/output devices. Students will design and develop a user interface as their final project.

Multimedia Application	DAGD 260	<p>Multimedia Authoring I</p> <p>This course covers the fundamentals of creating a multimedia project. Topics included are multimedia design, interface development, screen navigation, game play, scripting, development tools, audio integration, image and animation formats, and delivery solutions.</p>
	DAGD 420	<p>Digital Visualization &amp; Simulation (DAGD 230)</p> <p>This course is a study of applied animation for digital visualization and simulation. Students will develop animation projects based on real-world models and events. Topics include scientific visualization, legal simulation, and manufacturing processes.</p>
	DAGD 460	<p>Multimedia Authoring II (DAGD 260, DAGD 300, DAGD 355)</p> <p>Advanced topics in multimedia production are explored with an emphasis on creating a substantial interactive project.</p>
Web & Digital Imaging	GRDE 216	<p>Electronic Imaging</p> <p>Students will apply design principles to digital photography. An intermediate level of digital image manipulation; photo collage; use of masks, layers, filters, channels, and color systems will be taught.</p>
	GRDE 226	<p>Webpage Design (GRDE 216)</p> <p>Introduction to HTML and web authoring software. An intermediate level of page layout for the web will be explored including site mapping, creation, navigation, and management.</p>
Programming	SENG 100	<p>Introduction to Computer Programming</p> <p>This course teaches fundamentals of computer programming. Students learn how to write, test and debug small programs. Basic coding concepts and best practices are discussed and explained. Functions, data types, logical constructs required to produce software solutions will be the basis for this exploration. . Covers popular methodologies being used in the real world and examines the merits of each. Students are introduced to Software Development Life-Cycles.</p>
	SENG 101	<p>Computer Programming I (SENG 100)</p> <p>This course teaches fundamentals of computer programming. Students learn how to write, test and debug small programs. Basic coding concepts and best practices are discussed and explained. Functions, data types, logical constructs required to produce software solutions will be the basis for this exploration.</p>
	DAGD 320	<p>Multiplayer Game Programming (SENG 101, DAGD300)</p> <p>This course explores writing games that play across the internet, intranet, and network, focusing on online gaming technology.</p>

Digital Video	DAGD 180	Digital Video Editing (GRDE 216)  This course covers the fundamentals of constructing and editing a digital-based video. Topics included are cinematography, video storytelling techniques, pacing, editing, compression/decompression techniques (codecs), video file formats, soundtracks and sound effects, title screens and overlays, menu systems, and DVD authoring.
	APPS 301	Project Management  Students use Project Management techniques to successfully plan, schedule, and manage projects.
Business	BLAW 321	Contracts & Sales  Provides an introduction to the law and the legal system in the U.S. as well as a thorough examination of the law of contracts and sales. (Includes a review of articles 2 and 6 of the Uniform Commercial Codes.)
	MKTG 321	Principles of Marketing  Introduction to the basic functions of marketing. Included as topics of study are: consumer behavior, marketing research, marketing planning, physical distribution, selling, promotion, retailing, pricing, wholesaling, purchasing, international marketing, and e-commerce.
Professional Development	DAGD 220	Sophomore Portfolio (DAGD 100, GRDE 216)  This course introduces students to the concepts and practices associated with the preparation of portfolio creation. During this course students have the opportunity to enhance their design skills by developing a visual identity. Multimedia career development, resume building, and industry research will also be addressed.
	DAGD 340	Junior Project (DAGD 220, DAGD 230, DAGD 335)  This course will require students to prepare a successful animation from concept to completion.
	DAGD 491	Applied Internship for Digital Animation (DAGD 340)  This course is intended to be completed between the Junior & Senior year. The internship shall be setup and approved by means of a internship contract, including approval by the University & employer in a related animation field.
	DAGD 499	Capstone Course - Senior Project (Advisor Approval)  This course will focus on helping each student prepare a commercially marketable final project portfolio. Students will explore employment opportunities including seeking a posted position, working freelance, and establishing a business.

*As part of the graduation requirements of the current program, list directed electives and directed General Education courses. Provide the rationale for these selections.*

Recommended Electives					
Programmi ng	ISYS 204	Visual Basic Programming	CO 124	3	
	ISYS 216	Introduction to Java	CO 117	3	
	ISYS 212	C and C++ Programming	CO 127	3	
	ISYS 312	Advanced C++ Programming	CO 227	3	
		Elective		3	
		Elective		3	
		Elective		3	
Last updated: 3/17/09 Elective TOTAL HOURS: 9					

\*\* Transfer Students – 60 DAGD credit hours are required for Ferris B.A.S. Digital Animation & Game Design degree.

## General Education Requirements

Communication Competence—12 Credits Required					
COMM 121	Fundamentals of Public Speaking	SC 131	3		
ENGL 150	English 1	EN 100 OR EN 101	3		
ENGL 250	English 2	EN 102	3		
ENGL 311 or ENGL 321 or ENGL 325	Advanced Technical Writing Advanced Composition Advanced Business Writing	FSU-GR Class	3		
Scientific Understanding – 7 to 8 Credits Required - This requirement can be met with science courses in the following areas: Astronomy, Biology, Chemistry, Geology, Physical Science or Physics. In addition, GE 132-Physical Geography at GRCC meets the four-credit lab science requirement. AS 102, CM 100, and BI 125 meet the three-credit science requirement.					

	Scientific Understanding Elective with Lab	GRCC Lab Science	4	
	Scientific Understanding Elective (Lab or Non-Lab)	GRCC	3 or 4	
Quantitative Skills 4 Credits Required - This FSU MATH 116 requirement can be completed as follows: (1) complete MA 107 and MA 108 GRCC Courses, (2) pass the College Algebra and Trigonometry CLEP exam, or (3) complete a math course higher than FSU's MATH 116 (ex: MA 127, 129, 131, etc., at GRCC). Additionally, the algebra component of FSU's MATH 116 is MA 107 at GRCC. MA 107 can be completed as follows: (1) pass MA107 or higher (2) pass the college Algebra CLEP exam, or (3) an ACT Math subtest score of 24 or higher.				
MATH 116	Intermediate Algebra and Numerical Trigonometry	MA107 and MA 108	4	
Cultural Enrichment – 9 Credits Required - Credits can be earned in one or more subject areas; however, one three-credit course must be at the 200 level or higher. Select from the following subject areas: Art, Art History, any foreign language (French, German or Spanish at GRCC), History, Humanities, Literature, Music, Philosophy (but not Logic), or Theatre. In addition, the following specific GRCC courses are accepted as cultural enrichment: PO104, SC241, EN247 and EN 249.				
	Cultural Enrichment Elective	GRCC Elective	3	
	Cultural Enrichment Elective	GRCC Elective	3	
	Cultural Enrichment Elective (200 level or above)	GRCC Elective	3	
Social Awareness – 9 Credits Required - Subject areas include: Anthropology, Economics, Geography (but not Physical Geography; this course is considered a science elective), Political Science, Psychology or Sociology. Some GRCC courses that satisfy this requirement include: AN210, EC 251 or EC 252, GE 135, PS 110, PY201 and SO251. Criteria: (1) One three-credit course must be 200-level or higher. (2) Must have two subject areas.				
	Social Awareness Elective	GRCC Elective	3	
	Social Awareness Elective	GRCC Elective	3	
	Social Awareness Elective (200 level or above)	GRCC Elective	3	

The DAGD check sheet outlines what a student needs to graduate. While the general education requirements of the program have been mandated by the university, there is wisely significant flexibility inside these requirements to help support our industry.

Inside the Science requirement, we suggest programmers take Physics, Astronomy or other math related science. For visual artists and animators, we suggest Anatomy to help with an understanding of body mechanics, Geology, the study of earth systems or Astronomy, the study

of space systems. All these sciences provide grounding in what animators will be working on in future assignments.

For math, we require college level Algebra and Trigonometry. This helps animators with logical processes and spatial relationships.

In the cultural enrichment categories, we suggest History, Art History, Art including Life Drawing, Music and Theater as significant topics for our industry. Foreign language is encouraged as our industry is global.

For social awareness, we highly recommend Psychology including Adolescent Psychology, Anthropology which satisfies Global/REG sub requirements and Sociology as it is helpful to understand individual and societal behavior in game design and animation.

For general electives, we suggest ramping up programming for programmers including languages such as C, C++ and C#. For artists we suggest graphic design, page layout and more drawing.

Indicate any hidden prerequisites (instances where, in order to take a program-required course, the student has to take an additional course. Do not include extra courses taken for remedial purposes).

We have no hidden prerequisites as they are all laid out in our course sequence. If freshmen students follow the sequence, they should not come up against any. The preferred sequence is as follows.

## **Proposed Course Schedule Breakdown by Semester**

### **Freshman Year**

#### ***First Semester***

DAGD 100 3D Modeling & Animation I  
DAGD 102 Story Development for Film & Gaming  
DAGD 103 3D Visualization – 3D Drawing & Sculpture  
GRDE 216 Electronic Imaging  
GenEd (MA 107)

#### ***Second Semester***

DAGD 150 Introduction to Game Development  
DAGD 180 Digital Video Editing  
DAGD 230 3D Modeling & Animation II (DAGD 100)  
GRDE 226 Webpage Design (GRDE 216)  
GenEd (MA 108)

#### ***Summer Semester***

GenEd (EN 100)

## **Sophomore Year**

### ***First Semester***

SENG 100 Introduction to Computer Programming  
DAGD 101 2D Visualization – Storyboards & Style Guides  
DAGD 335 3D Modeling & Animation III (DAGD 230) or Game Domain  
DAGD 260 Multimedia I  
GenEd (SC 131)

### ***Second Semester***

DAGD (Domain)  
DAGD 220 Sophomore Portfolio (DAGD 100, GRDE 216)  
MKTG 321 Principles of Marketing (BA 270 at GRCC)  
GenEd (Science w/ Lab)  
GenEd (Cultural Enrichment)

### ***Summer Semester***

GenEd (EN 102)

## **Junior Year**

### ***First Semester***

DAGD (Domain)  
DAGD 310 User Interface Design (DAGD 150, GRDE 216, DAGD 260)  
DAGD (Elective)  
APPS 301 Project Management  
GenEd (Science)

### ***Second Semester***

DAGD 340 Junior Project (DAGD 230, DAGD 335)  
DAGD (Domain)  
DAGD Elective  
English 3xx  
GenEd (Social Awareness)

### ***Summer Semester***

DAGD 491 Applied Internship

## **Senior Year**

### ***First Semester***

DAGD (Domain)  
DAGD (Domain)  
DAGD (Elective)  
BLAW 321 Contracts & Sales (BA 207 at GRCC)  
GenEd (Cultural Enrichment)



## ***Second Semester***

DAGD 499 Capstone Course - Senior Project (DAGD 340, DAGD 420)  
GenEd (Social Awareness 200+)  
GenEd (Cultural Enrichment 200+)  
GenEd (Social Awareness

### ***Has the program been significantly revised since the last review, and if so, how?***

While this is our first review, the program has undergone significant change. The first iteration of DAGD was an outline with general educations and a few classes taken from a number of different disciplines, mainly programming. Within two years, the program was reworked to have a more logical sequence and incorporate actual game design and art curricula that round out the program. In 2009, we introduced 'iteration III' that solidified the core of DAGD classes but allowed for 18 hours or more of 'Domain' concentration that let students claim more focused coursework in digital animation or game design. Allowing students to concentrate in domains was a result of student feedback that requested concentrated coursework.

### ***Are there any curricular or program changes currently in the review process? If so, what are they?***

We are looking to add a scriptwriting course at the 300 level to be a substitute for University required English courses. This will come in as a 'writing intensive' course to offset the need for a 300 level English. This will be a great asset to students as they prepare for their 400 level Capstone course which often requires scripting and in the industry where many projects begin as a script.

We are also running a pilot class to substitute our APPS 301 project management class. One concern voiced by students is that the traditional applied science project management class was skewed to much toward manufacturing. Our advisory panel considers it an important skill so we are looking to create a management class focused on animation and game design.

We are also considering lowering the Math requirement in general education. The 'art clan' tends to struggle with this general education attribute and higher level math such as algebra trigonometry is un-needed in much of animation. We would coach students pursuing programming to higher level math.

### ***Are there plans to revise the current program within the next three to five years? If so, what plans are envisioned and why?***

By the nature of the animation and game design industry, we anticipate that changes and improvements in our curricula will be the norm. For instance, at the beginning of DAGD, Computer Aided Design or 'CAD' was a required course. It is now no longer even part of our sequence as it is unneeded in the industry. We have discussed a number of additions to our program. We would like to add more traditional 'drawn' animation into our program as a possible application domain. We need more computer 'animation' that examines walk cycles, lip sync and acting. We are looking at possibly adding computer 'matte' painting coursework for

digital set extensions. Motion capture is becoming more ubiquitous and we need to begin training students in this realm. We are looking to create a course sequence that produces whole games that can be promoted within the industry.

# QUALITY OF INSTRUCTION

## *Discuss student and alumni perceptions of the quality of instruction.*

An aggregate of student and alumni scores on the quality of instruction place it to be around a 7.3 on a 10 point scale or a C+. Students do appreciate the level of professionalism that all of the faculty bring into the program. However, some students feel that not all of the faculty operate at the high levels they expect will bring them success. Other students feel that faculty is unrealistic in their expectations and workload imposed on them.

Students, any college's harshest critics, rate the overall quality of the program 7.7 out of 10. When we examine the Student Assessments of Instruction (SAI) and average them over the years, we see a general satisfaction rating of 4.1. The total range of student satisfaction ranges from 3.9 to 4.4 out of five.

## *Discuss advisory committee and employer perceptions of the quality of instruction.*

The advisory committee feels the faculty members are of a very high quality and believe we are providing quality education that is beyond many design schools. They feel we are focused, proactive and well balanced in our approaches. They see the quality of our instruction and appreciate that we are not only 'academics' but have real world experience. They consider all top notch and proactive educators.

In our industry survey, (question 9, page 119) when asked what the strongest features of our program were we see 'Diverse programs', 'quality of instructors on the faculty' and 'quality of the students'. This is testament to the good work we are doing. In the same survey, we see that the overall quality of the program is a 4 out of 5. Students, any college's harshest critics rate the overall quality of the program 7.7 out of 10. When we examine the Student Assessments of Instruction (SAI) and average them over the years, we see a general satisfaction rating of 4.1. The total range of student satisfaction ranges from 3.9 to 4.4 out of five.

For the digital animation side of our program, we examined what is needed to be an entry level technical director and focused our efforts there. We place high value on the quality of modeling and rendering results as this is what is required for regional businesses such as Steelcase and Herman Miller. We are making great progress in the quality of our character modeling as well with the development of our Digital Sculpting class.

We base our instruction with industry standard software such as 3ds Max, Maya and the Adobe Creative Suite and deliver it on high powered dual monitored workstations. However, even the best computers are just processed sand without good instruction behind it.

Our faculty come from professional roots but are also in tune with current instructional techniques and theory. Two faculty members have advanced education degrees, two are working on advance graphics degrees and one has an advanced degree in media business management. With a diverse educational background we can help each other as we design and deliver instruction. Students appreciate that assignments are 'real world' and practical. Instructors design assignments that can be used as portfolio pieces and courseware is designed to feed into all projects.

While ‘art’ tends to be subjective in nature, we key in on the assessable process of creation that yields quality work. Many projects are required in the course of classes and students learn that it’s not just what you know, but how you can apply it that will yield success. The results of student work reflect the quality of our instruction.

***What departmental and individual efforts have been made to improve the learning environment, add and use appropriate technology, train and increase the number of undergraduate and graduate assistants, etc.?***

As a department, we look to continually improve the learning environment by bringing the latest professional grade software and techniques to the students. We train ourselves in these and bring them to our classroom as quickly as reasonable.

We discover these opportunities through industry contacts, trade shows such as the Game Developers’ Conference and SIGGRAPH and trade resources on the internet. We also examine the other schools and look how they do things. One trend we have been working toward models Ringling School of Design that focuses student work towards a personal theme that culminates in the Capstone project. Rather than an assemblage of separate classes, we look to have meaningful crossover to other work.

While we don’t have undergraduate or graduate assistants, we do have ‘lab techs’ that man the labs when faculty is not around. We only hire our better students to staff the labs and they are tasked with helping fellow students with problems and installing computer ‘patches’. The techs help our computer IT staff installing updates, cleaning monitors and keyboards and doing what is needed to keep the DAGD machine well oiled. Students are required to have a minimum GPA of 3.0, get recommendations from the faculty and do a formal interview to be hired.

Students are rewarded with work/study credit that helps pay for tuition. Students are also earning faculty respect and recommendations for employment as they advance their careers.

Summer Camp has a good pipeline for training instructors. We have a number of volunteers that assist our paid instruction staff. These volunteers receive ‘on the job’ training and are allowed to teach sections of summer camp.

***Describe the types of professional development have faculty participated in, in efforts to enhance the learning environment (e.g. Writing Across the Curriculum; Center for Teaching and Learning, etc.).***

Faculty members at the Grand Rapids campus do not have many of the advantages found on the main campus in Big Rapids. Informal drop-in sessions are an hour or more away from our domain. However, efforts are made by administration to bring speakers during lunch times. We have had speakers on financial aid, student services, advising and technology. Faculty are invited and encouraged to attend these meetings. However, in all honesty, faculty members tend not to pursue these opportunities if they are not officially required to attend.

***What efforts have been made to increase the interaction of students with faculty and peers?***

DAGD faculty members have a remarkably close relationship with their students. We are their mentors, advisors, instructors and partners in their careers. We encourage these relationships but keep a professional demeanor throughout. The proximity of our office to the classrooms is close and students can drop in any time and look for us. We maintain office hours and even spend our times in the labs during these hours monitoring student progress and making ourselves available for them. We also have events such as ‘Fragfest’ our 24 design competition that we hold twice a year along with weekly game events that we attend as faculty.

We help peers get to know each other by doing team projects in many of our classes and participate in the projects actively.

***Include such items as developmental activities, seminars, workshops, guest lectures, special events, and student participation in the Honors Program Symposium.***

DAGD faculty are proactive in searching for and participating in developmental activities with our students. We partner with our students by providing leadership to these events. These events include

- Game Developer’s Conference in San Francisco
- Siggraph in Los Angeles
- Ottawa International Animation Festival,
- Kalamazoo Animation Festival International
- Comic Con in Chicago
- Gen Con in Indianapolis
- The American Advertising Federation meetings in Grand Rapids
- The West Michigan Film and Video Alliance in Grand Rapids
- Mass Communication Associates International
- Kendall College of Art and Design Lecture Series
- ASIFA Central meetings and seminars

***Discuss the extent to which current research and practice regarding inclusive pedagogy and curriculum infuse teaching and learning in this program.***

Current research and practice regarding inclusive pedagogy and curricula is a methodology of education that embraces and celebrates human diversity. Not only should all human races and genders be included in the educational process, but they should lead where it is best suited. We believe that creativity is the nexus in which all of the technical and artistic work with underlying social tones come together.

“There is also a need to better align the focus of research in technology education with the national movement within the field to place more emphasis on engineering, design, creativity, and problem solving. There are examples of studies that have explored these more recent trends in technology education, for example, Dugger’s 1994 study of the similarities and differences in the design processes used by engineers and technology educators. Other studies have explored

design thinking by comparing expert and novice design behavior (Christianns & Venselaar, 2005; Welch & Lim, 2000).

Creativity is also a line of research that is emerging within technology education as it moves to embrace engineering design as part of its content base. Lewis (2006) has been a particularly strong advocate, not only for research exploring elements of creativity, but also for creativity to serve as an overarching framework for design and problem solving in technology education. A creativity framework provides “opportunities for students to step outside of conventional reasoning processes imposed by the rest of the curriculum” (p. 36). Studies have begun to explore issues of creativity within technology education including computer simulation (Michael, 2001) and assessment (Doppelt, 2007).”

( retrieved May, 2010 <http://scholar.lib.vt.edu/ejournals/JTE/v20n1/daugherty.pdf>)

While we acknowledge the wide range of human potentials, and equally acknowledge that 95 percent of our students are white, male and middle class, we focus on the creativity and skill that each of these minds can apply and achieve. No person is better, or worse than the other. We are defined by what we put up on the screen. We allow for multiple solutions of the same problem. There is no one ‘right’ answer in our work. We do have criteria, which is plainly spelled out in each of our assignments, but overall, creativity and excellence is our goal, no matter what the background of the individual.

The pedagogy we use at DAGD is driven by goals. Much like in the medieval ‘Guild’ system, our students are our apprentices. They are provided instruction and inspiration, but are then driven to practical application by assignments that are designed to achieve the learning outcomes. Students work together in a ‘workshop’ setting helping each other while class is in session and during open ‘lab’ time. We are available during lab hours and additional hours we spend in the labs working out student problems. The faculty members are the master craftsmen and the students are our apprentices working on solutions to the problems that we set before us. They work together discovering solutions to assignments and on their own when driven to personal excellence.

We believe that this an appropriate solution that balances out the online world many of our students live and the practical ‘results driven’ world that they will find themselves in.

Interesting articles on pedagogy strategy can be found here.

[http://www.aacu.org/inclusive\\_excellence/documents/Williams\\_et\\_al.pdf](http://www.aacu.org/inclusive_excellence/documents/Williams_et_al.pdf)

*Making Excellence Inclusive: Preparing Students and Campuses for an Era of Greater Expectations* By Damon A. Williams, Joseph B. Berger, and Shederick A. McClendon

[http://www.curriculum.edu.au/verve/\\_resources/pedagogy\\_strategy\\_file.pdf](http://www.curriculum.edu.au/verve/_resources/pedagogy_strategy_file.pdf)

Pedagogy Strategy : learning in an online world. ISBN 1 920865 30 6.

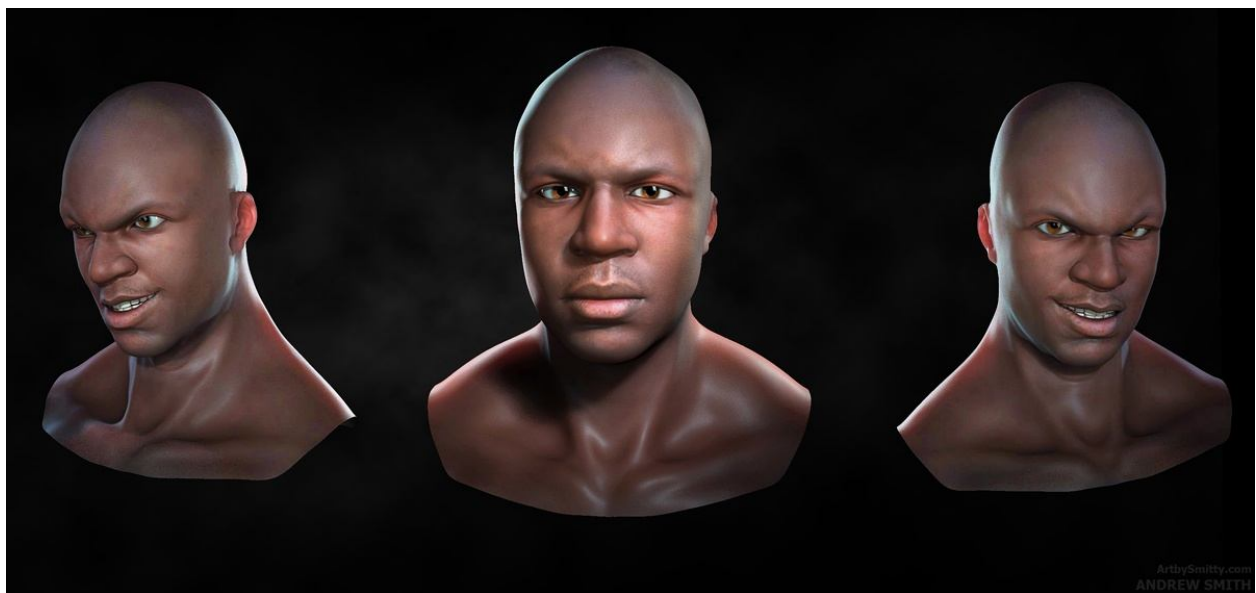
1. Education - Computer network resources. 2. Internet in education - Australia . 3. Learning strategies. I. Ministerial Council on Education, Employment, Training and Youth Affairs (Australia and New Zealand).371.334

***What effects have actions described in (5) and (6) had on the quality of teaching and learning in the program?***

When reviewing the quality of work that has evolved over the last six years of DAGD, we see a significant improvement of work as evidenced by the portfolios of the students and the yearly portfolio reels created for the program. To see an average student portfolio entering the program and leaving the program, you will see two different people.

Process drives product and the process we have developed of training, inspiring, creating and critiquing has helped develop students who are competitive internationally. Students who are creating professional quality work and will one day be driving excellence.

Andrew Smith is one such student. As a freshman, he was capable, but not exemplary. As a graduate, he is now working with USC as an art director for a ‘virtual body’ project.



*Artwork by Andrew Smith*

Andrew is remarkable in that he learned that self direction and initiative will help propel one to achieve more than the program offers at face level. However, we are successful in teaching students how to learn. Applying oneself continuously is what we strive to teach students.



*Artwork by Keith Schaffer*

Another student, Keith Shaffer is on his way to success. An outspoken student whose work was good, but not particularly outstanding, Keith has persisted beyond graduation and steadily improved his work. He now works with Andrew in California.





*Artwork by Ashleigh Froelich, 2010.*

Students leaving DAGD continue improving their skills. Ashleigh Froelich, another student who was engaging, but not outstanding has significantly improved her portfolio and modeling skills since graduating in Spring 2009. Again, her original work was average, but her current work is high level professional quality. Ashleigh has accepted work at a Chinese game studio in Shanghai, China and will be starting in the summer of 2010.

# COMPOSITION AND QUALITY OF FACULTY

*Describe and assess the composition of the faculty teaching courses in the program.*

The faculty of DAGD is unique. Pulled from industry and then trained as teachers, all faculty have years of professional experience behind them before walking into the classroom. This gives credibility to the program. Additionally there is diversity within the faculty group as all have come from different areas of the game design and animation industry. The benefit to the University is credibility, experience and professional focus. When parents and potential students talk to us, we can speak to them from our professional experiences. We are grounded in reality and help students see things from that perspective. Our faculty also spans generations of media development. While all ‘Jedi masters,’ some reach back into pre-computer animation days to others having the latest up to date programming approaches and theory. The depth of instruction is deep and the width of experience is wide and diverse.

We have faculty who have worked for the Disney Company on top tier interactive gaming, faculty who have won numerous advertising (Addy) and Emmy awards, faculty who have developed animation companies, serviced companies with IT expertise, developed games for AOL and even faculty who have served honorably in the US military. We come from many backgrounds, but all are now teaching to pass onto a new generation skills and experiences culled from years of professional work.

Ferris has been graced with professional student focused faculty. The faculty have been graced with a University that makes students the center of their mission.

## Faculty

*List the names of all tenured and tenure-track faculty by rank.*

*We currently have no tenured or tenure-track faculty.*

*Identify their rank and qualifications.*

n/a

### *Full Time Temporary Faculty – one year*

David Baker, Program Coordinator. BA, Art, Hope College, MSCTE, Ferris State University

Ward Makielski, Curricula Lead. BA, Industrial Design, University of Illinois, MBA, Ferris State University

Marty Lier, Instructor. BA, Engineering, Calvin College. MSCTE, Ferris State University

Cory Heald, Instructor. BAS, Digital Animation and Game Design, Ferris State University. MFA (in process) at Savannah College of Art and Design

***Full Time Temporary Faculty – one semester***

Joshua Freeneey, Instructor. BA, Full Sail University

***Adjunct***

Robert Evans, Instructor. BAS, Digital Animation and Game Design, Ferris State University

David Anderson, Instructor, M.Div., Fuller Seminary, 1968, B.A., California State University, 1965.

Mike Dollar, Instructor. B.S., Central Michigan University

***Indicate the number of promotions or merit awards received by program faculty since the last program review.***

David Baker was promoted to Program Coordinator in January, 2008.

Ward Makielski became curricular lead in addition to becoming a full time Instructor in January 2008.

Cory Heald was offered a full time Instructor position in January, 2007.

Marty Lier was promoted to Internship Coordinator in January 2009.

Josh Freeneey was offered a full time Instructor position in July, 2010.

***Summarize the professional activities of program faculty since inception or the last program review (attendance at professional meetings, poster or platform presentations, responsibilities in professional organizations, etc.).***

**Professional Activities**

***David Baker***

- Producer for Ferris's contribution for Mark Kistler's Emmy Award winning Imagination Station on PBS
- Attendance at Game Developer's Conference 2007, 2009
- Attendance at Future Play Conference 2006
- Attendance at Kalamazoo Animation Festival International 2009
- Developed and spoke at SmartFest 2006
- Development of DAGD DVD demo reels 2006-2010
- Blue Ridge Film Festival special guest and presenter 2006
- West Michigan Film Board Task Force
- DAGD Summer Camp coordinator
- Ann Arbor Film Festival Judge

### ***Ward Makielski***

- Speaker at 'SmartFest' 2006
- Attendance at Siggraph 2008
- Developed Mark Kistler's website [www.draw3d.com](http://www.draw3d.com)
- Developed website [www.wardoworld.com/](http://www.wardoworld.com/)

### ***Josh Freeney***

- Guest Speaker at Flash Fest in Detroit 2008
- Attended the Game Developer's Conference 2009
- Attended SIGGRAPH 2008
- Software developer on 'Travelling Fortress' game at <http://yeticgi.com>
- Attended Comicon Indianapolis 2009

### ***Cory Heald***

- Attended Game Developer's Conference in San Francisco 2010 and 2009
- Guest speaker at Ferris BR computer summer camp.
- Developed apprenticeship program at Yeti CGI <http://yeticgi.com>
- Attended SIGGRAPH 2008
- Attended Comicon Indianapolis 2009

### ***Marty Lier***

- Attended Game Developer's Conference in San Francisco 2007 – 2009
- Developed Websites for Industrial clients
- Services IT companies with support

## **Workload**

***What is the normal, annualized teaching load in the program or department? Indicate the basis of what determines a "normal" load. On a semester-by-semester basis, how many faculty have accepted an overload assignment?***

Faculty load is four three credit classes a semester. In addition, faculty are assigned an advising load of about ten new students a year. Faculty is also required to attend monthly departmental meetings and maintain 10 'office hours' per week that are reasonably accommodating to students. Additionally, all faculty take on one 'service' assignment such as Internship Coordinator, Student Activities Coordinator or Event Coordinator.

Faculty accept overload assignment as needed by the department. It is not untypical to have four 'preps' per semester and overload is not encouraged as to maintain quality in the classroom. Faculty have had to teach overload and have cheerfully accepted the task.

***List the activities for which faculty receive release time.***

- professional development conferences

Additionally, the program coordinator is released 50% to coordinate departmental issues. These include:

- Recruitment
- Interviewing potential students
- Outreach into the community with 24 school visits a year
- Coordinate and troubleshooting all activities
- Organize and maintain DAGD summer camp
- Maintain 20 office hours during summer semester

***What is the normal recruiting process for new faculty?***

Faculty are recruited from a variety of sources. Primarily, we have recruited our faculty through our network of professionals.

Marty Lier was recruited by Don Green as he was teaching CAD at GRCC. Ward Makielski was recruited when he reached out to Ferris's DAGD program. Cory Heald was recruited by Marty Lier as a business contact. David Baker was recruited from KVCC as he promoted the Kalamazoo Animation Festival International to Ferris. Josh Freeney was recruited by Ward as they worked on a computer game. Rob Evans was recruited as an outstanding DAGD student and freelancer.

We have also utilized Internet sites such as AWN and GAMASUTRA to broadcast to a wider range of applicants. Additionally, the program coordinator travelled to Savannah College of Art and Design to recruit. We continue to expand our network through professional organizations and conferences such as KAFI, GDC and Siggraph.

***What qualifications (academic and experiential) are typically required for new faculty?***

We require a four year Bachelor degree for initially teaching full time at DAGD. For all new full time positions, we require a BA degree and a Masters degree or progress and plan to receiving a Master's degree. We also require that instructors have significant and appropriate experience in the classes that they teach. We also use our adjunct and summer camp opportunities to 'try out' instructors to see if they sync well with our curricula and our students.

As we look for new talent, we have discovered that 'Master' level instructors are hard to come by. A recent trip to Savannah College in Art and Design that was specifically designed for an instructor's search only gained four qualified resumes

The market for instructors is brisk with half a dozen or more being advertised on [www.AWN.com](http://www.AWN.com) at any given moment. Most of these positions do require a Master's degree so the competition to retain instructors is brisk.

Trade schools such as 'Gnomen', the 'DAVE school' and 'Animation Mentor' are driven by industry professionals that provide specific training in areas such as modeling and animation. Students find this model appealing as the time frame is condensed and they are in contact with

professionals working in the field as opposed to faculty who are sometimes well removed from it. While these schools aren't held accountable for instruction, the market drives whether they can survive or not.

<http://www.animationmentor.com/>

<http://www.thegnomonworkshop.com/>

<http://www.daveschool.com/>

All the above mentioned trade schools have been in business for over five years and are thriving as they serve a student population well.

***What are the program's diversity goals for both gender and race/ethnicity in the faculty?***

DAGD strives to be neutral in both gender and ethnicity in our outreach. Our goals' to achieve diversity in our faculty is founded talent and students learning. We believe, first and foremost that these issues take precedent over any others. However, we are very proactive in inviting guest speakers to our program who illustrate how diverse the industry can be. Allen Turner, creator of the Xbox game 'Stubbs the Zombie' is an African American developer out of Chicago that was invited to speak in 2007. Sue Shakespeare, a producer from Creative Capers in Burbank CA was a speaker in 2008. Angie Mistretta of Pixar and Sharon Woods of Lansing Community College serve on our advisory board. Tony Benedict, while white and male, is an animator in his 70's that had the students riveted.

***Describe and assess the efforts being made to attain goals in (c).***

While we have no specific plan to achieve REG equality, we share classes with Rick Baker, an African American who is lead of the Software Engineering department. Rick was hired for his talent and his outstanding 'people' skills and is a valued member of our team as we share coursework with him.

As we grow as a department, we will be developing specific guidelines to be certain that we do not exclude, or include any qualified member of faculty based on race, ethnicity, gender or gender preference.

***Orientation. Describe and assess the orientation process for new faculty.***

Orientation for new faculty consists of the three day advising seminar held in Big Rapids along with mentoring by the entire faculty in DAGD. As we share office space, we can advise quickly as new faculty have procedural or pedagogical questions. Additionally we do not have new faculty advise students their first year.

While a more structured orientation process would be helpful if the staff was larger, our intimate group is able to process orientation quickly and effectively with a minimum of fuss. We tutor each other on proper advising strategies for new students and help each other with Ferris issues that might erupt.

We have the good fortune of having John Backstrom and September Howet in our office. Both staff members are helpful in answering questions and providing direction for faculty advisors.

## Reward Structure

***Reward Structure: e.g., salary, professional development funds, travel funds, UCEL and FSUGR incentive money***

We have competitive salary structure that attracts and retains talented individuals.

All faculty are encouraged to make professional development opportunities a reality and are supported with reasonable travel budgets. We encourage two faculty members to attend the Game Developer's conference in San Francisco to help get the 'beat' of the industry. During alternate years, we encourage faculty to attend other conferences such as SIGGRAPH, GenCon or other professional development conferences. We have written for and achieved the 'Timme' Travel Grants' in pursuit of professional development funds.

Release time is provided for travel during the school year if it supports DAGD activities.

Other money has been generously offered for faculty subscriptions to online tutorial sites such as Lynda.com or Digital Tutors. We bring this learning into the classroom.

***Describe the reward structure in the program/department/college as it relates to program faculty. Indicate the type of reward and eligibility criteria.***

We have no specific reward structure for DAGD faculty other than what is offered through the general college sources. CPTS administration has supported some extra projects such as development of an entrepreneurial incubator and graphics for marketing.

***Does the existing salary structure have an impact on the program's ability to recruit and retain quality faculty?***

The salary structure seems to be reasonable to both attract faculty and retain faculty. We hope that valued adjuncts can either be brought into full time faculty positions or offered other incentives, such as tuition reimbursement, health insurance or travel stipends to keep their interest in DAGD keen.

***Is the reward structure currently in place adequate to support faculty productivity in teaching, research, and service? If not, what recommendations would you make to correct the situation.***

The reward system is apparently able to sustain faculty productivity. However, it would be helpful to develop a reward system to encourage more curricular development and higher end professional development. Current, if a DAGD faculty member does not have a Master's degree, they need to either choose from limited degrees in education and business to leverage the generous eight credit tuition reimbursement system. If our faculty wanted to take courses in Art at Kendall, much of the tuition would be out of pocket.

If a faculty member chose to attend a college such as Savannah College of Art and Design, the online curricula they use would have to be out of pocket. Savannah generously discounts their Master's for faculty members. It would be helpful to have some scholarship dollars available for such pursuits. Such a benefit may attract young and energetic new faculty. While it can be hard

to tie such money to benefits, structurally it could be developed as a 'raise' a faculty member would receive on the attainment of their masters.

On a base level, it would be helpful to have all faculty to have access to resources such as Lynda.com or Digital Tutors.

***Is enhancing diversity and inclusion a component of the reward structure? Please explain.***

Enhancing diversity and inclusion is not a component of our reward structure. As we consider inclusion and diversity part of our cultural and ethical stance, we have not considered this a basis for reward. While we are certainly open to such possibilities, we are small enough where this does not seem to be an issue.

## **Graduate Instruction (If Applicable)**

***List all faculty teaching graduate courses.***

None

***What percentage of graduate courses is taught by non-tenure-track faculty? Please comment.***

Not applicable

***What are the program's (or department's) criteria for graduate faculty?***

Not applicable

***Have all graduate faculty (including non-tenure-track faculty) met the criteria? Please comment.***

Not applicable

## **Non-Tenure-Track and Adjunct Faculty**

***Please provide a list for the last academic year of full-time non-tenure-track and adjunct faculty who taught courses in the program. For full-time non-tenure track faculty, indicate the length of their appointments and the number of years of service at the University. Comment on the program's ability to retain non-tenure-track faculty.***

Full Time Non-Tenure Track Faculty

Marty Lier – one year term contract – with DAGD since 2003

Ward Makielski – one year term contract – with DAGD since 2005

David Baker – one year term contract – with DAGD since 2005



Cory Heald – one year term contract – with DAGD since 2007

Joshua Freaney – one year term contract – with DAGD since 2008

Adjunct Faculty

David Anderson – teaches two sections a year – with DAGD since 2005

Mike Dollar – teaches on section a year – with DAGD since 2006

Robert Evans – teaches two sections a semester – with DAGD since 2009

***What percentage of program courses is taught by the faculty in (a)? What courses are they teaching? Please comment.***

DAGD full time faculty teach about 85 percent of the course work.

- David Baker - DAGD 101
- David Anderson - DAGD 102
- Ward Makielski (Online), Robert Evans DAGD 103
- Marty Lier, Ward Makielski (online) DAGD 100
- David Baker - DAGD 180
- Frederick Baker - SENG 100
- Frederick Baker - SENG 101
- Marty Lier, Cory Heald - DAGD 230
- Cory Heald - DAGD 335
- Cory Heald - DAGD 375
- Cory Heald - DAGD 380
- Cory Heald \_ DAGD 385
- Cory Heald - DAGD 430
- Joshua Freaney, Ward Makielski - DAGD 150
- Ward Makielski (online) DAGD 300
- Cory Heald - DAGD 310
- Joshua Freaney - DAGD 260
- Ward Makielski, Marty Lier, DAGD 420,
- Joshua Freaney - DAGD 460
- David Baker, Marty Lier - GRDE 216
- Marty Lier- GRDE 226
- Joshua Freaney - DAGD 320
- Andy Purvis - APPS 301
- GRCC class - BLAW 321
- GRCC class - MKTG 321
- David Baker, Marty Lier - DAGD 220
- Marty Lier - DAGD 340
- Marty Lier - DAGD 491

- Ward Makielski - DAGD 499

We have a core of five faculty who teach in DAGD. They have a wide spectrum of abilities and cover several disciplines from hand drawn art to advanced graphics and computer programming. We have additional adjunct faculty that allows for depth of instruction in Sound Design (Mike Dollar), Story Construction (David Anderson) and Digital Sculpting (Robert Evans). We appreciate being able to bring in other talent to provide perspective and other points of view in production.

***Describe the required qualifications (academic and experiential) for faculty listed in (a). Indicate if all faculty have met the criteria, and if not, what is being done to resolve the situation?***

- All faculty must have their BA in a related field. All full time faculty have to have a Masters degree, be pursuing their Masters or have an active Plan for pursuing their Master's degree.
- All full time faculty must have three or more years in the media or gaming industry as a designer, programmer or artist.
- All faculty must have a passion for teaching and serving students.

Currently all full time faculty have this plan in place other than Mr. Freaney. Mr. Freaney has expressed a desire in pursuing his Master's if offered a full time year contract that contains health insurance.

***Does the program consider the current use of non-tenure-track faculty to be appropriate? Why or why not?***

The program is staffed with non-tenured track faculty. The current faculty is serving the program well.

***If the program is accredited, what position if any does the accrediting body have regarding the use of non-tenured and adjunct faculty?***

The program is not accredited. There are no specific accrediting bodies in our field.

While there is no accreditation, we do follow the guidelines from the 2008 IGDA Curricular framework of the IGDA for our game design track. This framework was created originally in 2003 and updated in 2008. It was created as a joint project between academia and professional advisory boards.

## SERVICE TO NON-MAJORS

*Describe and assess the impact that delivery of service courses offered by the program or the department has on the program.*

We typically do not offer courses to non-majors. However, we have had applications for ‘visiting students’ that we have allowed. Our coursework, being offered off campus, does not typically attract students from the general population. In any event, the requirements remain the same. A 2.5 GPA, a 19 ACT composite, or 48 completed credit hours at a Community College at 2.5 or above, and a portfolio of work.

With several requests for articulation from community colleges, we have designed a program that works with Ferris’ Bachelor of Integrative Studies degree. In this degree, students who have significant credit from community colleges in the animation area can pursue coursework and focus on what they want from DAGD. Students need only to take 18 credit hours of a DAGD concentration to satisfy the DAGD part of the BIS degree.

	DAGD BIS Sub program course checklist		
DAGD 310 fall	User Interface Design (still needs online dev)	FSUGR	3
DAGD 300 fall+spring	Game Design and Theory	FSUGR	3
DAGD 335fs	3D Modeling and animation	FSUGR	3
DAGD 375 spring or DAGD 385 fall	Advanced Modeling and Animation – Character (MACA 2530 req) (still needs online dev) Advanced Modeling and Animation – Vehicle and Structure (MACA 2530 req) (still needs online dev)	FSUGR	3
DAGD 460 spring	Multimedia Authoring II	FSUGR	3
DAGD 380 fall	Digital Sculpting (still needs online dev)	FSUGR	3
DAGD 420 spring	Digital Visualization and Simulation		
DAGD 430 fall	Digital FX		
COAS 495	BIS capstone	Online	2
ENGL 321	Advanced Composition	Online	3
PSYC 365	Sensation and Perception	MCC SPCH 2300	3
COMM 332	Persuasive Speaking	MCC SPCH 2010	3
ANTH 385	Japanese Culture	INTL 2911	3
HIST 371	East Asia in 20th c	MCC 2520	3
HIST 375	Latin American History	MCC 2429	3

LITR 380	World Folk Literature	Online	3
----------	-----------------------	--------	---

***Identify and describe the General Education service courses provided by the program faculty for other departments at FSU.***

We currently do not offer any general education courses for FSU

***Identify and describe any non-General Education service courses or courses required for other programs. Comment on your interaction with the departments or programs for which the courses are provided.***

We have a number of courses that apply to the Software Engineering degree. Students wishing to focus on game design inside of the SENG degree must take the following courses.

- DAGD 150 – Introduction to Game Design and Development
- DAGD 300 – Game Design and Theory
- DAGD 255 – Programming 1
- DAGD 355 – Programming II

We work closely with the Program Coordinator, Rick Baker, and listen to the needs of his program as we develop content for Software Engineering. Often, students who are in the DAGD degree will change programs once they discover their real passion is the programming side of game design.

***Discuss the impact of the provision of General Education and non-General Education courses has on the program.***

General education courses are a traditional part of a University education. The exercise of liberal arts in addition to career focus is a time honored approach to learning. DAGD honors this approach by requiring at least 41 credit hours of liberal arts be addressed. We agree that a rounded understanding of the world will enhance all facets in an animated project or game.

With this in mind, we also prescribe classes that are of special interest to the animator or game designer. Science such as Anatomy can be leveraged into good human modeling understanding. Psychology, sociology and anthropology are at the heart of games. Art and Theater are cultural enrichments that are very applicable to our industry. We also find that students enjoy mixing their DAGD training with other courses that are more general.

***Does the program plan to increase, decrease, or keep constant its level of service courses? Explain.***

We did have plans to offer one service course to the University in Big Rapids. DAGD 100, Introduction to Computer Animation was staged and ready to go for Fall 2010. After a semester of negotiation with various entities, we had to cancel this pilot program as monies were not available to pay the adjunct instructor. We are disappointed at this development and look to find ways of funding this opportunity to bring animation and game design to the main campus.

# DEGREE PROGRAM COST AND PRODUCTIVITY DATA

*Submit Institutional Research and Testing data. Comment on the data.*

Digital Animation and Game Design is a cost effective program. Even with the high cost of computer workstations and professional software, DAGD makes its own way at Ferris. The average cost per credit hour, including a \$25 department cost, a \$6 Dean’s cost and a \$145 instructor cost is \$175.16. With DAGD credits calling for \$366 per technology intensive credit hour, we are revenue positive for the college.

	Student Credit Hours					Full Time Equated Faculty					SCH/FTEF			
	Summer	Fall	Winter	F+W		Summer	Fall	Winter	F+W		Summer	Fall	Winter	F+W
2004-2005	27	320	320	640		0.25	1.5	2.09	1.79		108	213	153.1	356.55
2005-2006	27	585	713	1298		1	3	3.75	3.38		27	195	190.1	384.59
2006-2007	36	1152	1206	2358		0	5.13	5.49	5.31		28	224.8	219.8	444.38
2007-2008	60	1236	978	2214		2.25	5.86	5.25	5.56		26.61	210.8	186.3	398.47
2008-2009	90	1251	1023	2274		2.63	6.42	5.3	5.86		34.22	195	193	388.17

## Assessment and Evaluation

*Describe and evaluate the program’s assessment mechanisms.*

*List and describe what variables are tracked and why when assessing the effectiveness of the program (e.g. mastery of essentials of subject area, graduation rates, employment rates, pass rates on professional exams).*

Formal ‘tested’ assessment in DAGD is a function of a professor’s pedagogy. We base our assessments on quality of graphics and quality of programming. In other words, does it work?

Our main assessment is found in students’ projects and portfolio. We work extensively with rubrics and grading contracts to help focus student efforts.

The following activities help us with departmental goals and assessment.

- **End of semester reviews** are maintained where faculty show each other the best work of the semester. These informal morning sessions have been excellent in helping us see inside each other’s classes.

- **Sophomore Portfolio assessment.** Students create a professional grade portfolio containing work from their first two years at DAGD. This portfolio is assessed by industry professionals. Out of 400 points in this exercise, the mean is about 280.
- **Internship Portfolio.** Internships are required by all graduates. Part of the application for internship process demands that a portfolio is available for review. This is used to help students secure internships nationwide.
- **Capstone website and portfolio.** A portfolio is required of all DAGD 499 capstone students. This is professional grade project and is used to help students gain employment.
- **Portfolio in the beginning and Portfolio at the end.** Similar to pretest and post test. To begin this loop, all students are required to submit a portfolio for entrance into DAGD. We save these portfolios in student files. We can use this to see how far a student has progressed in DAGD.
- **DAGD Job Reel.** Additionally we publish our program portfolio every year with the DAGD Job reel. We use this 'portfolio' reel to promote DAGD to potential students and schools. This hour long DVD contains a three minute 'best of' demo and samples from many of our classes. A highlight is the 'short film' segment that is an unexpected delight that showcases students' storytelling ability.

Quantification of student work is not an easy task. However, our work is generally assessed on both behavioral goals such as deadlines and quality and aesthetic goals. Rubrics and course assignment schedules both play into this pedagogical strategy. To initiate changes we discuss problems we are having in class during departmental meetings.

With advice from fellow faculty, we initiate changes in our classes to help improve the overall curricula. This has resulted in more cross class collaboration and cooperative ventures between classes. Once we determine that an idea is working, we provide room in a course and eliminate older assignments.

***Provide trend data for the variables listed in (1). Compare the data to accreditation benchmark standards if applicable, or provide some other type of assessment of the data.***

Not applicable, however The Animator Guild or Union, IATSE 834 in Los Angeles has a website that discusses professional and labor issues. <http://www.animationguild.org/>

***Describe how the trend data in (2) is used to assess the rigor, breadth, and currency of the degree requirements and curriculum.***

If we were to examine the quality of work from 2004 to 2010, we would see an exciting trend upward in many DAGD areas. The first student work from the department in 2004 reflected students who were developing on a freshman and sophomore level with no mystery. As we see these students progress, we can see how their work has developed into professional level animation and game assets.

***Describe how the trend data in (2) is used to assess the extent to which program goals are being met.***

One of our goals is to be a 'Top Ten' animation and game design programs in the US. By comparing our work to those schools we believe are in this rank, we can see significant inroads to these goals.

# ADMINISTRATION EFFECTIVENESS

## *Discuss the adequacy of administrative and clerical support for the program.*

Administrative support for DAGD is good. We enjoy a close relationship with all staff from our friendly and helpful 'front desk' receptionists all the way up to our Vice President, Don Green. We work together as a team helping students find answers to questions including classes, financial aid and general advising.

Our receptionists find time on faculty calendars. They track faculty down and work out schedules efficiently. They answer student questions effectively and politely. They are timely and make sure everything can run smoothly as possible. They are always quick with a pleasant 'hello' and efficiently operate this important central post.

'On the ground' administrative support is provided by Tracy Powers, Jocelyn Goheen and Nancy Moore. These powerful resources stay two steps ahead in keeping up with main campus issues, scheduling classes, working with faculty contracts and delicately balancing budgets to name just a few tasks they perform. We enjoy a proactive relationship and work with them to keep the system well running.

Our registration assistant, Amanda Mitchell juggles many issues efficiently and without complaint. She proactively contacts students who have miss-booked themselves and suggests possible solutions to discuss with their advisors. She is accurate and on target and a significant asset to the organization.

Student services, headed by Dawn Schavey, is well managed. She is able to help students find housing and balance lifestyle issues. She volunteers with the community and helps out at all DAGD student functions and efficiently manages events issues such as food and rooms.

September Howet manages admissions efficiently and effectively. We have been working close together this year improving the efficiency and effectiveness of the admission process. We have developed systems to help students through our rather weighty admission process. September has recently taken a post within Ferris promoting CPTS in Macomb Community College. She will be missed. We will work with the new coordinator to ensure quality applications process.

We are fortunate to have a strong and balanced marketing department headed by Jennifer Amlotte and supported by graphic designer Mary Dilley.

Bill Foster, our recruiting evangelist is out in the community daily working with guidance councilors and students helping them chart reasonable directions for their future. Bill's extensive network and vibrant personality is core to our team.

## *Are the program and/or department run in an efficient manner? Please explain.*

The department is run efficiently and with a minimum of fuss. Faculty are dedicated and rarely miss classes. Office hours are convenient for students and adhered to. Faculty are proactive about book lists and supplies. We all have areas we concentrate on and pull together as a team. Monthly meetings keep us on track and 'end of semester best of' shows help us see what others are doing to improve class and curricula.



While other departments may have meetings that are grudgingly attended, ours are vibrant discussion groups that have been significant in helping sort out issues and problems in a proactive and cooperative way. Attended by both faculty and administration, we look forward to departmental meetings as a way to communicate freely and effectively. We use this 'think space' to synthesis new ideas and look forward to the future.

Administration is effective in responding to needs in scheduling classrooms. There is little panic as the opening days of class come to bear on us. If a class needs to be juggled for faculty load, faculty help each other and think how best students can be served. Overall I am very proud of our faculty as they are focused on the students and looking to bring them into the world of animation and game design unselfishly and constructively.

***Are class and teaching schedules effectively and efficiently prepared? Please comment.***

As faculty, we work together balancing out class schedules at staff meetings and deliver them as requested by administration. We are always adjusting to improve the balance for students.

Jocelyn Goheen, Tracy Power's executive assistant is ahead of the game when it comes to preparing schedules for faculty and rooms.

***Are students able to take the courses they need in a timely manner? Please comment.***

Students are able to take courses in a timely manner. We have created a balance course sequence that allows students to work their way through the program efficiently and effectively. We have logical sequencing that feeds one course into another. We offer many courses in both fall and spring semesters to capture any students who may not have had needed prerequisites. We also advise students effectively looking forward a year in advance charting out an individual educational program. We are also working to bring more DAGD courses online to facilitate commuting and time issues.

# SECTION 4: FACILITIES AND EQUIPMENT

## INSTRUCTIONAL ENVIRONMENT

*Are current classrooms, labs, and technology (both on-campus and at off-site locations) adequate? Explain.*

Classrooms at the Ferris Grand Rapids site are currently adequate. We are able to schedule reasonably well. The technology in these classrooms are good and we upgrade computers every other year. We keep current with software yet are careful not to invest too heavily into obscure or seldom used software.

When problems in technology do arise, we work to solve the problems with a permanent solution such as having our own server when the one utilized at Kendall was unreliable.

Our current lab situation leaves something to be desired. We currently ‘book’ lab time much like classroom space. This is effective, but as mentioned in other parts of this report is cumbersome. We feel that growth of our program will demand lab space be dedicated or at least be consistent to certain times of the day. Often classes in CPTS that do not need high powered machines as ours are scheduled in these rooms out of necessity. If space could be found for those classes, the evenings at DAGD could be dedicated to lab time.

We would propose that at least one of our rooms be reserved every night for lab. As the space is filled, we can re-examine how to solve scheduling problems.

Additionally, we need to work with a production pipeline that encourages professional practices. Very few companies have unlimited resources for computer rendering and processing. One solution has been to utilize unused ‘downtime’ to create what is known as a ‘render farm’. Animators create sequences in a preview form and then ‘render’ the sequences. Rendering can be very time intensive. If you can gang computers up and commit them to a render, you can multiply the effort of one computer by as many CPU’s as possible. While we have discussed creating a render farm, we have not yet committed the resources to utilize this industry proven technique.

There are other issues that can slow our system down, but we are continually examining how we can improve the ‘bootability’ of our systems.

Our network is robust for many standards, however we are self admitted network bandwidth hogs. Video files are among the largest in the computing world and we exchange these as a matter of course and pipeline. As HD video files become the norm, we will need to be proactive in finding network solutions that do not interfere with classroom efficiency and administration duties.

***How does the condition of current facilities impact program delivery? Explain.***

The current facility is tight, but is adequate to deliver reasonable instruction. As mentioned, cooling our classrooms can be an issue. We would encourage constant monitoring and data collection to help identify problem times.

Our IT person, Vel Pavlov has been increasing accessibility for all systems so instructors can hook laptops up to the AV system without reconfiguring any cabling. Vel is always looking at ways to improve computer efficiency and classroom effectiveness. For instance, in Fall 2009, Vel researched and added, with faculty approval, computer control software that instructors can use to communicate with each student computer, lock out the internet or even blank all screens if attention is needed.

We do have a number of classes in GRCC classrooms. We have an ongoing issue with being able to 'log on' to computers in those classrooms. Being a separate system, Ferris passwords do not work properly. I would suggest that we try to make all systems recognize the Ferris instructor passwords to reduce logon issues or provide other solutions to accessing the wireless network in our building.

***Describe the program's projected needs with respect to instructional facilities.***

**Classrooms:** As we grow, we will need at least one more classroom within two years with higher end systems installed in them. Additionally, we need to consider classroom and hallway aesthetics. DAGD classrooms do not feel like a destination. Gray walls, high windows and fluorescent lights create a feeling of imprisonment and not education. While pin boards in these classrooms have improved the environment, I would suggest a 'makeover' to all DAGD classrooms to give a feeling of inclusion. Imagine if 'Hogwarts school of Witchcraft' had gray unremarkable walls with flat lighting! Simple lighting techniques and colorful banners could make a significant psychological difference inside these rooms.

**Graphics Tablets.** Graphics Tablets are an alternative to a 'mouse.' A graphics tablet has a wireless electronic pen which allows artists to 'draw' naturally on the computer. People liken using a mouse in photoshop and Zbrush to drawing with a brick. Many of our animation and graphic design classes could benefit from the use of Graphics tablets. Most of our upper level students have bought them and use them during class. We should make them standard on all our computer stations. This would add about 300 dollars to the cost of a computer. Students could be required to buy their own electronic pens as these tend to be lost quickly.

**Video FX lab:** As our need for video special FX animation grows, we will need to consider efficient access to green screens and lighting solutions. Additionally, we need to examine the possibility of becoming a center of motion capture. This involved technology may be a central tool in as the film community comes to Michigan because of the Michigan Film Production Incentive. A dedicated Visual Effects environment would be a great asset as we tour potential students through our facility. The Applied Technology Center does have quality space that is currently underutilized as machine shops that could be repurposed in such a way.

**Video Cameras:** We should consider one or two more High Quality HD video camera for Junior/Senior Level checkout. With the addition of two cameras, we would be able to stage full three camera shoots.

**Sound Stage:** While we have access to video facilities through GRCC and Community Media Center, it would be helpful to add sound stage capability. Our auditorium may be the start of this project.

**Hallway Virtual Art Gallery:** Being well trafficked, we could utilize wall space in the hallways of DAGD for artwork by DAGD students being projected on Plasma or LCD monitors. With the plethora of media, we could use this space to advertise what is going on inside the walls. With thousands of people walking through the halls, we are missing a great promotional opportunity. Think ‘Art Prize’!

**DeWolfe Music Library:** Last year, as a way to trim budgets, we eliminated “DeWolfe”, our music library. While not inexpensive, it allowed for a range of musical and sound FX styles that gave students quick, legal and quality music for their productions. While we have found some inexpensive and no cost solutions, we miss this resource and would like to reinstate it.

**Sound Class Reinforcement:** Mike Dollar, our Audio instructor has requested studio Microphones and MIDI Keyboards for four years running. This year, we bought four USB microphones and immediately the effect on the whole program has been outstanding. We would suggest purchasing another four Microphones for his class and six MIDI Keyboards for his class. Instructors who are delivering blended and online courses have spoken highly enough of these microphones that they are constantly being checked out. Additionally, a FM lavalier mic and shotgun mic would be very helpful in field production.

**Video Web Space.** In an effort to preserve our own disk space for video, we would suggest that instructors and students be given video space off campus. We can buy video space from services such as VIMEO that will allow downloading from everywhere and efficient uploading to the classroom. This can be used for both video tutorials and student hand ins.

**Student Web Space.** We should support the Ferris initiative to provide all students with personal web space for their portfolios. Currently students must pay up to 100 dollars a year for website hosting. As a University, we should provide this for all students. In an assessment committee headed by Dr. Robbie Teahan, we can get student web space for around 10 dollars a year as it would be a bulk purchase. Students would be able to start building web portfolios as freshman and sophomores and carry them for three years beyond their graduation.

While not all the above are ‘brick and mortar’ requests, the use of virtual space is a great way of leveraging the physical space we do have.

***Describe current plans for facilities improvements and indicate their status.***

We currently keep all the software updated and have a schedule of new computers every other year with memory upgrades on in-between years. We have no other plans for facility improvement.

***Describe how proposed changes or improvements to facilities would enhance program delivery.***

By enhancing our facility with consistent lab time, we can help students plan projects better and overall create a feeling of community. Having quick access to a sound studio can help students produce higher quality sound tracks.

As special FX as found in movies such as Ironman and Avatar are ubiquitous in the industry, we should consider planning for such a venture. We should have the appearance of a special FX and animation studio similar to what one would find in Hollywood. Not only would students have quality space to work and create in, but it may attract more potential students to our program. As the Michigan Film Incentive brings more producers to Grand Rapids, we could have an advantage being 'ground zero' for training and development.

While such a studio could cost in excess of \$100,000, it might help us capture the high end video effects market in Michigan. Such a multi-purpose studio could be used for video production and game creation.

As we have created a niche for technical directors, this may help improve our market positioning. An example of a motion capture system can be found at the following website.

<http://www.vicon.com/>

## **COMPUTER ACCESS AND AVAILABILITY**

***Outside of computers in faculty and staff offices, identify the computing resources (hardware and software) that are allocated to the program.***

We have two classrooms that are focused on DAGD. Each classroom has 25 high end computer workstations with dual screen monitors. Software includes the Adobe Creative Suite CS5, Autodesk 3ds Max, Maya and Softimage XSI, Z-brush and Mudbox, Roadkill, and Microsoft Office suite. Additionally, we have control software that allows us to block internet usage and communicate directly with student computers. We have access to two more classrooms that have older versions of the Adobe Creative suite and current versions of Microsoft Office.

We also share lab space with GRCC on the second floor of our facility. These computers are not well configured for our uses. Any graphics software is typically a couple years old and file formats do not match what is currently being created so files cannot be opened.

***Discuss how these resources are used.***

GRCC computer lab space is not used much by our students. The computers are underpowered and lab techs do not know the software to be helpful. Students would rather go home and use their own resources than utilize GRCC computers. While the problems with the GRCC labs might be more perception than truth, it is the way students see things.

***Discuss the adequacy of these resources and identify needed additional resources.***

As mentioned, GRCC computer lab resources are underutilized. One problem is that student files on our network are not available on GRCC computers. While workarounds are simple, it does pose the question how to improve use. This writer believes we can make this resource more 'Ferris' friendly by branding part of the lab with Ferris DAGD banners that help 'mark' a student's domain. While this is purely a cosmetic solution, it would be worth investing in some simple banners to test its efficacy.

***Does an acquisition plan to address these needs currently exist?***

No official plan exists.

***Describe the plan.***

I have spoken to our Assistant Dean, Tracy Powers about researching the tools in the GRCC labs in the summer of 2010 and seeing how they 'stack up' to what we have. Additionally, a student survey could be run that asks students why they choose not to work in the GRCC labs. Come fall 2010, I would like to have a research plan in progress that discovers the problems with GRCC lab use.

***Has it been included in the department or college's planning documents?***

No.

***Discuss the efficacy of online services (including WebCT) available to the program.***

We utilize Web CT (aka Ferris Connect) in many of our classes. While it has its flaws, it does allow for delivery and receipt of classroom materials. Online testing is helpful in assessment and relieving faculty of the tedium of grading tests. Additionally, online discussion groups are helpful in creating student community outside the classroom.

We do have issues with the technology as it is evident that Web CT suffers from a legacy of being built on 1990's technology. Many of the features we expect in Web 2.0 applications are not there frustrating faculty and users alike.

As we bring DAGD more online and in blended formats, we will need to investigate more robust curricular delivery tools or develop methodologies that allow us to use the current systems.

***Discuss the adequacy of computer support, including the support for on-line instruction if applicable.***

We have good computer support in our building and good access to computer support through the technology hotline. Online instruction has been reasonably driven. Efforts have been made to bring instruction through web seminars. Our on-site computer IT person, Vel Pavlov has done a remarkable job keeping the computers humming and installing patches as they are required. Online instruction is supported by Ferris's main campus and with our own online instructor, Ward Makielski who is a 'black belt' level Ferris Connect resource.

## **Computers and Equipment**

We enjoy good support from administration for fresh and high quality workstations from Dell. These represent a significant investment and it is not lost on faculty and students. These are mated with state of the art software. We spend about \$75,000 a year on software and over \$100,000 a year on upgrading computers. In the last five years, we have had three computer upgrades.

While our computers are outstanding, we have some deficits in equipment. While we enjoy the support of the Community Media Center, students do have to drive to it and book it. We could use more on site lighting and sound equipment to support our classroom such as DAGD 160 Audio Production. A sound booth would significantly improve the quality of the sound work as would microphones and keyboards to be shared by students.

Portable lighting kits would also be helpful to support the HD camera we do have.

Video Projection: All our classrooms have video projectors, but it would be worthwhile to note that they are reaching the end of their useful life. One projector has already been replaced and we would anticipate having to replace one a year.

## **OTHER INSTRUCTIONAL TECHNOLOGY**

**Identify other types of instructional technology resources that are allocated or available to the program.**

Our classrooms are equipped with good quality classroom projectors and stereo amplifiers with wall mounted speakers. To complete the system, combination VHS/DVD players allow us to play commercial and custom made tapes and disks.

We also have access to a computer docking cart with 15 Apple laptop computers. While usually used and reserved for the Information Security and Intelligence program, we have used them for laptop trade fairs and editing projects.

GRCC is a wealth of resources. We can order AV carts with monitors and players on them. Additionally, if classroom or seminar space is needed, the building coordinator, Becky Yoder, is always available to help.

All faculty are supplied with well outfitted Dell Laptop computers that are capable of running the software that is appropriate for the instructor. We customize them and keep them running in top shape with the help of Vel Pavlov, our onsite IT manager.

***Discuss how these resources are used.***

These resources are part of our everyday work at Ferris GR.

***Discuss the adequacy of these resources and identify needed additional resources.***

The resources are adequate considering our needs. If we were to add more, we would first consider better cooling for our classrooms. When our computers are in full operation, the temperature in the rooms reach well over 90 degrees. We postulate that the rooms were not designed for the heat load the computers generate. While we have suggested simple inexpensive fixes to GRCC who manages the building, not much is done for us other than directives to keep the classroom doors closed to maximize air transfer. Better lighting in room 172 would be helpful also. Currently we have only the over head florescent lights to light the room. Softer ambient light would save electricity and reduce heat in this main computer lab.

We should also consider investing in more game creation tools for the Xbox 260, PS III and Wii along with purchasing the consoles for student use.

***Does an acquisition plan to address these needs currently exist? Describe the plan. Has it been included in the department or college's planning documents?***

We do not have an acquisition plan.



***Discuss the impact of adequacy of other types of instructional technology resources and support of these resources on the program.***

Our office is served with printers and copiers that can be used for duplication of syllabus and other paper. It is networked so faxes can be sent or received or files can be printed from our computers.

GRCC is an educational partner with us. We have 'depth' in instructional technology support provided by their staff. Their offices are in our building and they are happy to lend a hand on short notice fixing problems. Typically, the fixes we ask are login issues or connectivity issues in the classroom. They also will come running with an AV cart if one is needed.

On occasion, we have been served by the Television Production facility at GRCC. At no cost, they loaned us a HD video switcher and other equipment during our Mark Kistler project in 2008. Additionally, they have videotaped special guests that we have had.

## **LIBRARY RESOURCES**

***Discuss the adequacy of the print and electronic and other resources available through FLITE for the program.***

FLITE is a remarkable tool for Ferris Students. Its online resources are outstanding. However, DAGD students do not use FLITE for either online resource or physical resource. It is a matter of knowing what is available to DAGD.

Students are not provided with any significant information and do not know how to access or utilize the FLITE system. For instance, a search for computer game art turns up one book. Additionally, when this writer tried to login the system using his Ferris ID, it was rejected and was prompted to call a librarian.

***Discuss the service and instruction availability provided by the Library faculty and staff with respect to the needs of the program.***

Stacy Anderson is our Library Liaison, however we have not requested any help from Library resources.

***Discuss the impact of the budget allocation provided by FLITE to your program. Is the budget allocation adequate? Explain.***

We are not aware of any budget resources available through FLITE. If FLITE would be willing to allocate financial resources, we would be happy to utilize them by the purchase of Lynda.com video tutorials and digital tutors materials.

<http://www.lynda.com/> and <http://www.digitaltutors.com/09/index.php>

# SECTION 5: CONCLUSIONS

*Based on data analysis derived from Sections 2-4 and on the collective wisdom and judgment of the PRP. In arriving at these conclusions, the PRP should summarize the relationship of the program to each of following specific categories and any other categories it deems appropriate:*

## RELATIONSHIP TO FSU MISSION

### The Mission of Ferris State University:

*Ferris State University prepares students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society.*

The Digital Animation and Game Design (DAGD) program is aligned with the mission of Ferris State University. We focus on the growth of students in career skills, civic involvement and lifelong learning. We teach our students how to learn and offer it in a professional context that demands rigor. We see ourselves in the context of a global economy and understand the stewardship with which we have been entrusted.

## Program Overview

The program at Ferris State University Grand Rapids offers students a well-rounded education as they earn their Bachelor's of Applied Science, while giving them the depth of technical skills needed to compete in the fast-paced world of interactive technology. Graduates of the DAGD program are able to enter into a growing field of job opportunities that isn't limited to just entertainment and video games, but offers possibilities in legal simulations, corporate training, architectural flythroughs, education, biomedical visualization, and a host of emerging opportunities as more and more industries see the advantage of engaging their customers through interactive and animated applications.

## Mission

To provide high-quality education at a reasonable price to students seeking to gain technical expertise in interactive and animated applications, and instill skills that are valued and relevant to the workplace.

## Core Values

- Quality instruction by teachers who have a proven track record of industry success.
- First rate response and customer service.
- Leading hardware and software for lab use and instruction.
- Relevant industry involvement in classroom projects.

- Progressive strategy for implementing evolving curriculum and classroom content.
- Expanding base of opportunities for students to showcase abilities to and interact with industry.
- Growth and diversification of student population and industry opportunities in Digital Animation and Game Design for South-Western Michigan.
- Outreach programs to high school and junior high schools designed to stimulate interest and awareness for Digital Animation and Game Design.

## **Vision**

To be recognized as one of the leading educational institutions in animation and interactive technologies not just in Michigan, but in the nation. Students will see us as a high quality program for a good value, and feel confident in the skills that they will learn and the opportunities for which they will be qualified when they graduate. Industry will see us as an institution that provides skilled, talented, and employable graduates. Faculty will find this a challenging and rewarding place to teach.

## **PROGRAM VISIBILITY AND DISTINCTIVENESS**

Ferris Grand Rapid's Digital Animation and Game Design (DAGD) is a high profile program that is creative, distinctive and rigorous. We are focused on developing the next generation of animator and game designer.

DAGD is designed as a multidisciplinary degree. Disciplines covered include 3D animation, programming, design, business and liberal studies. Students study for careers in animation, design, simulation, and programming. The digital animation concentration builds on the existing B.A.S. format. This format includes a required concentration for depth, an elective section that offers greater breadth in the discipline area, and general education requirements targeted toward courses serving employees in digital technology.

Using state of the art technology, professional grade software and innovative teaching approaches, Digital Animation and Game Design delivers an education that students will need to succeed in a highly competitive business. Built from the ground up and designed by professional media experts and game designers, students work with some of the most experienced and respected professionals in the Midwest.

Some activities and programs that make us distinct are

- The student chapter of the International Game Developer's Association (IGDA),
- The end of Spring Semester day long career event 'Industry Day',
- A faculty 'show and tell' Wrap Up event at the end of every semester,
- 'Frag Fest', our 24 hours animation/game design competition
- Dual enrollment with Grand Rapids Community College,
- Online 'blended' delivery and virtual faculty structure,
- Professional faculty roots
- DAGD Speaker Series that brings quality animators and game designers in to speak and work with the students.

## **PROGRAM VALUE**

Positioning ourselves as more than a new media degree and aiming at the highly competitive and visible worlds of animation and game design, we create a pathway for students to achieve their career goals. We are specifically channeling ourselves to develop students who will be able to compete and be successful in the Digital Media world. We are focused on educating students in the latest tools and technology used to create digital and interactive content.

Animation, Game Design and Media careers are considered some of the hottest jobs for the coming generation. Having a quality program that develops students who are employable in this realm is a great asset to Ferris. No other University in Michigan has such a robust program that is gaining the attention that DAGD has been receiving. With the Michigan Film Incentive Bill that rebates up to 42 percent of production costs spent in Michigan, we are perfectly positioned to be able to help both the growing media industry in Michigan and our students.

The required general education classes are targeted to future employees in digital technology as well as providing general knowledge and skills that will be useful in many aspects of life. The foundation classes provide depth of knowledge applicable to any digital technology field with classes in design, business, 3D animation, and programming. The recommended electives allow students to further expand their knowledge in a particular area such as programming, 3D animation and digital effects. Before graduating, all students also complete an internship to give them the real-world experience and people connections necessary to succeed in their chosen profession.

Part of our appeal is our partnership with community colleges. We are located on the campus of GRCC and share the Applied Technology Center that was built in 1991. Our classrooms are modern, accessible and located close to amenities such as the GRCC field house, cafeteria and parking ramps.

Students who start out at GRCC can transfer over with a strong transfer plan or start their career at DAGD and blend classes seamlessly with their DAGD curricula. Our faculty is familiar with many of the classes at GRCC and can advise appropriately according to student interests. GRCC's class offerings are very broad and the diverse population allows our students to fully experience a university-like setting.

One of the most appealing aspects of a GRCC/FSU collaboration is the tuition advantage a student enjoys. With up to 60 credit hours transferable to FSU, Kent county resident students essentially get a 40 credit hour scholarship to FSU. This is significant for parents who are often helping to finance their student's education and students who are often holding a repayable student load at the end of their time with us.

## ENROLLMENT

After an initial surge of enrollment in the first three years of DAGD, we have seen a leveling off and reduction of students entering our program. We would attribute this to a number of factors. First is competition from colleges such as Davenport, ITT, Art Institute of Detroit and Kendall who have all started animation and game design programs. Secondly we are seeing students explore options at community colleges before committing to Ferris. Third, the economic conditions of the last two years have caused people to 'put on hold' their academic plans.

However, after three years of tepid freshmen enrollment, we are seeing a trend upward based on application numbers for 2010. We can attribute this to

1. The hard work by 'on the ground' recruitment team efforts
2. Creation and generous distribution of the DAGD demo reel to High School Councilors
3. Continued effort by faculty in high schools and public forums.
4. The success of DAGD summer camps
5. The establishment of the DAGD website.

Any solid marketing effort is multi-faceted. We anticipate that DAGD will continue to attract more applicants as our reputation expands, alumni find work and our work disseminates over the World Wide Web.

For the next three years, we would like to see our freshman class to be a strong 40 freshman and 20 transfer students. As we work to attract the best and brightest and have them commit to Ferris earlier, we believe we can build a high quality freshman class that will push the results of the program even further.

A concerted effort will be put forward in coming years to ensure that quality students are encouraged to apply to DAGD. Follow up will be done to have students persist in all application materials and feel that Ferris is the school of choice for them. We believe that by illuminating the path to Ferris and make the campus environment feel welcome; students will see Ferris as the obvious solution to their career goals.

## CHARACTERISTICS, QUALITY AND EMPLOYABILITY OF STUDENTS

DAGD students who make it to graduation are skilled in many areas. While designing the overall curricula, we asked ourselves and advisory board what is needed for success in the animation field. The courseware we designed is a reflection of that search. The students who graduate have learned that with rigor and dedication, excellence can result. They are focused and driven to persist in their pursuit of an animation or game design career. They understand the power of teamwork and have learned to be wary of those that don't pull their load. The students have learned the value of community as they work together, play games together and sweat together. They have developed lifelong friendships that will extend the Ferris DAGD network worldwide. Students that graduate with a Ferris DAGD degree are Innovative, skilled and creative.

We see from our *industry survey* results that they see graduating student work as being very good or excellent. As faculty, we are proud that students have achieved professional quality work that stand up to some of the best that other colleges have to offer. When we go into the field and display the yearly DAGD compilation reel, the overall reaction from the general public is very positive. In six short years we have gone from an idea to being a national contender in the animation and game design field.

Herein lies the paradox. With all the success we have been having, our students are finding it difficult to find employment in this industry. As 2008 closed, we found ourselves in the worst financial crisis in 80 years just when the first large group of DAGD students were graduating. Many of these students have yet to find work. This may be a large factor in why DAGD students are not finding jobs. It is easy to point fingers at the economy. We need to discover why jobs are not coming and how we can improve this.

*Hope* is critical to persisting in any rigorous situation. Quality job placement for graduating seniors and quality internship placement is critical for future growth. If students can be reasonably assured of a quality job when they graduate, they will be more likely to push through adversity. While we do significant job training and search work, we should do more. Having a secured 'headhunter' for DAGD would be a significant asset. Better retention numbers would result as would faculty motivation to deliver quality instruction.

Ferris claims a 95 percent placement rate or more for many of their programs. As seen by our lack of data on graduating seniors and employers and a response rate of 14 percent for our alumni, *we are not close to achieving the dreams of the majority of our graduates*. More telling is that of the seven who responded, 3 of them or about 40 percent are not working in the field.

With a dedicated career services person who can 'break the ground' for our students and do the hard work of securing work and internships, we can significantly change the posture of DAGD.



## QUALITY OF CURRICULUM AND INSTRUCTION

In our industry survey, when asked what the strongest features of our program were we see ‘Diverse programs’, ‘quality of instructors on the faculty’ and ‘quality of the students’. This is testament to the good work we are doing. In the same survey, we see that the overall quality of the program is a 4 out of 5. Students, any college’s harshest critics rate the overall quality of the program 7.7 out of 10. When we examine the Student Assessments of Instruction (SAI) and average them over the years, we see a general satisfaction rating of 4.1. The total range of student satisfaction ranges from 3.9 to 4.4 out of five.

The game design curricula itself is drawn from the IGDA Curriculum guidelines from 2003 and 2008. These guidelines were developed by a consortium of professional game designers and animators as a roadmap to help educational institutions that were developing game design programs. In the initial iteration of DAGD, classes were composed of existing Ferris and GRCC classes. As the curriculum was refined and developed over six years, we focused on two domains; digital 3D animation, game design and programming. We looked at what it takes to be successful in the media industry and focused DAGD classes to deliver students who have skills to satisfy industry needs.

For the digital animation side of our program, we examined what is needed to be helpful as an entry level technical director and focused our efforts there. We place high value on the quality of modeling and rendering results as this is what is required for regional businesses such as Steelcase and Herman Miller. We are making great progress in the quality of our character modeling as well with the development of our Digital Sculpting class.

We base our instruction with industry standard software such as 3ds Max, Maya and the Adobe Creative Suite and deliver it on high powered dual monitored workstations. However, even the best computers are just processed sand without good instruction behind it.

Our faculty all come from professional roots but are also in tune with current instructional techniques and theory. Two faculty have advanced education degrees, two are working on advance graphics degrees and one has an advanced degree in media business management. With a diverse educational background we can help each other as we design and deliver instruction. Students appreciate that assignments are ‘real world’ and practical. Instructors design assignments that can be used as portfolio pieces and courseware is designed to feed into all projects.

While ‘art’ tends to be subjective in nature, we key in on the assessable process of creation that yields quality work. Many projects are required in the course of classes and students learn that it’s not just what you know, but how you can apply it that will yield success. The results of student work reflects the quality of our instruction.

## **COMPOSITION AND QUALITY OF THE FACULTY**

The faculty of DAGD is unique. Pulled from industry and then trained as teachers, all faculty have years of professional experience behind them before walking into the classroom. This gives credibility to the program as few programs have. Additionally there is diversity within the faculty group as all have come from different areas of the game design, graphics, engineering and animation industry. The benefit to the University is credibility, experience and professional focus. When parents and potential students talk to us, we can speak to them from our professional experiences. We are grounded in reality and help students see things from that perspective.

Our faculty span generations of media development. While all ‘Jedi masters,’ some reach back into pre-computer animation days while others have the latest programming approaches and theory. The depth of instruction is deep and the width of experience is wide and diverse.

We have faculty who have worked for the Disney Company on top tier interactive games, faculty who have won numerous advertising (Addy) and Emmy awards, faculty who have developed animation companies, serviced companies with IT expertise, developed games for AOL and even faculty who have served honorably in the US military. We come from many backgrounds, but all are now teaching to pass onto a new generation skills and experiences culled from years of professional work.

Ferris has been graced with quality student focused faculty. The faculty have been graced with a University that makes students the center of their mission.

# APPENDIX

## Appendix A - Faculty Resumes

### David Baker

9954 Daylily Lane

Galesburg, MI 49053

[classicanimation@hotmail.com](mailto:classicanimation@hotmail.com)

269-665-6510 hm

616-643-5722 wk

**Overview** – David Baker is an award winning communicator, educator and media producer. His extensive background in production and education has led him to produce projects including television commercials, instructional manuals and videos, children’s educational CD-ROM games and international film festivals. Working in a variety of styles designed to both entertain and help people learn, his enthusiasm for communication, education and animation create unique and unforgettable productions.

David Baker’s skills include educational management, instructional design, animation, video production, 2D and 3D graphic applications, writing, marketing and management of media production resources.

### Professional Highlights

#### Educational Institutes

Ferris State University / Grand Rapids - Program Coordinator / Instructor / Curricular Designer  
Digital Animation and Game Design program (DAGD)

2005 – Current. Program Development Committee DAGD

2009 – Current. Curricula and staff development for DAGD/FSU, Hyderabad, India

2007 – Current. Supervise and direct the DAGD Summer Camp project and scholarship fund

2007 – Current. FSU Student Assessment Committee member

2008 – Current. FSU Student Advising Committee member

2009 – Developed and wrote department website at <http://dagd.ferris.edu>

2007 – Kent County Technical Center Graphic Communication Advisor Council and Chairman

Kalamazoo Valley Community College – Instructor / Curricular Designer

2000 – 2005 Developed and instituted KVCC’s Animation Curricula

2002 – 2004 Core planning team member of the \$10m Center for New Media

2001 – 2005 Founder and Director of the Kalamazoo Animation Festival International

Developed over \$500 K in grants and in-kind support for KAFI. <http://kafi.kvcc.edu>

## **Film, Video and New Media Companies**

- 1994 – 2001 Key Producer and Director - Lawrence Production. Developed animated films and CD-Rom games for national and regional clients including The Kellogg Foundation, Kellogg's Cereal City, Children's Television Workshop (Sesame Street), Upjohn, Eaton Corporation, Phillips Media, WOTV, WUHQ, WGVU, MTV and the Hope Health Network.
- 1985 – 1994 Created and directed Classic Animation; the first successful animation company in Michigan that brought 2d animation and computer graphics together. Worked with clients such as Herman Miller, Steelcase, Amway, AllenTest Products, Easter Seals, Kellogg's.
- 1984 – 1985 Art Director/Producer, Kalamazoo Writing and Video – Worked with industrial, pharmaceutical and advertising companies in a variety of media.
- 1983 – Technical Illustrator and Animation producer for DynaArabia , Ras Tanura, Saudi Arabia. Worked in a team art environment producing educational illustrations and textbooks for oil refining technology.
- 1977 – 1983 – Industrial Media Inc. Art Director. Produced film and animated spots for Consumers Power, US Navy, Caterpillar Tractor and a variety of industrial and advertising clients.

## **Education**

Ferris State University, Big Rapids MI – M.S.C.T.E. 2009 – *Highest Honors* 3.97 GPA

Hope College, Holland, MI – B.A. - Art / psychology – 1977

## **Professional Organizations and Film Festivals**

- Media Communicators Association International ( MCAI – 1986 – present)
- Association International du Film d'Animation ( ASIFA – 1994 – present)
- West Michigan Film and Video Association (WMFVA – 2005 to present)
- Principle Judge – Ann Arbor Film Festival 2006.
- Guest Speaker – Saugatuck Children's Film Festival 2003, 2004.
- Judge and Animation Speaker – Vision Film Festival – Roanoke VA – 2006
- Faculty Advisor for Ferris's Flying Bulldogs – KAFI Cartoon Challenge 2009
- Seminar Speaker on Animation and Computer Graphics ITVA National conference 1990

## **Awards and Professional Highlights**

- Co- Produced 25 episodes of "Mark Kistler's Imagination Station "for PBS broadcast - 2008
- Founder and Director of the Kalamazoo Animation Festival International – 2001 -2005
- Codie Award – "Lambchop Loves Music" – CD Rom Game – Phillips Media - 1995
- New York Film Festival Silver Award for – 'Who Knew?' – Herman Miller - 1992
- Developed and animated 'Mr. Grit' – a core character for Kellogg's Cereal City and training videos.
- Cine Golden Eagle for 'Pigopolis' –an energy conservation film – Consumers Power – 1980
- Over 20 Addy awards 1985 – 1997

# WARD MAKIELSKI

487 Grove St.  
Framingham, MA 01701  
[ward.makielski@gmail.com](mailto:ward.makielski@gmail.com)  
(508) 877-6563

## QUALIFICATIONS

- Effective designer and educator in digital animation and game design.
- 15+ years of industry experience in software production, game design, and digital animation.
- Proven record of taking products from concept to completion - credits on 20+ shipped titles.
- Passion for creative technology; well-balanced between artistic and technical skills.
- Proficient in illustration, animation, 3D applications, level editing and authoring tools, web development, technical writing (design/functional specs) and scripting languages.
- Extensive experience “working in the trenches” creating assets and scripting code.
- Proven management capabilities with experience running internal development teams, external vendors, and relationships with clients and licensors.

FERRIS STATE UNIVERSITY – Grand Rapids, MI

2005-present

### Instructor – Digital Animation and Game Design

Responsible for setting program direction, hiring faculty, advising students, and teaching courses in animation and game development for a four year Bachelor’s of Applied Science degree program with approximately 150 students.

**Program Director/Program Coordinator, 2005-2007**

#### Courses Taught:

**DAGD 100 - Introduction to Computer Animation, Fall 2007**

Foundations in 3ds max modeling, animation, texturing, lighting, and rendering.

**DAGD 103 - 3D Visualization – 3D Drawing & Sculpture, Spring and Fall 2007**

Fundamentals of creating 3D projects beginning with 2d visualization and traditional modeling techniques.

**DAGD 260 – Multimedia I, Spring and Summer 2006**

Basics of Flash as an animation and authoring tool for web and stand-alone applications.

**DAGD 300 – Game Design and Theory, Fall 2005, Fall 2006, Fall 2007**

Development and presentation of concept, game design, and functional specifications, along with design and creation of interactive prototypes and playable game levels using UnrealEd.

**DAGD 460 – Multimedia II, Fall 2006, Summer 2007**

Advanced multimedia topics in Flash with an emphasis on ActionScript.

**DAGD 499 – Senior Capstone, Fall 2007**

Completion course for the degree program focused on students’ completion of presentation materials (resume and portfolio) and a semester-long final project – game or animation.

#### Program Improvements:

##### **Developed Student Organization**

Sponsored student chapter creation of International Game Developer’s Association (IGDA).

##### **Guest Speaker Series**

Established format for visiting professionals to present expert content to students. Guests to date have included Duane Loose (Art Director, EA), Chris Vuchetich (Senior Game Designer, Amaze Entertainment), Allen Turner (Game Designer, Wide Load), Tony Benedict (Classic Animation Director, Hanna Barbera, Disney, Warner Brothers).

##### **Curriculum Changes**

Successfully navigated review and approval process for massive program course update, including the creation of some dozen new classes.

##### **Summer Camps**

Started week long summer camps in digital animation to introduce program and content to high school students. These camps have served as a feeder program and have resulted in additional DAGD enrollments.

##### **Scholarship Fund**

Established scholarship fund with revenue from summer camps.

##### **Established Program Review and Promotional DVD**

Introduced post-mortem course review to screen student work and evaluate content across program at the close of every semester – assessment considerations and “best of show” content identified for program promotion, growth and evolution.

## Professional Profile

### Summary of Professional Experience

- Leadership Expertise
- Training & Presentation
- Asset Planning
- Supervision & Administration
- Strategic Planning
- Collaboration & Mentoring
- Teaching & Advising
- Coordinating Training & Needs Planning
- Curriculum Review & Development
- Developed Training Manuals
- Record Keeping & Assessments
- Budget development & Implementation

## Professional Experience

Ferris State University, Grand Rapids, MI  
6/2002-Present

### Faculty/Advisor

Digital Animation and Game Design

### Achievements:

- Developed a new Bachelors degree from concept to completion
- Created outstanding relationships between the Community, High Schools, faculty, administrators, and the professional Industry
- Worked with Universities & Colleges to promote articulation
- Present & Train at various learning events & conferences

### Responsibilities:

- Teach a full load of classes plus overload when requested
- Advise students
- Consortium review
- Select books, courseware, and other educational delivery material
- Facilitate High School visits & student orientations
- Develop new courses & teach them (Webct & Blackboard)
- Design & implement new computer labs
- Work with Industry to maintain industry standards & internship possibilities
- Coordinate & Monitor student activities
- Collaborated with peers on assessments
- Encouraged & promoted online delivery
- Review and advise on hiring panels
- Mentor students & peers

# cory heald | resume

2451 Ancient Dr. SW  
Wyoming, MI 49519  
616.308.0189  
healdc@ferris.edu

## objective

To show competence in my ability to teach in the creative field.

## experience

2004-present Ferris State University Grand Rapids, MI

### Adjunct Instructor

- Developed 10 unique classes for the Digital Animation & Game Design Program.
- Received student evaluation scores consistently of 4+ out of 5.
- Helped increase the quality of work from students to a professional level.

2005-2006 DesignVox East Grand Rapids, MI

### 3D Director

- Conceptualized, managed and produced 3D animations for various clients.
- Assisted in the integration of 3D into existing pipelines to expand company offerings.
- Produced high-end renderings for print media.

2000-2005 Dots in Motion Grand Rapids, MI

### Owner

- Started the firm to create 3D animations for local and global companies.
- Worked with diverse projects from real-time to photorealistic brochure renderings.
- Created a enjoyable work environment and with high employee dedication.
- Developed strong customer loyalty that still lasts today.

1998-2000 Focal Point Grand Rapids, MI

### 3D Artist\Sales\Trainer

- Learned, trained and sold Autodesk software.
- Produced architectural renderings local firms.
- Taught 3ds Max at Grand Rapids Community College.

1996-1998 Facet Inc. Milwaukee, WI

### 3D Director

- Established a creative department for the company.
- Created marketing material for various advertising campaigns.
- Worked with CAD department to create furniture symbols for a layout software.

1994-1996 Enviro Systems Furniture Caledonia, MI

### 3D Artist

- Developed efficient 3D pipelines to assist sales team.
- Worked with engineers to create visual prototypes.
- Assisted interior designers with color and layout design through 3D.

## education

2004-2007 Ferris State University Grand Rapids, MI

- B.A. Digital Animation and Game Design.
- Graduated summa cum laude.

## volunteer/free work

2006 Daybreak Community Church Hudsonville, MI

- Donated an animation for the opening of the Infusion Conference.

2000-present Cornerstone Church Caledonia, MI

- Developed 9 professional logos for different areas of the church.
- Create visuals for 6 series.
- Direct and operate camera team for services.

## interests

art, mountain biking, gaming, photography

## **David R. Anderson**

**4907 Dorchester Drive  
Norton Shores, Michigan**

**231.7987127 email: daveanda@gmail.com**

---

**1964 – *Personal assistant to Dr. Bill Bright, Campus Crusade for Christ***, assigned

to develop first two commuter campus ministries – reported directly to Dr. Bright.

**1965 – *Graduated from Cal State Los Angeles*** – double major in Psychology and Classical Literature.

**1968 – *Graduated with Master of Divinity degree – Fuller Theological Seminary***, Pasadena California. Subsequently served two terms on alumni committee, chairman during one term, authored fine arts edition of *Theology News & Notes* periodical.

**1966-68 – *part time youth pastor*** in Evangelical Covenant Church denomination. Was part of initial group of resource development Youth Directors in Southern California – worked with “*The Wittenberg Door*” humor magazine.

**1967-68 – *apprentice in film production*** under Dave Johnson and Carroll Nyquist at *World Wide Pictures*, the Billy Graham theatrical film ministry in Burbank California.

**1968-1974 – *associate producer with Johnson-Nyquist Film Productions*** – produced dramatic and documentary films for all but one of the major religious/inspirational film distribution companies. Developed a special marketing program for four titles JNP ended up owning and brought them successfully to multi-markets.

**1974-1980 – *vice president, marketing Cathedral Films Inc.*** Took over new evangelical film division, Outreach Films and took it from 3 titles to 9 titles, became known as the highest quality films available in the 70’s to the religious market. Refurbished the classical line of Cathedral biblical titles. Cleaned up rental franchises throughout U.S. and Canada --facilitated crossover work with Walt Disney Non-Theatrical distribution in identical film outlets. Supervised all production of film and filmstrips. Took company to five time revenue stream in first 3 years. Administered moving company from headquarters in Burbank across from NBC to new facilities in Westlake Village, California. Set up streamlined inventory flow of very complicated multi-component media kits, and brought production scheduling into high accountability procedures.

**1980-1991 – *vice president, marketing and production for Gospel Films, Inc.*** Took over all marketing and production of major religious media ministry in Michigan. Increased new product flow dramatically from two new titles per year to more than 90 new titles in first 6 years. Incorporated new system and design for franchised library system, tripled revenue income from film rentals and special leases in first five years. Fulfilled role of executive vice president, coordinating much of CEO’s ministry during my tenure there.



**1991 – formed Anderson & Associates – independent media consulting company** with six clients, created major theatrical screenplay based on life of Instructor Cn Luther with producer of *Jesus of Nazareth*. Produced 26 Movie of the Week programs for the INSP Television Network in Charlotte, North Carolina.

**1991 – 1998 – general manager of new media division at Zondervan Publishing House.** After consulting for seven months, joined this major Christian publishing company with the mandate to create a new audio and video business as a separate profit generating division inside the ZPH corporate structure. Took a new business into a six million dollar company division in the first three years. Created major new product lines in audio and video, then merged that business with Electronic Publishing to form the formal New Media division. Created new animation series and two award-winning feature animation titles and released them through 20<sup>th</sup> Century Fox during my tenure at Zondervan.

**1998-2000 – vice president entertainment and licensing for Tommy Nelson.** Joined this new division under the Thomas Nelson Publishing banner with the mandate to pick up the then existing eleven new non-print products and grow the entertainment side of this exciting new children's product company. Produced 35 new titles in first year, taking ration mix of published books to entertainment products from a 80% books 20% entertainment product to a 50%-50% even split in types of product over first 18 months of leadership. Produced award winning video series including “*The Visual Bible for Kids*”, and “*Little Dogs on the Prairie*” animation, as well as facilitating development and growth of the *Adventures in Odyssey* brand name under multi-product development contract with Focus on the Family. Part of team that brought Tommy Nelson to fourteenth (2000) and fifteenth (2001) largest children's product companies in North America according to *Publisher's Weekly* annual survey.

**2001- 2007 – founding director Compass Arts Film Academy -** Aligned with a 35mm production company in Grand Rapids and started a mentoring based film school which graduated 125 students in its first year. Created semi-annual intensive experiences in both the Hollywood and the Vancouver film market. Developed a one year multi-course program that became one of the highest rated Career School accreditations in the state of Michigan. Placed recent graduates on independent feature films where they received strong endorsements from department heads they were responsible to.

**2004-2007 – adjunct professor in Communication and Media Studies –** specialty in Film at Cornerstone University; and adjunct professor teaching Story Structure for Film and Gaming at Ferris University, Grand Rapids Campus – where I have taught all incoming freshman in their Digital Animation and Game Design major.

**2007-present – associate professor: Communication and Media Studies – Cornerstone University;** while continuing my connections with Ferris University as ongoing adjunct professor in Digital Animation and Game Design. Also served one academic year as interim Division Chair in my department at Cornerstone University.

Credits as **Story Editor on the 20<sup>th</sup> Century Fox Feature Film, “The Ultimate Gift”**, starring Amilee Breslin, James Garner, and Brian Dehany. Also offer my services for story coverage and storyline consulting to a variety of independent feature film productions.

Served as condenser and director for audio editions of best-selling novels for *Oxbow Productions*, *Zondervan Publishers*, and *The Thomas Nelson Publishing* company.

### **Other Interests/activities:**

Produced *America's Tallest Singing Christmas Tree* in west Michigan for fourteen years. Created this major fund-raiser from its inaugural construction and presentations gaining national recognition with special guest segments on ABC and NBC.

Associate producer, technical director, & judge in the *Miss America scholarship system* for twelve years. Was set designer for Miss America state pageants for eight years.

Serve on the board of the *Damah Film Festival* in Seattle, and then moved it to Culver City – annual festival with extensive grant programs to film visionaries creating films with wholesome life-affirming values.

Invited on the founding board for the *Heartland Film Festival*, Indianapolis, Indiana; which has become one of the top five film festivals in America.

Also helped to format and launch the annual *City of Angels Film Festival* at the Directors Guild in Beverly Hills, California; and the *Reel Spirituality* conference for film professionals – also held at the Directors Guild.

Wrote episodic animation for *Sony Wonder*.

Served on founding committee to launch the *L.A. Film Study Center*, under the auspices of the *CCCU Association of Colleges*.

Currently reside in Norton Shores, Michigan with my wife Carol – married 44 years; with three married daughters; each have created their own respective leadership in fields of entertainment, theme park development, film production, and theatre performance.

**Joshua Freaney** \_joshuafreaney@gmail.com \_ (616)406-7046 \_

**\*Education\***\_ Bachelors of Science in Game Design Full Sail Real World Education Orlando, FL Sept 2, 2005 Computer Science Major Grand Valley State Allendale, MI 2002 - 2003 \_

**Academic Experience\***\_

- Compass Arts Academy Grand Rapids, MI September 2001 - May 2002 **\*Intern\*** - Network and Computer Administration, Film Editing, Film Crew Support, Web Development  
Destructobor/Vhaydos - game project August 2004 **\*Programmer\*** - 2D Art Design, Input, Level Editor, Interface Design and Implementation, Particle System  
Until the Crystal Cracked - game project April 2005 **\*Programmer\*** - 2D Art Design, Input, Tools, Particle System, System Architecture Design, File IO Framework, Animation and Effect System Integration **\*Project Administrator\*** - Employee Scheduling, Risk Management, Review and Integration of Systems and Technologies, Motivation and Moral Supervisor \_

**Work Experience\_\***

- Visser Family YMCA Grand Rapids, MI January 2001 - August 2002 **\*Rock Climbing Wall Supervisor\*** - equipment maintenance, HR, and instruction of adults and children in use and safety with equipment. Internet 2000 Grand Rapids, MI June 2002 - August 2003 **\*Tech Support Specialist\*** and **\*Wireless Administrator\*** - wireless sales, installation, maintenance, phone support, and database management.
- AOL Games - game project Sept 2005 **\*Lead Programmer / Production Manager\*** - 2D Art Design, Input, Tools, Particle System, System Architecture Design, File IO Framework, Animation and Effect System Integration.
- Ferris State University - Aug 2006 - Present **\*Instructor/\*\*Curriculum Design/Online Learning Exploration\*\*** - **\*Intro to Game Design, Flash 1 & 2, Multiplayer Game Programming, Programming 1 & 2 Apress** - December 2008 - Present
- Technical Book Review - Foundation Game Design with Flash, and TBD title\*

**Technical Skills\_\***

**\* Proficient with OpenGL \* Well Versed in Actionscript 3.0 Development \* Proficient with XNA \* Skilled in use of C,C++,C# \* Experienced using MFC for tool creation \* Fast at absorbing API™s of any kind for plug-in or exporter creation \* Basic Understanding of Maya, Max, Swift3D, and Lightwave, Modo \* Proficient in using Flash for web development and animation \* Skilled with video software such as Premier, Avid and Final Cut Pro, After Effects \* Basic Understanding of 2D art and photo manipulation software such as Photoshop, Illustrator**

# Robert Evans

2745 Birchcrest Dr SE #217 989.858.0052  
Grand Rapids, MI 49506 robert.a.evans1@gmail.com

## EXPERIENCE

2001-2007 Michigan Army National Guard Lansing, MI

### Multimedia Illustrator / Graphic Designer

- Provided graphic design aesthetics to help improve retention of information during briefings and meetings for Officers.
- Recreated International cities in occupational countries to help establish an understanding of an area prior to deployment.
- Worked with independent contractors for marketing campaigns to increase active duty retention .

2007-2008 Freelance Grand Rapids, MI

### Photo-realistic 3D Artist

- Created highly detailed and textured models for real-time web viewing.
- Improved productivity and deadline times over end products by 50%.
- Initialized new markets and products to world class computer based companies.

2007-2010 Ferris State University Grand Rapids, MI

### Adjunct Professor

- Taught DAGD 103 - Drawing and Sculpture.
- Taught DAGD 380 - Digital Sculpting and Texturing.
- Taught DAGD 490 - Advanced Portfolio.

2009-2010 YetiCGI Grand Rapids, MI

### Assistant Lead Art Director

- Oversee 2-15 junior artists.
- Responsible for creating the physical, visual appearance for projects.
- Directly oversee artists; level designers, graphic artists, and illustrators.

## SOFTWARE

- Adobe Photoshop.
- Adobe Illustrator.
- Adobe Premier.
- Adobe Flash.
- Autodesk - 3D Studio Max 5-2010.
- Autodesk - Softimage 2010
- Autodesk - Maya 2010
- Pixologic ZBrush 2 & 3.1 & 3.5.
- Luxology Modo 401

## EDUCATION

2004-2007 Ferris State University Grand Rapids, MI

- B.A. Digital Animation and Game Design.

## INTERESTS

Fine Arts, Music, Computers and Literature.



## Appendix B – Competitor Programs

### CMU Program

Contributed by: Drew Davidson

The Entertainment Technology Center at Carnegie Mellon University is the premiere professional graduate program for interactive entertainment as it is applied across a variety of fields. The ETC offers a unique two-year Masters in Entertainment Technology degree that is jointly conferred by the School of Computer Science and the College of Fine Arts.

At the ETC, students learn how to work effectively in interdisciplinary teams and create engaging interactive experiences. They are prepared for any environment where technologists and artists work closely on a team; like theme parks, children and science museums, web sites, mobile computing, video games and more.

We have a project-based curriculum with almost no lecture-based coursework. Our only required courses are in the first semester: Building Virtual Worlds, ETC Fundamentals, Improvisational Acting, and Visual Storytelling. In their last three semesters, students take a free elective that can be any course taught at CMU, and the rest of their time is in the project courses.

Project courses consist of a faculty assigned, interdisciplinary team of students who share an office for a semester. Each team has a faculty advisor who guides them toward building an artifact; often a prototype, but sometimes a finished product for installation, and some teams have an external sponsor/client. These semester-long projects originate with external clients, faculty research, or student pitches.

Throughout their semesters, students are provided with in-depth critiques. These critiques are split between process grades and product grades. Process grades focus on their individual accomplishments and challenges, while product grades assess the work the group has done together as a team.

Pittsburgh isn't the center of the interactive entertainment or video game universe (yet!) so we send students to conferences and to visit the industries for which they are preparing themselves. All ETC students are encouraged and supported to do an industry internship during the summer between their two years. And it should also be noted that several successful ETC projects have inspired entrepreneurial ETC alumni to start local spin-off companies that are creating the future of interactive media and video games. There are now 6 spin-off companies operating in Pittsburgh.

Looking forward, the ETC has evolved into ETC Global. This involves campuses world-wide, starting with Adelaide, Australia and California in 2006 and Seoul, Korea, Singapore and Osaka, Japan in 2007. These campuses form parts of a distributed whole; our students will be able to shift from location to location on a semester-by-semester, project-by-project basis to complete their two-year degree. In a rapidly globalizing world, we think this grand experiment will prepare our students for the jobs of the future, where having a team distributed over multiple continents will become commonplace.

The Entertainment Technology Center is simply different. We emphasize leadership, innovation and communication by creating challenging experiences through which students learn how to collaborate, experiment, and iterate solutions. Our students graduate well-prepared to have a positive impact in their fields. The ETC is the place for students interested in taking the lead in the industry.

<http://igda.org/education/>

## **Full Sail Program**

Contributed by: Rob Catto

Full Sail Real World Education, a college outside of Orlando, FL, has been an innovative educational leader for those pursuing a career in the entertainment industry. In 1998, the Associate of Science degree in Game Design and Development was developed to fill the need for academically trained employees. In 2004, the program was converted to a Bachelor of Science degree in Game Development.

Students experience a “real world” education, with a professional class structure of 8 hours per day, and a 24-hour round the clock schedule which earned Full Sail the “Most Innovative Program” Award by the Florida Association of Postsecondary Schools and Colleges.

The Game Development degree is a Software Engineering program with a game development focus. The curriculum is fashioned using the Software Engineering framework provided by the Association for Computing Machinery. Students are scheduled for two courses a week lasting either four or eight weeks. Students attend classes five days a week attending a four hour lecture followed by a four hour lab.

Course curriculum can be broken down by the following major sections and credit hours.

- General Education – 24 credit hours
- Professional Practice – 08 credit hours
- Computing Essentials – 24 credit hours
- Software Engineering – 42 credit hours
- Game Design – 10 credit hours
- Project Development – 26 credit hours

The Project Development courses immerse students in a game development project with heavy emphasis on core teamwork as well as project planning and documentation. Students are also introduced to a Software Quality Assurance cycle with an emphasis on peer review and proper defect reporting mechanisms. Student assignments include creation and maintenance of technical design documentation, implementation of game technology, and design and implementation of a quality assurance cycle, designed to provide a strong foundation for delivering milestones in subsequent courses.

Full Sail’s Game Development degree program has twelve starts each year with the fall months having the highest population.

More information about the Game Development degree program and the other Full Sail degree programs can be found at: <http://www.FullSail.edu>

## Northumbria University

Computer Games Software Engineering Degree Program at Northumbria University, Newcastle, England. Contributed by: Dan Hodgson

BSc (Hons) Computer Games Software Engineering at Northumbria University combines traditional computer science disciplines with modules specifically about games development. In the main the program is aimed at producing high quality graduates for programmer roles within the industry, backing up the subject-specifics with a broader range of computing disciplines. Introductory games design and asset production are also taught so that graduates would appreciate the jobs of those around them. The program is delivered over 4 years. Here is an outline of the modules studied:

### Year 1

- Programming for games 1 & 2 : starting from scratch in C++ with the principles of programming, working through to development of small 2D games in DirectX
- Maths for Computer Games 1: Trig, complex numbers, matrices, vectors, calculus and particle dynamics
- Computer games Design: principles of good game design, nature of the industry, industry issues & ethics, Creation of a game design document
- Relational Databases: SQL and database design using Oracle
- Web design: HTML, Javascript, PHP etc.
- Computer Systems Fundamentals: basic processor architecture & assembler

### Year 2

- Programming for Games 3&4: More 2D programming in DirectX, compiler writing, 3D programming on a GameCube devkits
- Maths for Computer Games 2: Differential Equations, rigid body dynamics, Numerical techniques, 3D representations and affine transformations in 3D
- Game Systems Architecture: Intermediate processor architecture & assembler (pong on 6800)
- Foundations of HCI: Interaction principles, interface design, use of peripherals, presentation of information
- System Design and Architecture: Top-down system design using UML
- Object-oriented game development: bottom-up look at O-O design patterns for game systems using UML
- Project Management and Professional Skills

### Year 3 Industrial Placement

### Year 4

- Games Case Project: Group project creating a significant game demo
- Advanced Architecture for Game Systems: advanced game systems architecture, including GameCube and ARM architecture.
- Advanced Programming issues for games: An advanced module looking at relevant programming techniques for up-to-date game development. At time of writing this focuses on distributed and network programming
- Multimedia assets for computer games: 3D modeling and video production
- AI for computer games
- Level 3 option module

For more information please see <http://www.gamesdegree.com>

## USC Program

Contributed by: Tracy Fullerton [tfullerton\[at\]cinema.usc.edu](mailto:tfullerton[at]cinema.usc.edu)

The School of Cinematic Arts at the University of Southern California created a Master of Fine Arts in Interactive Media in 2002 and a Bachelor of Arts in Interactive Entertainment in 2005. These programs were endowed by a gift from Electronic Arts and focused on developing the next generation of creative designers and producers for the games and interactive industries. There is a strong focus in these programs on procedural literacy, innovation in game design, and collaborative creative work.

In 2006, the Viterbi School of Engineering at USC created a Master of Science and Bachelor of Science in Computer Science with an emphasis in Games. These programs, which include integrated curriculum with the core production cycle in place at the School of Cinematic Arts, are focused on developing game programmers experienced in creative teamwork and collaboration.

In 2007, the Roski School of Fine Arts created two minor programs that also integrated with both the School of Cinematic Arts and the Viterbi courses. In addition to these formal degree programs, the Annenberg School of Communications offers courses in cultural game studies. Also, a University-wide research unit – the Games ORU – was established in 2007 to promote further integration of curriculum, research labs and collaboration among all USC programs addressing games and game design.

The integrated production courses for the M.F.A./M.S./B.A./B.S. students in both the School of Cinematic Arts and the School of Engineering include:

Game Design Workshop – a beginning game design course focused on the design of innovative game mechanics, prototyping and play testing in an iterative design process.

Intermediate Game Design and Development – an intermediate production class in which teams of two design and develop a small digital game. Emphasis is on digital prototyping, play testing, and production management.

Advanced Game Projects – a two-semester advanced production course in which teams of



6-10 students produce an innovative game project mentored by industry experts. This course may be taken as either a crew member or project lead.

Project leads and game concepts are selected by a competitive pitch process involving faculty, prior team leads and industry mentors.

In addition to this core production cycle, students in the School of Cinematic Arts take classes in: film and video production, screenwriting, history and theory of interactive media, business of games, sound design, visual design, etc. B.A. students also must fulfill their general education requirements for the four-year degree. M.F.A. students must produce a thesis project and paper, the researching of which should contribute new knowledge to the field. Full course lists for both the M.F.A. and the

Students in the M.S./B.S. program take the core Computer Science curriculum in addition to the integrated production cycle and game-specific computer science topics such as AI, graphic programming, etc. Full course lists can be found at:

B.A. can be found at: <http://interactive.usc.edu/about/>  
<http://www.cs.usc.edu/admissions/graduate/msgames.htm> and  
<http://www.cs.usc.edu/current/undergrad/default.htm>

## UTS Program

Contributed by: Yusuf Pisan [ypisan\[at\]it.uts.edu.au](mailto:ypisan[at]it.uts.edu.au)

University of Technology, Sydney (<http://www.uts.edu.au/>) started the Bachelor of Science in Games Development in 2006. Australian university degrees are typically three years. For the BSc in Games Development is a four year degree where students study two years in TAFE (similar to community college or training institution) and then study two years at UTS. The first two years is very hands-on where students focus on programming skills, learn to work with game engines and work in teams to produce a series of games. The next two years at UTS is in the Faculty of Information

Technology, aimed at increasing students' depth of knowledge in computer science and computer games.

While at TAFE, students have around 30 hours of class time per week. The classes are run mostly in workshop/studio mode. At UTS, students typically have 8 hours of lectures and around 8 hours of labs and tutorials per week.

At UTS, students take the following game related courses (as well as other CS courses)

Computer Graphics – a traditional graphics course with a slight games orientation

Game Design – focusing on design issues through text based games, 2D games and writing design documents, minimal programming knowledge required

Game Programming – heavy programming course where students build a game engine from scratch. Emphasis on advanced graphics techniques, such as BSP trees, and some simple AI techniques (finite state machines, LUA based scripting and rules)

3D Computer Animation – focusing on character movement and short story. Students create a five minute animation using Maya.

• Computer Graphics Rendering Techniques – student build their own ray tracing engine from scratch • Systems

Development Project – students complete a group project over two semesters. Groups are usually ten to fifteen students requiring large amount of teamwork. • Computer Graphics Project – an independent project where students need to develop an idea from scratch and implement it. TAFE places are limited to 30 and UTS places limited to 20 students each year. Students need to apply and be selected to continue from TAFE to UTS. Student whose applications are not successful receive a Diploma of Games Development from TAFE. At UTS, students typically take 4 courses in each 14-week semester, maximum total of 16 courses for 2 years at UTS.

Official information about UTS course can be found at <http://www.handbook.uts.edu.au/it/ug/c10229.html>

## **WPI Program**

Contributed by: David Finkel ([dfinkel@wpi.edu](mailto:dfinkel@wpi.edu))

The major in Interactive Media and Game Development (IMGD) (<http://www.wpi.edu/Academics/Majors/IMGD/>) at Worcester Polytechnic Institute, Worcester, Massachusetts, was begun in the Fall of 2005. It is jointly administered by the Department of Computer Science and the Department of Humanities and Arts. It is a four-year undergraduate program, and leads to a Bachelor of Science degree.

Undergraduate courses at WPI given in a seven week term, with 28 contact hours. There are four terms in the academic year, and students typically take three courses per term. The major offers two tracks, a Technical track, focusing on programming, and an Artistic track, focusing on visual arts, music and writing. Two guiding principles of the program are 1) that all students take some course work in each of the tracks, and 2) Artistic students and Technical students work together in courses and in projects.

Students in the IMGD major are required to take two of the following three core courses:

Critical Studies in IMGD, giving a critical overview of the elements of a game, and establishing a common vocabulary for analyzing games

The Game Development Process. This course discusses the roles of the different contributors to the creation of a game. Students create simple games.

Storytelling in Games.

They also take one of two courses focusing on social and ethical issues: Social Issues in Interactive Media and Games or Philosophy and Ethics of Computer Games.

In addition to these courses, students take courses specialized for their track.

Technical majors take ten courses in Computer Science, focusing on areas of Computer Science relevant to game development, such as Software Engineering and Computer Graphics. They also take two advanced technical IMGD courses, focusing on low-level game programming in the first course, and, in the second course, higher-level topics such as AI and networking in games.

In the Artistic track, students take ten courses in Humanities and Arts, and two advanced artistic IMGD courses, covering the creation of art assets and their integration in game development. The culmination of the major is a Major Qualifying Project, a project three courses in size. Artistic and Technical students work together to design and create a game or other interactive media project.

## Appendix C – Faculty Survey Results

### Frequency Table

q1 Satisfaction w/ overall prog quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

q2 Program comments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	40.0	40.0	40.0
	Amazing considering where we started from. The work continuously improves. While there are still significant holes in our work, we are filling them every semester.	1	20.0	20.0	60.0
	None	1	20.0	20.0	80.0

	There are a few areas that we our failing our students; up to date computers and labs that are open more often. The amount of work that we demand from our students to ensure they will be marketable in this career field is enormous and not giving them the best possible computers and enough time to use those computers is effecting the overall work of our students.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q3 Satisfaction w/ overall instructor quality**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q4 Instructors comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	40.0	40.0	40.0
	None	1	20.0	20.0	60.0

	Top notch and a good blend between good technicians, good artists and real world perspective.	1	20.0	20.0	80.0
	We can all improve in one area or another. Having open sessions for training classes and conferences (GDC \$ Siggraph) would be a great benefit to all of us.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q5 Satisfaction w/ overall software qual/relevance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q6 Software comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	60.0	60.0	60.0

	All of the software that we use and provide to our students is top of the line in almost every possible field. The only area that is lacking is with the VFX software. The price point is the major factor in regards to that software though, at anywhere from \$8,000-\$250,000 a seat I can understand why we do not have everything needed for VFX, we also only teach one or two classes that would require the use of that type of software.	1	20.0	20.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q7 Satisfaction w/ overall hardware qual/relevance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	2	40.0	40.0	60.0
	Somewhat Dissatisfied	1	20.0	20.0	80.0
	Very Dissatisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q8 Hardware comments**

- Could use dedicated lab space and communal areas. We could use more of an 'art vibe' around here. Bulletin boards are OK, but not easy for people to see as the 'back row' is not travelled space.
- need better projectors and also better student life areas or any at all :)
- The systems that we give our students to work on are becoming very dated. We're using a ten year old operating system that is only 32bit. We need to update our systems to a more modern OS and give them a much greater amount of RAM. 4GB of RAM isn't going to cut it anymore. The labs are not being used to their full potential because most of the students have a better computer at home. Having dated computers that cannot handle the polygon counts or the needed amount of video ram is making it nearly impossible for the students to bring their work into the labs to work, or even turn in their homework. When a 4 year old laptop can run better than the computers we have in the labs we have a problem. Wish things ran properly in our labs

**q9 Satisfaction w/ overall curriculum qual/relevance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q10 Curriculum comments**

- **It could go deeper... trying to do too much in too little time makes some of the curricula thin. Students are just hitting stride, then they graduate.**



- For the most part what we teach is exactly what the students are going to need in the future. I would like to see a tighter focus towards game art though. Characters, vehicles, props and environments for games are all starting to fall behind.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	40.0	40.0	40.0
		1	20.0	20.0	60.0
		1	20.0	20.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q11a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0

**q11b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Somewhat Important	2	40.0	40.0	60.0
	Very Important	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q11d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	25.0	25.0
	Somewhat Important	1	20.0	25.0	50.0
	Very Important	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q11e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11f Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Somewhat Important	1	20.0	20.0	40.0
	Very Important	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q11g Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	3	60.0	60.0	60.0
	Very Important	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q11h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Somewhat Important	1	20.0	20.0	40.0
	Very Important	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q11i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	4	80.0	80.0	80.0
	Very Important	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q11j Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	33.3	33.3
	Somewhat Unimportant	1	20.0	33.3	66.7
	Very Important	1	20.0	33.3	100.0

	Total	3	60.0	100.0	
Missing	System	2	40.0		
Total		5	100.0		

**q11k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Effective	3	60.0	75.0	75.0
	Very Effective	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q12b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	2	40.0	40.0	60.0
	Very Effective	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q12c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12f Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12g Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q12h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q12j Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Effective	1	20.0	100.0	100.0
Missing	System	4	80.0		
Total		5	100.0		



**q12k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q13 Comments (including key areas not listed):**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14a DAGD100 - 3D Modeling - Animation 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14b DAGD101 - 2D Visualization - Storyboards**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	25.0	25.0
	Very Satisfied	2	40.0	50.0	75.0
	N/A	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q14c DAGD102 - Story Devel for Film - Gaming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14d DAGD103 - 3D Visual Drawing - Sculpture**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14e DAGD150 - Intr Game Design - Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	3	60.0	60.0	80.0
	Very Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14f DAGD180 - Intro Digital Video**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14g DAGD220 - Portfolio 1 - Sophomore Project**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	3	60.0	60.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14h DAGD230 - 3D Modeling - Animation 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	3	60.0	60.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14i DAGD255 - DAGD Programming 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q14j DAGD260 - Multimedia 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q14k DAGD300 - Game Design and Theory**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14l DAGD310 - User Interface Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	3	60.0	60.0	60.0
	Very Satisfied	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14m DAGD320 - Multiplayer Game Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14n DAGD330 - 3-Dimension Computer Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14o DAGD335 - 3D Modeling - Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	3	60.0	60.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14p DAGD340 - Animation - Junior Project**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	2	40.0	40.0	40.0
	Somewhat Satisfied	1	20.0	20.0	60.0
	Very Satisfied	1	20.0	20.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14q DAGD355 - DAGD Programming 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	3	60.0	60.0	60.0
	Very Satisfied	1	20.0	20.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14r DAGD375 - Advanced 3D - Character**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	3	60.0	60.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14t DAGD420 - Applied Digital Simulation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	1	20.0	20.0	40.0
	Very Satisfied	1	20.0	20.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14u DAGD430 - Digital FX**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0



	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14v DAGD460 - Multimedia 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14w DAGD491 - Applied Internship**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14x DAGD499 - Capstone**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14y GRDE216 - Digital Imaging**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	20.0	20.0	20.0
	Somewhat Dissatisfied	1	20.0	20.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14z GRDE225 - Webpage Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	1	20.0	20.0	40.0
	Very Satisfied	1	20.0	20.0	60.0
	N/A	2	40.0	40.0	100.0

**q14z GRDE225 - Webpage Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	1	20.0	20.0	40.0
	Very Satisfied	1	20.0	20.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q17 Strongest features of program – comments from faculty**

- Individual communication and interaction with students and lessons
- The overall breadth of understanding. The skills learned in DAGD allow students to get into most environments and thrive. Our students will survive once they get inside the system.
- The strongest features include a strong desire to teach students the right tools/skills to find employment.
- We have a solid foundation to build from to help our students enter the job market with a broad collection of skills. We can produce quality VFX, character, vehicle, environment artists as well as programmers, web designers, graphic designers and audio.

**q18 Areas that require the most improvement**

- 2d art, basic animation

- A cohesive curricula that ladders all students to excellence. Real 'animation' is practically nonexistent and needs to be addressed to be world class. Additionally 'design' seems to be a dirty word around here! While technical skill is applauded, design is considered 'fufu' and not very well regarded. All courses should consider this aesthetic. Additionally, if we are to be a game design program, we need to make games. We have come a long way to making this a reality, but we need to go further.
- Digital Imaging needs to be overhauled. It currently teaches the use of Photoshop in far too broad of a spectrum. Photoshop can be used in so many different ways and many of them do not apply to the techniques and skills required within our degree program or careers that the majority of our students are seeking. It should focus more on the creation of textures for game art for current gen systems. It should also have a firm foundation in the use of 3D texture painting.
- Processing of information, and also specific technology concerns (modern operating system, more ram, projector quality)

**q19 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	No	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**Statistics from Faculty Survey**

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1 Satisfaction w/ overall prog quality	5	0	1.20	1.00	.447
q2 Program comments	5	0			
q3 Satisfaction w/ overall instructor quality	5	0	1.20	1.00	.447

q4 Instructors comments	5	0			
q5 Satisfaction w/ overall software qual/relevance	5	0	1.20	1.00	.447
q6 Software comments	5	0			
q7 Satisfaction w/ overall hardware qual/relevance	5	0	2.40	2.00	1.140
q8 Hardware comments	5	0			
q9 Satisfaction w/ overall curriculum qual/relevance	5	0	1.20	1.00	.447
q10 Curriculum comments	5	0			
q11a Foundation/Traditional Media	5	0	3.40	4.00	1.342
q11b 3D Modeling & Animation	5	0	3.60	4.00	.894
q11c Game Design	5	0	3.00	3.00	1.225
q11d Digital Media	4	1	3.25	3.50	.957
q11e Professional Development	5	0	3.60	4.00	.894
q11f Programming	5	0	3.40	4.00	.894
q11g Project Management	5	0	3.40	3.00	.548
q11h Communication	5	0	3.20	4.00	1.304
q11i General Education	5	0	3.20	3.00	.447
q11j Other	3	2	2.33	2.00	1.528
q11k Other specified	5	0			
q12a Foundation/Traditional Media	4	1	3.25	3.00	.500
q12b 3D Modeling & Animation	5	0	3.00	3.00	1.225
q12c Game Design	5	0	3.00	3.00	.707
q12d Digital Media	5	0	3.00	3.00	.707
q12e Professional Development	5	0	3.00	3.00	.707

q12f Programming	5	0	3.00	3.00	.707
q12g Project Management	5	0	2.80	3.00	.447
q12h Communication	5	0	3.00	3.00	.707
q12i General Education	5	0	2.80	3.00	.447
q12j Other	1	4	3.00	3.00	
q12k Other specified	5	0			
q13 Comments (including key areas not listed):	5	0			
q14a DAGD100 - 3D Modeling - Animation 1	5	0	4.20	4.00	.837
q14b DAGD101 - 2D Visualization – Storyboards	4	1	4.00	4.00	.816
q14c DAGD102 - Story Devel for Film – Gaming	5	0	4.20	4.00	.837
q14d DAGD103 - 3D Visual Drawing – Sculpture	5	0	3.80	4.00	.837
q14e DAGD150 - Intr Game Design – Development	5	0	3.00	3.00	.707
q14f DAGD180 - Intro Digital Video	5	0	4.20	4.00	.837
q14g DAGD220 - Portfolio 1 - Sophomore Project	5	0	4.40	4.00	.548
q14h DAGD230 - 3D Modeling - Animation 2	5	0	4.00	4.00	.707
q14i DAGD255 - DAGD Programming 1	5	0	3.60	4.00	.548
q14j DAGD260 - Multimedia 1	5	0	3.80	4.00	.447
q14k DAGD300 - Game Design and Theory	5	0	4.20	4.00	.447
q14l DAGD310 - User Interface Design	5	0	3.40	3.00	.548
q14m DAGD320 - Multiplayer Game Programming	5	0	3.40	3.00	.894

q14n DAGD330 - 3-Dimension Computer Animation	5	0	4.20	4.00	.837
q14o DAGD335 - 3D Modeling - Animation	5	0	4.40	4.00	.548
q14p DAGD340 - Animation - Junior Project	5	0	3.20	3.00	1.304
q14q DAGD355 - DAGD Programming 2	5	0	3.60	3.00	.894
q14r DAGD375 - Advanced 3D - Character	5	0	4.00	4.00	.707
q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure	5	0	4.20	4.00	.447
q14t DAGD420 - Applied Digital Simulation	5	0	3.80	4.00	1.304
q14u DAGD430 - Digital FX	5	0	4.20	4.00	.837
q14v DAGD460 - Multimedia 2	5	0	3.80	4.00	.837
q14w DAGD491 - Applied Internship	5	0	4.20	4.00	.837
q14x DAGD499 – Capstone	5	0	4.20	4.00	.837
q14y GRDE216 - Digital Imaging	5	0	3.20	4.00	1.643
q14z GRDE225 - Webpage Design	5	0	3.60	4.00	1.673
q15 Instructors that stand out as excellent	5	0			
q16 Instructors that stand out as poor	5	0			
q17 Strongest features of program	5	0			
q18 Areas that require the most improvement	5	0			

# Appendix D - Graduate Follow-Up Survey Results

## DAGD APR...Grad Follow-Up

### Frequencies

Prepared by: Institutional Research & Testing, 06/10

### Frequency Table

q1 How long has it taken for you to be employed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Within six months	1	14.3	14.3	14.3
	Within a year	2	28.6	28.6	42.9
	Within three years	1	14.3	14.3	57.1
	I am not working in the field	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

q2 Current salary

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	\$20,000 - \$39,999	2	28.6	50.0	50.0
	\$40,000 - \$59,999	2	28.6	50.0	100.0
	Total	4	57.1	100.0	
Missing	System	3	42.9		
Total		7	100.0		



**q3 Work in field part-time w/in yr of graduaion**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	14.3	14.3	14.3
	No	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

**q4 Still employed in this fiel**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	57.1	57.1	57.1
	No	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

**q5 Geographically, where working**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	detroit, mi	1	14.3	14.3	14.3
	grand rapids	1	14.3	14.3	28.6
	Grand Rapids Michigan	1	14.3	14.3	42.9
	Grandville, MI	1	14.3	14.3	57.1
	Los Angeles	1	14.3	14.3	71.4
	Los Angeles, California	1	14.3	14.3	85.7

	Southfield, Michigan	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**q6 Gone on for additional training**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	28.6	28.6	28.6
	No	5	71.4	71.4	100.0
	Total	7	100.0	100.0	

**q7 Where**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	71.4	71.4	71.4
	I got the internship myself the summer before I graduated. They hired me 6 months after I graduated and I've been working there since.	1	14.3	14.3	85.7
	University of Southern California.	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**q8 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	14.3	14.3	14.3
	help with job placement, more student projects, more defined goals	1	14.3	14.3	28.6
	I am still looking for work in the animation field, but this economies kinda killer on that...	1	14.3	14.3	42.9
		1	14.3	14.3	57.1
		1	14.3	14.3	71.4
		1	14.3	14.3	85.7
		1	14.3	14.3	100.0
	Total	7	100.0	100.0	

**Alumni Comments:**

- I attended Ferris with the idea that it would help to prepare me for a job working within the game industry. While for the most part, I enjoyed my time in the DAGD, I honestly feel the program did not do a good job of giving me the skills needed for this type of career. Truthfully, I learned more about how to create game art, and the game industry as a whole, in 6 months of online personal study, then I was ever taught at Ferris. I do feel that the DAGD program at Ferris has the potential to be that for other students, and I have seen some improvements in the program since I left. However, I still feel the program has a long way to go.
- A few things that could and should be improved upon are listed below: Students should be given 24 hours access to the labs. The DAGD should have an environment where students that truly want to work can. When I was a student, I always tried to take advantage of open labs. Being able to show my work to others for instant feedback was tremendously helpful. Open lab time also allowed students to help each other to push their artwork beyond what they already had, and to improve their skills. However, often the timing conflicted with my schedule, and I was unable to work on projects when I wanted to. Most game companies,

and even most colleges have 24 hours labs, and not having 24 hour lab access is a huge hindrance to DAGD students.

- Higher level 3d classes should be simplified to allow for more creativity and originality on the projects. Two or three projects per class tops. Give the students time to make something truly amazing instead of 6 or 7 Ok things. It does not do a student any good to have a demo reel that is exactly the same as everyone else. I currently do not have any work that I did as a student of Ferris in my portfolio. For one, my skills have vastly improved because of personal study, and for two, I do not want to show anything I created when there are 50 things just like it out there.
- Standards need to be raised. I have seen a lot of the work that has come out of the DAGD both while I was a student, and after I graduated, and standards need to be raised. A lot of the work that is done, (and in honestly some of my own student work as well) is a far cry from where it needs to be. As a student, I saw too many projects that should not have been passed, given good marks. Teachers need to improve their skills. Many of the things I was taught were out of date, or inaccurate to actual industry work. Staff needs to do a better job keeping up to date with current industry trends, and technologies. Students should not have to turn to Google to get answers to basic questions or to learn how to push their art to the next level.
- I feel I left the DAGD Program with a solid understanding of the basic technical skills, but not really overall art concepts. But based on what I saw the last couple of years in the degree I think the newer students are being taught more art and basic concepts along with the technical skills. So the degree is headed in the right direction in that sense. However, I don't feel there is enough emphasis on teaching students how to build their resume and demo reel and perform a job search. I know I was not prepared to perform an effective and efficient job search upon graduation.
- I got my job thanks to the education at Ferris State. Although I think Ferris has a long ways to go before the program improves. I know that I am one of few graduates who actually have a real job in the games industry. I think Ferris teaches you what you should learn and accepts the fact that you try without holding the bar too high. I wish Ferris was more Digital Animation and Game Design focused and LESS focused on GRCC general education crap. These two areas are why our program at Ferris is not as good as others in the country.
- If only you had competent people in charge of internships, or to help w/job finding I'd recommend people attending FSU-GR. As it stands I've told several people to look elsewhere.

**Statistics**

	N	Mean	Median	Std. Deviation
--	---	------	--------	----------------

	Valid	Missing			
q1 How long has it taken for you to be employed	7	0	3.43	4.00	1.718
q2 Current salary	4	3	2.50	2.50	.577
q3 Work in field part-time w/in yr of graduation	7	0	1.86	2.00	.378
q4 Still employed in this field	7	0	1.43	1.00	.535
q5 Geographically, where working	7	0			
q6 Gone on for additional training	7	0	1.71	2.00	.488
q7 Where	7	0			
q8 Additional comments	7	0			

# Appendix E - Employer Follow-Up Survey

## DAGD APR...Employer

### Frequencies

Prepared by: Institutional Research & Testing, 07/10

### Frequency Table

#### q1a Foundation/Traditional Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

#### q1b 3D Modeling & Animation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

#### q1c Game Design

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1d Digital Media: Web design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	2	100.0	100.0	100.0

**q1e Digital Media: Video**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1f Digital Media: Flash**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1g Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	2	100.0	100.0	100.0

**q1h Programming-Scripting Languages**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1i Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	50.0	50.0	50.0
	Somewhat Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1j Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1k General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	50.0	50.0	50.0



	Somewhat Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q1l Other**

		Frequency	Percent
Missing	System	2	100.0

**q1m Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	100.0	100.0	100.0

**q2a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2f Programming-Scripting Languages**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2g Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q2j Other**

		Frequency	Percent
Missing	System	2	100.0

**q2k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	100.0	100.0	100.0

**q3a Adobe Photoshop**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	50.0	50.0	50.0
	Required Knowledge	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3b Adobe Illustrator**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3c Adobe Flash**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Required Knowledge	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3d Adobe Dreamweaver**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	2	100.0	100.0	100.0

**q3e Adobe Premier**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Required Knowledge	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3f Pixelogic ZBrush**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	2	100.0	100.0	100.0

**q3g Autodesk Mudbox**

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Not Important at All	1	50.0	50.0	50.0
	Somewhat Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3h 3dsMax**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	50.0	50.0	50.0
	Required Knowledge	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3i Maya**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3j SoftimageXSI**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	2	100.0	100.0	100.0

**q3k Unreal**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3l Unity**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	1	50.0	50.0	50.0
	Very Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3m CryEngine**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	2	100.0	100.0	100.0

**q3n Python**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	1	50.0	50.0	50.0
	Somewhat Important	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q3o Other**

		Frequency	Percent
Missing	System	2	100.0

**q3p Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	100.0	100.0	100.0

**q4 Comments or Software Suggestions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	50.0	50.0	50.0
	Crazy Bump, Topogun, Roadkill,	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q5 Specific skills stand out as having been excellent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	50.0	50.0	50.0
	teamwork, 3d	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q6 Specific skills stand out as having been poor**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	50.0	50.0	50.0
	overall drawing,	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q7 Rate the overall quality of the Ferris DAGD program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Good	1	50.0	50.0	50.0
	Excellent	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q8 Comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some classes need tougher requirements to pass students. Stress on completing projects. There needs to be a large group project (Like a yearlong) Labs NEED to be open 24hrs.	1	50.0	50.0	50.0
	This is an incredible program that blends high level technical skills with strong overall knowledge	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q9 Strongest features of the DAGD program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Faculty, modeling, texturing, lighting,compositing,storytelling	1	50.0	50.0	50.0
	Strong modeling and rendering classes.	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q10 Areas that require the most improvement**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Animation. There should be more animation classes or training. More theory classes about differences between games and movies, etc..	1	50.0	50.0	50.0
	Game Design, completed games... where are they?	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q11 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	50.0	50.0	50.0
	keep up the good work!	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q12\_1 I am: Professional in the Animation industry**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	1	50.0	50.0	50.0
	Selected	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q12\_2 I am: Professional in the Game Design industry**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	1	50.0	50.0	50.0
	Selected	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q12\_3 I am: Professional in Video, Media or Advertising**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	100.0	100.0	100.0

**q12\_4 I am: An employer/past employer of a DAGD alumni**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	100.0	100.0	100.0

**q12\_5 I am: Educator**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

**q12\_5 I am: Educator**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	100.0	100.0	100.0

**q12\_6 I am: Architecture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	100.0	100.0	100.0

**q12\_7 I am: Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	1	50.0	50.0	50.0
	Selected	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q12a Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	50.0	50.0	50.0
	Military research	1	50.0	50.0	100.0
	Total	2	100.0	100.0	

**q13 I have brought a Ferris DAGD student in as an intern**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q14 Rate my satisfaction with the internship experience**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q15 I have hired a Ferris DAGD alumni**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	50.0	100.0	100.0
Missing	System	1	50.0		
Total		2	100.0		

**q16 Rate my satisfaction with the employment experience**

		Frequency	Percent
Missing	System	2	100.0

**Statistics**

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1a Foundation/Traditional Media	2	0	3.50	3.50	.707
q1b 3D Modeling & Animation	2	0	3.50	3.50	.707
q1c Game Design	2	0	3.50	3.50	.707
q1d Digital Media: Web design	2	0	4.00	4.00	.000
q1e Digital Media: Video	2	0	3.50	3.50	.707
q1f Digital Media: Flash	2	0	3.50	3.50	.707
q1g Professional Development	2	0	4.00	4.00	.000
q1h Programming-Scripting Languages	2	0	3.00	3.00	1.414
q1i Project Management	2	0	2.50	2.50	.707
q1j Communication	2	0	3.50	3.50	.707
q1k General Education	2	0	2.00	2.00	1.414
q1l Other	0	2			
q1m Other specified	2	0			
q2a Foundation/Traditional Media	1	1	4.00	4.00	
q2b 3D Modeling & Animation	1	1	4.00	4.00	
q2c Game Design	1	1	3.00	3.00	
q2d Digital Media	1	1	3.00	3.00	
q2e Professional Development	1	1	3.00	3.00	
q2f Programming-Scripting Languages	1	1	3.00	3.00	
q2g Project Management	1	1	3.00	3.00	
q2h Communication	1	1	3.00	3.00	
q2i General Education	1	1	3.00	3.00	
q2j Other	0	2			

q2k Other specified	2	0			
q3a Adobe Photoshop	2	0	3.50	3.50	.707
q3b Adobe Illustrator	2	0	2.50	2.50	.707
q3c Adobe Flash	2	0	3.00	3.00	1.414
q3d Adobe Dreamweaver	2	0	3.00	3.00	.000
q3e Adobe Premier	2	0	3.00	3.00	1.414
q3f Pixelogic ZBrush	2	0	3.00	3.00	.000
q3g Autodesk Mudbox	2	0	1.50	1.50	.707
q3h 3dsMax	2	0	3.50	3.50	.707
q3i Maya	2	0	2.50	2.50	.707
q3j SoftimageXSI	2	0	1.00	1.00	.000
q3k Unreal	2	0	2.50	2.50	.707
q3l Unity	2	0	2.00	2.00	1.414
q3m CryEngine	2	0	1.00	1.00	.000
q3n Python	2	0	1.50	1.50	.707
q3o Other	0	2			
q3p Other specified	2	0			
q4 Comments or Software Suggestions	2	0			
q5 Specific skills stand out as having been excellent	2	0			
q6 Specific skills stand out as having been poor	2	0			
q7 Rate the overall quality of the Ferris DAGD program	2	0	4.00	4.00	1.414
q8 Comments	2	0			
q9 Strongest features of the DAGD program	2	0			
q10 Areas that require the most improvement	2	0			

q11 Additional comments	2	0			
q12_1 I am: Professional in the Animation industry	2	0	.50	.50	.707
q12_2 I am: Professional in the Game Design industry	2	0	.50	.50	.707
q12_3 I am: Professional in Video, Media or Advertising	2	0	.00	.00	.000
q12_4 I am: An employer/past employer of a DAGD alumni	2	0	.00	.00	.000
q12_5 I am: Educator	2	0	.00	.00	.000
q12_6 I am: Architecture	2	0	.00	.00	.000
q12_7 I am: Other	2	0	.50	.50	.707
q12a Other specified	2	0			
q13 I have brought a Ferris DAGD student in as an intern	1	1	1.00	1.00	
q14 Rate my satisfaction with the internship experience	1	1	4.00	4.00	
q15 I have hired a Ferris DAGD alumni	1	1	2.00	2.00	
q16 Rate my satisfaction with the employment experience	0	2			



# Appendix F– Alumni Survey Results

## Alumni Comments

### Excellent instructors

- Instructor and Instructor. Although I only had Instructor for one class my first year at FSU, he was understanding and knowledgeable in what he teaches. Instructor although seems like a hard-ass is very knowledgeable in many subjects and is willing to answer question should the student ask.
- Instructor and Instructor seem to be trying to steer the degree where it should have been for the last few years.
- Instructor and Instructor. They both have a great knowledge of what they are teaching and go the extra mile to stay ahead of the curve.
- Instructor and Instructor and Instructor and Instructor
- Instructor was an great instructor that had a good grasp of what is wanted in the digital world.
- I really enjoyed the following teachers. Instructor, Instructor and Instructor. They all really enjoyed what they do, and were always a part of the community. The classes they taught were taught for a reason, and you always felt like you learned something you needed.
- I think that everyone is very knowledgeable in their certain areas, but if I had to choose one that contributed most to my success, it would be Instructor. His standards and expectations were the highest out of everyone which is much needed in an industry that expects the same. His high expectations motivated me to do well.
- Instructor is an awesome instructor and all around great guy. He has gone out of his way to help me on projects that were unrelated to his class, as well as make exceptions for me in his class to help me pass. Instructor is very knowledgeable when it comes to 3D, but does not always get the point across.
- Instructor is a great teacher because he seems to be the most interested in seeing the students succeed. Instructor is also interested in seeing the students do well, but he has a much harsher approach in showing it than Instructor does.
- Instructor and Instructor. Both of these instructors stayed current with what was happening in the industry and always tried to get their students involved and ahead of the game. They were there for them inside and outside of lecture and judged their work with a professional attitude.

- Instructor is by far my favorite professor, mostly because he taught the classes that I was most interested in. Instructor had the right attitude, but played favorites in his classes. Instructor was an excellent introductory teacher.
- Instructor is a truly superb instructor. He truly helps students to not only learn what the classes are expected to teach, but how to function in the professional world as well as being willing to teach anything a student wants to learn.

## Poor Instructors

- Instructor. He seemed to derail more good ideas that help.
- Instructor plays favorites with the students, shows very little realization that his students (even those that are not his favorites) are humans who should be shown some measure of respect. He often experiments with new techniques and programs in class instead of teaching what the class is supposed to teach. Most of the information gained in his classes is self taught and I don't pay tuition to teach myself. I can do that for free.
- Instructor and Instructor. Why? The fact that neither of them showed up to the capstone presentations (from what I understand they did not show to multiple capstone final presentations). Also, they seemed to be above everyone else. They had teachers pets, and treated them like gold, while other students got poor or no feedback. This was not always the case, but it seemed like a trend that many noticed. Give everyone an equal chance... I felt Instructor, Instructor and Instructor did just that.
- Instructor seems to teach his classes by the seat of his pants, like he doesn't really have a grasp as to what he is going to cover in the class period. Or maybe he know what he wants to cover, but not quite sure how he's gonna get there.
- Instructor is a nice person with a lot on his plate. However, I found his classes were not very interesting.
- I do not know if he is still around but Instructor. Now this might be because I utterly fail at programming, but I did not learn anything form that class. I did not feel the urge to learn it. And later on in a different class I did try to understand programming, and did not succeed. So the fault might be mine or his, or a combination.
- I had issues with the classes that Instructor taught that weren't directly related to programming. When he taught them we were still force feed programming through ac3. Ex.Game Design and Theory.
- Instructor, he has begun to teach a number of classes and no matter the subject of the class or its relation, whether related or not, will involve a great deal of programming. Not to say that programming shouldn't be learned, but to over involve it in classes is unnecessary.
- Instructor; in class he would often say "you don't need to understand this, just think of it as voodoo magic". In class 2, he taught as though understanding the theory meant you had the skills to do it in practice, which I feel is not the case. I learned more going to his office for help than I did during class periods.
- Instructor is a great guy, but not a great instructor for anything other than intro classes. (I think he's probably a good instructor for 'claaas' as well, but I didn't have him for that He gives assignments that consist of following tutorials in a book.
- There was only one but he no longer is an instructor

## q17 Strongest features of DAGD program

- I feel teaching the fundamentals of 3D Studio Max is a must. Also, story development is HUGE. Being able to sketch and convey an idea is also really important. All the fundamental classes that Instructor, Instructor and Instructor teach are great. Even though some thought Instructor's class was un-needed, I think it is a good way to show students other forms of media and creation.
- I think the strongest features are the instructors. There may be a little bit of a lack of instructors in the program, but the skills of those in the program are very good.
- It seems as though most of the emphasis was/is placed on Game Design aspects and not enough on animation when the program is called "Digital Animation and Game Design". It seemed as though this was a game design program and we touched on aspects of animation just because it's in the title of the degree.
- Modeling and learning the new software that modeling can be done in.
- Sadly animation. I say sadly because animation isn't what all the program is about. There isn't much game design but a few classes and only one other class for other more specific areas.
- Teachers
- The 3d modeling and animation aspects.
- The faculty, and honestly Instructor, he teaches the bulk core of the program I'd say. It would really suffer without him. I can appreciate what money is spent on our program it is more than most I believe, but it really needs to be more.
- The integration of the students with the professional world throughout the program is a huge benefit to students in learning the ins and outs of working with clients as well as giving students experience to put on their resumes to help them get a job after graduating.
- The part that focuses on Digital Animation. The majority of teachers seem to understand this part of the program best.
- The teachers I listed actually care about teaching stuff. They push the students to see where they can go, and it's what every teacher should do.
- Throughout the curricula, it is always made clear to students as to where the skills learned can be applied, and that there is serious work in games. Though opportunities aren't frequent, all of the instructors try to impress a sense of the real world on what they teach.

## q18 Areas require most improvement

- A broader approach to the whole game design title that is listed in the programs name. Even if there are not more classes for it maybe a strong stand on some of the classes. Most of these classes were treated like blow off classes.
- Focusing on other areas of education rather than just modeling.
- Game Design and Development. The classes need to be focused in on what is relevant for today's standards of game design.
- Hardware problems in the lab.
- I think the program needs to allow for even more concentration on certain areas. It seems like most of the jobs out there require a concentration on one particular skill.
- It's nice to know that the program will now have two distinguished legs/paths that students can now pursue. If they want to go down the "Artistic Track" they can do that and not have to slough through all the coding classes, and vice-versa.
- More classes for the other subject besides animation. Also for those who do not wish to be animators to be inform how to properly set up their portfolios for their chosen profession.
- More computers that are more powerful, more equipment, greenscreens, cameras, props, turntables. And perhaps a professor dedicated to animation.
- The computer labs. Re-Ghost the computers every 2 - 3 months. Give students that need to render administrative rights so they don't run into issues. DO NOT USE QUATRO CARDS. They are expensive, and the benefits do not warrant there use. Get gaming graphics cards, they work the same, and cost 1/4th the price. Just do some general research. Cory feels the need to use Nvidia Quatro cards, however he has not done the research to back up his claims. Also, keep note that there is a TON of software on those lab computers that is conflicting, most of it isn't even being used.
- The game design portions of the program are lacking. To really make it feasible for students coming out of the DAGD program to find jobs in the mainstream game industry we should have more exposure to different game engines, level design in practice and principle, game design theory, and environment design.
- There needs to be more classes that relate to "game design", as there are more than enough modeling and animation courses
- We have almost no community. We have no hangout. We are just a bunch of people who meet up for a class or two and then go home. We need that community to really push the projects.

## q19 Additional comments

- "You get out of it what you put in," is an easy way to justify teaching you nothing.

- I have heard the quality of work coming out of Instructor's classes being praised, but the sheer quantity and the fact that he requires for a passing grade for the work to be professional quality is taking down the quality of work coming out of every other class that is taken at the same level as those. I am a proponent of hard work, but with the load he assigns, students are left with the choice to either not pass his class, or do subpar work in every other class they have. Keeping the same quality requirement would be fine if he gave sufficient time for students to reach that quality level without having to give up jobs, sleep, or do poorly in every other class.
- I may seem negative, but I just spent a lot of money and like anyone else wanted to get the most out of it. Take all of this as constructive. There are some students that I think get neglected due to their "shyness", or lack of social skills. Work with those students more, as I have found, some of them are AWESOME artists. They just need to be helped.
- I think overall the program is great and I'm glad to have been a part of it. It could be better, but I think Ferris has an awesome thing going with this program.
- I think overall the program seems to be going in the right direction, but like I have mentioned previously, I feel there should be more concentration on certain areas instead of trying to cover a broad area of skills.
- In order to make this degree the best it could/can be, it really should be using Maya instead of Max, and it should break into two distinct degrees, not two tracts. Ferris should develop an Animation degree that focuses solely on animation and that which pertains to animation (story development, story boarding, life drawing, principals of animation, etc.) and a degree that solely focuses on Game Design and aspects that pertain to Game Design. That way the students/graduates won't only have a working knowledge of things, but will be specialized in the area(s) that they are particularly interested in.
- With my learning style and past experience one of the greatest difficulties we have classes once a week. It seemed that I lost a lot of information by cramming it into 3 hours and not come back for a week. Only for the next day have the same thing happen in a different class. But this is me. I learn better if I have a class at least twice a week.

#### Statistics

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1 Satisfaction w/ overall quality of experience	15	0	2.00	2.00	.378

q2 Experience comments	15	0			
q3 Satisfaction w/ overall quality of instructors	15	0	1.67	2.00	.488
q4 Instructors comments	15	0			
q5 Satisfaction w/ overall quality/relevance of software	15	0	1.80	2.00	.676
q6 Software comments	15	0			
q7 Satisfaction w/ overall quality/relevance of hardware/facility	15	0	2.27	2.00	1.033
q8 Hardware/facility comments	15	0			
q9 Satisfaction w/ overall quality/relevance of curriculum	15	0	2.40	2.00	.507
q10 Curriculum comments	15	0			
q11a Foundation/Traditional Media	14	1	3.29	3.00	.726
q11b 3D Modeling & Animation	15	0	3.40	4.00	.737
q11c Game Design	15	0	3.20	4.00	1.014
q11d Digital Media (Web, Video, Flash, Graphics)	15	0	3.33	3.00	.617
q11e Professional Development	15	0	3.33	3.00	.617
q11f Programming -- Scripting Languages	15	0	2.67	3.00	.816
q11g Project Management	15	0	2.80	3.00	.941
q11h Communication	15	0	3.60	4.00	.632
q11i General Education	15	0	2.47	3.00	.834
q11j Other	11	4	2.64	3.00	1.120
q11k Other Specified	15	0			
q12a Foundation/Traditional Media	15	0	2.47	3.00	.640
q12b 3D Modeling & Animation	15	0	3.80	4.00	.414

q12c Game Design	15	0	2.47	2.00	.915
q12d Digital Media (Web, Video, Flash, Graphics)	15	0	2.80	3.00	.775
q12e Professional Development	15	0	2.67	3.00	.617
q12f Programming -- Scripting Languages	15	0	2.40	2.00	.828
q12g Project Management	15	0	2.13	2.00	.640
q12h Communication	15	0	2.27	2.00	.594
q12i General Education	15	0	2.80	3.00	.676
q12j Other	7	8	2.14	2.00	.900
q12k Other Specified	15	0			
q13 Comments (including key areas not listed):	15	0			
q14a DAGD100 - 3D Modeling - Animation 1	15	0	3.27	3.00	.594
q14b DAGD101 - 2D Visualization – Storyboards	15	0	3.40	3.00	.828
q14c DAGD102 - Story Devel for Film – Gaming	15	0	3.87	4.00	.834
q14d DAGD103 - 3D Visual Drawing – Sculpture	14	1	3.79	4.00	.699
q14e DAGD150 - Intr Game Design – Development	15	0	3.27	3.00	1.223
q14f DAGD180 - Intro Digital Video	15	0	3.00	3.00	1.254
q14g DAGD220 - Portfolio 1 - Sophomore Project	15	0	2.60	3.00	.910
q14h DAGD230 - 3D Modeling - Animation 2	15	0	3.07	3.00	.704
q14i DAGD255 - DAGD Programming 1	15	0	2.73	3.00	1.223
q14j DAGD260 - Multimedia 1	15	0	3.20	4.00	1.014
q14k DAGD300 - Game Design and Theory	15	0	3.00	3.00	1.069



q14l DAGD310 - User Interface Design	15	0	2.47	3.00	1.125
q14m DAGD320 - Multiplayer Game Programming	15	0	3.80	5.00	1.612
q14n DAGD330 - 3-Dimension Computer Animation	15	0	3.60	4.00	1.183
q14o DAGD335 - 3D Modeling - Animation	14	1	3.21	3.00	1.051
q14p DAGD340 - Animation - Junior Project	15	0	3.00	3.00	1.069
q14q DAGD355 - DAGD Programming 2	15	0	3.13	3.00	1.302
q14r DAGD375 - Advanced 3D - Character	15	0	3.13	3.00	1.125
q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure	15	0	4.13	4.00	.990
q14t DAGD420 - Applied Digital Simulation	14	1	3.21	3.00	1.311
q14u DAGD430 - Digital FX	14	1	3.64	4.00	1.393
q14v DAGD460 - Multimedia 2	15	0	2.87	3.00	1.356
q14w DAGD491 - Applied Internship	15	0	3.53	4.00	1.302
q14x DAGD499 - Capstone	15	0	3.53	4.00	.516
q14y GRDE216 - Digital Imaging	15	0	3.00	3.00	1.254
q14z GRDE225 - Webpage Design	15	0	2.07	2.00	.961
q15 Excellent instructors	15	0			
q16 Poor instructors	15	0			
q17 Strongest features of DAGD program	15	0			
q18 Areas require most improvement	15	0			
q19 Additional comments	15	0			

# Appendix G – Current Student Survey Results

## DAGD APR...Current Students

### Frequencies

Prepared by: Institutional Research & Testing

### Frequency Table

q1.a Overall quality of your experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	5.3	5.3	5.3
	Somewhat Dissatisfied	2	10.5	10.5	15.8
	Somewhat Satisfied	11	57.9	57.9	73.7
	Very Satisfied	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

#### Comments on Q1a.

- I am dissatisfied with my guidance from Instructor as my academic adviser. I signed up with classes with him, and little to my knowledge, got crushed because I took VFX, junior project, digital simulation, and multiplayer programming all in one semester. I do take some blame for not looking into it myself, but my adviser helped me none. I love the instructors, but can sometimes feel Instructor requires too much from his classes. I took vfx with Instructor, had really zero interest in VFX although learning the basics is extremely helpful for my portfolio etc, and then when the final project came around he slams an extremely hard project on us, which in turn also makes it extremely hard to keep pace with my finals in my three other classes. Computers, software, and facility are good. The curriculum is so-so. It seems a lot of the teachers have an idea of what they want to do, but kind of throw whatever they think sounds good together as the assignment on the spot in class that day. As far as relevance, it still kind of spreads things thin in my opinion. Sure I can take the extra step myself and used my time to make a great 3D portfolio... but not when Instructor is crushing us with final projects in a class that's required but could care less about the software. There just

isn't time for both. So I feel like instead of spending my time in a class where I'm improving my skills to build a great portfolio, I'm busting my butt doing 3D motion tracking to simply pass a class that was minimal help.

- The main problem is with the teachers, there are only a few that I feel actually contribute. My problems with Instructor is that he seems to play favorites in the classroom a lot more than a teacher should, he seems to have like 5-8 students that he really cares about and is willing to help to no end but if you are not one of those students then he just kind of blows you off and will give you minimal help. My biggest problem with Instructor is that he does not seem to know the software that much (which is fine for the 100 level classes because they are learning basic stuff) and when I had him for Class A (which is supposed to be his program of choice) every time I asked him a question he had to go look it up online, which actually ended up with me looking it up online and finding tutorials for it. The last teacher that I have a problem with is Instructor, my main problem with him is that he is just not very good at teaching classes and does not really to be prepared for classes when he is teaching and tries to make everything fall into what he likes when the students have very different views of what they want to do for projects in his classes. Those are the teachers that I feel are doing stuff wrong but I do feel that Instructor and Instructor are doing the right thing when it comes to teaching. Instructor seems to always be available to help his students (all of them not just a select few) and he really knows what he is talking about when it comes to the programs he is teaching. Instructor also is a good teacher and will give everyone the help that they want/need in his classes but most of the students are forced to take one of his programming classes and most of the students do not want to go into programming so he does a nice job of working with those students and he also knows more than any teacher should know about the programs that he is teaching.
- I really enjoy the DAGD program but sometimes feel that the curriculum is slightly dated. I have purchased a few books for the DAGD program that were clearly out of date for example the photoshop book and video editing book. I feel also that sometimes some of the teachers seem behind in what they are teaching. I felt like the junior project class was a waste of time. This class could have been a great opportunity to do some awesome stuff but I felt that it lacked direction from the teacher and proper projects to be worked on. It seemed to me that the projects were bogus or it was just "clients" looking for free labor when they clearly had no idea what they wanted. I think over all I will be more satisfied with the degree I get from Ferris state in DAGD than if I would go to another school. In addition this past year I had ridiculous amounts of trouble rendering at school in 3DSMax and problems with lots of the rendering in Adobe products. I never noticed any problems before until the installed the parent thingy in the computers. I know it's there to supposedly help with teacher but it uses up so much ram running in the background and hinders programs more than helps.

- Better than I expected in all areas. Very Satisfied.
- I found the program to be decent but its lacking in the sense it's too open, they try to focus on everything instead of if you want to go into games you take these classes, if you want visual effects you take these classes etc.
- I like the program, but it is still to new. There are so many changes being made it's frustrating. I have been taught and re-taught the same things in different level 3d classes, when I could be exposed to something new that would actually help me in the future.
- I really loved everything about the DAGD experience. The only detriment was a bad experience with one teacher that I felt didn't know what he was teaching too much but even then, it wasn't too bad.
- I would say that on the whole I am very satisfied with most of the instructors of the DAGD program. However, I feel that some of the instructors have been out of the industry too long and are falling behind the curve.
- I would say the quality my experience as well as overall relevance of the curriculum was somewhat satisfied as I felt some classes really helped my skills evolve (Digital Effects) while others were not only lacking challenge, but also relevance (Photoshop). I would also say the overall quality of the hardware is somewhat satisfied because they are working computers, however...they are becoming a little dated in terms of rendering power. I think I saw more render failures this year than any other to date!
- Labs are wonderful, but it would be nice to have a bit more lab time. Specifically it would be great if there were no days when one could not access a lab.
- Sometimes the instructors fail to realize that some students are not as interested in the gaming aspect of the program as digital effects or product modeling and design. With class sizes as small as they are, it would be beneficial for the instructors to understand the specific goals of each student and attempt to offer projects and assignments that will prepare the student for the specific field they aspire to.
- There are so many different programs that could be taught, so all would be impossible, but 3D Studio Max was the ONLY 3D program I was exposed to, and I feel there are more out there that could be touched upon.

**q1.b Overall quality of the instructors**

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Very Dissatisfied	1	5.3	5.3	5.3
	Somewhat Dissatisfied	2	10.5	10.5	15.8
	Somewhat Satisfied	9	47.4	47.4	63.2
	Very Satisfied	7	36.8	36.8	100.0
	Total	19	100.0	100.0	

**q1.c Overall quality of the software**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	5.3	5.3	5.3
	Somewhat Satisfied	7	36.8	36.8	42.1
	Very Satisfied	11	57.9	57.9	100.0
	Total	19	100.0	100.0	

**q1.d Overall relevance of the software**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	2	10.5	10.5	10.5
	Somewhat Satisfied	5	26.3	26.3	36.8
	Very Satisfied	12	63.2	63.2	100.0
	Total	19	100.0	100.0	

**q1.e Overall quality of the hardware**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Somewhat Dissatisfied	1	5.3	5.3	5.3
	Somewhat Satisfied	13	68.4	68.4	73.7
	Very Satisfied	5	26.3	26.3	100.0
	Total	19	100.0	100.0	

**q1.f Overall quality of the facility**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	5.3	5.3	5.3
	Somewhat Satisfied	10	52.6	52.6	57.9
	Very Satisfied	8	42.1	42.1	100.0
	Total	19	100.0	100.0	

**q1.g Overall quality of the curriculum**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	5.3	5.3	5.3
	Somewhat Dissatisfied	2	10.5	10.5	15.8
	Somewhat Satisfied	10	52.6	52.6	68.4
	Very Satisfied	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

**q1.h Overall relevance of the curriculum**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	5.3	5.3	5.3
	Somewhat Dissatisfied	4	21.1	21.1	26.3
	Somewhat Satisfied	8	42.1	42.1	68.4
	Very Satisfied	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

**q3.a Foundations/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	5.3	5.3	5.3
	Somewhat Unimportant	2	10.5	10.5	15.8
	Somewhat Important	7	36.8	36.8	52.6
	Very Important	9	47.4	47.4	100.0
	Total	19	100.0	100.0	

**q3.b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	5.3	5.3	5.3
	Very Important	18	94.7	94.7	100.0
	Total	19	100.0	100.0	

**q3.c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	5.3	5.3	5.3
	Somewhat Unimportant	3	15.8	15.8	21.1
	Somewhat Important	5	26.3	26.3	47.4
	Very Important	10	52.6	52.6	100.0
	Total	19	100.0	100.0	

**q3.d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	2	10.5	11.1	11.1
	Somewhat Unimportant	3	15.8	16.7	27.8
	Somewhat Important	9	47.4	50.0	77.8
	Very Important	4	21.1	22.2	100.0
	Total	18	94.7	100.0	
Missing	System	1	5.3		
Total		19	100.0		

**q3.e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	5.3	5.3	5.3
	Somewhat Important	7	36.8	36.8	42.1



	Very Important	10	52.6	52.6	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q3.f Programming - Scripting Languages**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	4	21.1	21.1	21.1
	Somewhat Unimportant	5	26.3	26.3	47.4
	Somewhat Important	7	36.8	36.8	84.2
	Very Important	2	10.5	10.5	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q3.g Other/Miscellaneous**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	3	15.8	15.8	15.8
	Somewhat Unimportant	4	21.1	21.1	36.8
	Somewhat Important	7	36.8	36.8	73.7
	Very Important	4	21.1	21.1	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q4.a Foundations/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	3	15.8	15.8	15.8
	Somewhat Unimportant	3	15.8	15.8	31.6
	Somewhat Important	9	47.4	47.4	78.9
	Very Important	3	15.8	15.8	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q4.b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	2	10.5	10.5	10.5
	Somewhat Important	4	21.1	21.1	31.6
	Very Important	13	68.4	68.4	100.0
	Total	19	100.0	100.0	

**q4.c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	5.3	5.3	5.3
	Somewhat Unimportant	7	36.8	36.8	42.1
	Somewhat Important	5	26.3	26.3	68.4
	Very Important	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

**q4.d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	6	31.6	31.6	31.6
	Somewhat Important	8	42.1	42.1	73.7
	Very Important	4	21.1	21.1	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q4.e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	5	26.3	26.3	26.3
	Somewhat Important	4	21.1	21.1	47.4
	Very Important	9	47.4	47.4	94.7
	N/A	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

**q4.f Programming - Scripting Languages**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	2	10.5	10.5	10.5
	Somewhat Unimportant	4	21.1	21.1	31.6
	Somewhat Important	7	36.8	36.8	68.4

	Very Important	4	21.1	21.1	89.5
	N/A	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

**q4.g Other/Miscellaneous**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	2	10.5	10.5	10.5
	Somewhat Unimportant	4	21.1	21.1	31.6
	Somewhat Important	8	42.1	42.1	73.7
	Very Important	3	15.8	15.8	89.5
	N/A	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

**q5 Additional comments regarding q3 & q4**

- An emphasis on traditional media is almost nonexistent in the DAGD program and I know that there are quite a few people would like to it emphasized more but I personally do not care for traditional media but it definitely would not hurt to add more drawing classes
- Because of the nature of the program, I learned good core skills regarding 3D. If I wanted video and editing knowledge, I should've gone to the main campus for that program. Video skills are important to me now because of my job, but that stuff wasn't really needed in the DAGD program.
- Has everything I could need to learn what I want.
- I find some of the other/miscellaneous rather unimportant because of the field we are in. I understand the general skills are important, however...they really don't relate with the program (such as the business classes).
- I like the new syllabus for graduation. The fact that you have different areas you can focus in is nice. I wish there was more upper level classes you could take to help towards your degree. I felt some of the lower

level classes were kind of a waste. They introduced you to the program but I don't know if a whole semester is needed to learn photoshop or to learn 3ds max. I would have rather had a week learning how to navigate 3ds max then jumped right into the 200 level 3ds max with Instructor. Since his classes teach you relevant information regarding modeling.

- I think having the degree split up into 3D, Game Design, and Programming is retarded. (Not to mention minimal exposure to actual animation) There should be 3 separate degrees that focus only on one area.
- I'm only just now a sophomore here so I don't know many classes.
- The program would do well to have more traditional skills stressed. Having more understanding of the basics would be very beneficial. Building on no foundation is bound to fail.
- we need more focus on bring large projects from start to finish, maybe even set it up so that students can take a project from one class into another, so that they can have large projects that span several semesters even.

#### **q6 Specific instructors that stand out as excellent**

- Some teachers were far more valuable to me than others. Mainly due to their specific focus, but not always. I feel that I learned the most in a short amount of time with Instructor. He explains the terms that have been used frequently but you never really understood. He explains how things work. He teaches you the material that probably should have been taught earlier. He can precisely point out what is off that you could not figure out and how to fix it. I have a much better understanding of anatomy. Instructor is another amazing teacher. I learned with leaps and bounds in the first class I had with him. Great critiques. Great at teaching modeling. He does need to improve at explaining the underling mechanics of things. Like what certain textures do exactly, what they are used for. All that he teaches is great, I just need more information. He obviously cares for his students and wants them to succeed and that is why he appears hard because he knows it takes more than average to make it anywhere. Instructor is an amazing programmer. He can teach 1 and 0 to pretty much anyone. I don't understand programming anymore because I forgot, but he got me to understand basics at the time.
- As I said in question 2 the two main instructors that stand out for me are Instructor and Instructor. These two teachers both care about the students and are always around or available for help and know the programs that they are working in very well.
- Instructor stands out as an excellent instructor to me I feel that when it comes to 3d modeling he can give me the answer I am looking for. Instructor also is an excellent teacher in my opinion I feel that he is very

knowledgeable when it comes to modeling and current 3D applications. Josh is also an excellent programming teacher. I have taken a few programming classes prior to starting at Ferris and I have never had a programming teacher as good as Instructor. I am a little concerned though that I find the best teachers are graduates of the DAGD program. Is it not possible to get a teacher that has worked for a Game design studio?

- Instructor and Instructor. They both have a technical understanding that is far beyond the other instructors, and it shows.
- Instructor and Instructor and Instructor.
- Instructor, Instructor, and Instructor are all excellent teachers. All three teachers are very knowledgeable in their subjects. Instructor and Instructor specifically have been good teachers for me as they are not afraid to tell you the truth and give you serious critique so that you know, in the real world, what will be expected of you. Instructor continues to be the program's strongest adviser.
- Instructor, Instructor, and Instructor stand out as excellent teachers because of their honest appraisal of students' work as well as their drive to help their students improve wherever they can.
- Instructor communicates with new students and parents extremely well and is helpful to all freshmen. Instructor is an excellent resource to expand my 3d skills. I like how he is trying to improve everything for us. Instructor is awesome at programming. If I cared to learn more about it, I would talk to him all the time. He is a good resource for the students. Instructor is an awesome teacher for lower level students, but when it comes to advanced techniques, I go to other teachers. Instructor has an extensive knowledge base, but trying to get that out of him seems difficult. He talks fast and assumes the students know more than they do. I think he needs advice on actually teaching and dealing with students. I wish he taught more 3D classes.
- Instructor is very approachable as an instructor. He is knowledgeable about how the business works and it is obvious he truly has a passion for what he does. Instructor is someone I can talk to in a casual conversation about elements of the program that interest me and I am certain he will listen and give me honest feedback. Instructor is a great instructor in terms of the "how-to" aspect of modeling and animation. He is well versed in many modeling programs and eager to help. However, he isn't as approachable as some would like him to be.
- First off I'd like to say that Instructor is a great teacher. I had him for a drawing and sculpting class and he was fantastic. Funny and just all around a great teacher. Instructor is great as well. Everyone says he's a hard-ass but I had him for 3D modeling 2 and though he's tough, he's fair and just a great teacher. He's funny and seems really interested in helping the students. Instructor is also an amazing teacher. He is the quintessential awesome dork and he is just great. Works very fast though...

- For 3D modeling and animation, Instructor is an excellent instructor. If you can keep up, you are pretty much guaranteed to have a handful of quality portfolio pieces at the end of one of his classes.
- Instructor. He is very concerned with his students' learning and will gladly help students. He's very humble, and a fun guy to be around. Instructor does an amazing job, is humble, nice, and of course is helpful and knowledgeable. Instructor is very patient and kind with students. Instructor did a good job when I had him, just wish he had more classes.
- Instructor was a great teacher for me, I could tell he spent time thinking about the content of the class and how to convey it to us in the best way. He was always there for questions and would help you when necessary.
- The only instructor I've had so far was Instructor, for 2 online courses. He was an excellent teacher overall. He gave out clear instructions and was very helpful with any questions I had.
- The two instructors I had were equally good. Though Instructor was to me the better teacher this time as his boot camp like training gave me the skills I need to move on with my head held high. The other instructor was Instructor, and he too was good, but his classes were more beginner classes for me, and did not get me as excited.
- Though I am not focusing on becoming a programmer, I find Instructor's classes to be really great. He knows code backward and forward in just about any language you could want to learn and he is always willing to sit down and help you through a difficult chunk (providing that you're actually trying.) I really appreciate how Instructor pushes his students to grow and become better 3D artists. Some students think he's too hard on them, but he actually cares about the subject he teaches and if his students will be able to get jobs once they've graduated.

### **Instructors that stand out as poor**

- The only teacher I've had that I didn't like particularly is Instructor. I had him for Class A and I felt like he had no idea what he was talking about. If the course had been Class A then he would've probably been pretty good but creating a story for a game is completely different then completing one for a movie. Along with his misinformed stance that movie games are good games on the most part and that we should strive to be like them, his ironically inadequacy knowledge of how to use a DVD player/plug in his computer to the TV, his condescension of everyone in class who dared to have a differing opinion, and his reviewing of a movie that he didn't even know more about then I did (A Knights Tale, which I've watched everything on and yet he kept saying things were in it that the director loved when all one has to do is watch the commentary to know

otherwise as well that it wasn't even in the original version) Instructor was not what I expected when I heard about the class. He lived up to none of my expectations and I would cringe to take another class if he taught it. I wanted to like him. He coincidentally started the Singing Christmas Tree at my high school which I was a part of for four years and loved, but I was saddened to know his personality. Knowledgeable in film techniques? Yes. Very well connected? Definitely. Good teacher of gaming? No no no.

- Also as I stated in question 2 there are three main instructors that stand out to me as being poor, those are Instructor, Instructor and Instructor. Instructor plays favorites way too much, Instructor just does not know seems to know the programs that well and Instructor just seems very unprepared for the classes that he is teaching
- Instructor - His classes have little content and I have learned very little from him having taken many classes with him. Half the time I show up to class there is nothing going on or he talks for a few minutes and goes to his office. He seemed to be more relaxed last semester as opposed to earlier ones. I have spent a lot of time in classes wishing I was learning something like I knew I could be at another school but I have given up on Instructor. Instructor, Instructor - Both are obviously great guys, they both want to help the students and educate. The problem is they lack the skills and knowledge needed to advance the students. As much as everyone likes these guys I really have learned nothing from them too.
- Instructor and Instructor. Nice guys but they don't have the knowledge to teach 3d eetc
- Instructor does an excellent job with some of his classes (Sophomore Portfolio) and a poor job with others (Photoshop and Drawing). Though he is knowledgeable, I think he needs to grow a little more to better teach those classes. Though I had such great words for Instructor as a teacher, he is a rather poor adviser and is not as involved in student activities as I feel he should be.
- Instructor seems like he is out of his league when it comes to the technology we are working with. He just seems to stumble through the software and try to stay 1 chapter ahead of the students. Any questions asked are rarely answered correctly. Instructor does tend to re-teach the same thing in each new class over and over. I also wish he would do more projects in class and tell us why he does what he does. Instructor is harder to communicate with. (From what I have experienced and what I have heard from other students.) Instructor should teach a traditional 3D class like Modo or Maya that focuses on learning the new software as well as advanced modeling techniques. Exposing students to his 'bag of tricks' would result in a better showing of student work at the end of their time at Ferris.
- I feel Instructor can sometimes comes off as arrogant.
- Instructor seems to get off topic, and he lacks the technical knowledge that Instructor and Instructor posses. because of this the students sometimes get into bad habits while modeling or texturing while forming their



core understanding of the subject matter. This makes it difficult when they get into the higher level courses and have to relearn their workflow or understanding of a concept.

- Instructor is overall the worst teacher in my opinion. Don't get me wrong he's a very nice guy but I don't think he has anything to offer when it comes to the DAGD program. I have had him for a few classes and I find his assignments childish or irrelevant. To many times you could catch him accidentally hitting the spacebar in photoshop (which locks the keyboard) and him not knowing what to do since nothing would work so he would just reset the program. I feel he teaches out of date material and that his grading is horrible. He has no sense of how much work goes into something and sometimes will even praise complete garbage. I have no idea why he is the head of our program. Just cause he's seen a digital animation doesn't make him knowledgeable in the area. I want teachers that know what they are talking about not someone that can open a book and read it to me.
- No instructor I have met was in my opinion "poor".
- Perhaps Instructor, simple because he does not give a good critique. He is nice with his comments but his grading shows how he really feels. It would be useful if he elaborated more effectively with what specifically needs to be different. Not very good with computers either.
- The online classes need more commtions.
- Though I greatly respect Instructor and his past work, I think that he has been out of the industry for too long and is not up to speed on current techniques. Additionally, I feel like sometimes he talks down to his students and if he were to demonstrate a little more respect for his students he would earn more of their respect as a teacher. I think that Instructor is a great guy and a good teacher, but I think that he could push his students harder than he currently does. I've seen students come from his class and struggling in the next one because they haven't gone as far as they should have.

### q8 Strongest features of the DAGD program

- Allow to be creative.
- By far, the 3D modeling aspect of the program is the strongest as there are more classes allowing more room for growth and development. Though I am not a programmer, I do still strongly feel this half of the program (programming and game design) needs to be expanded on like the 3D modeling and animation half.
- DAGD's strength is in its digital modeling and animation classes.
- I think that the DAGD program is really good at creating 3D generalists and technical artists. It gives a good foundation of all areas of game design, animation, and visual effects.
- Modeling. We have some great teacher who can tutor you on the art of 3d.
- Open lab and the student community. Talking with different students and seeing what they are doing in the program helps one to compare what they are doing; allowing them to either improve themselves or help the other student out.
- Technology and friendly teachers.
- the basic 3d classes. the VFX class was my favorite class that was offered.
- The fact that the DAGD program stays up to date with its software and continues to evolve makes it very unique. As long as the curriculum stays relevant I am happy.
- The sense of unity is very high in this program I think, as well as the number of people who give great constructive criticism to help others succeed.
- The strongest feature is modeling, this because that is what they teach us most and they do not teach the programming, animation or drawing like I feel they should
- The strongest feature of the program would be the staff. The instructors are not only well versed in the courses they teach, but they also are opening to providing students with valuable connections and methods for obtaining jobs upon graduation.
- The teachers that genuinely care about the students.
- The teachers we have, as well as the software available to students is amazing. I'm glad the school is willing to purchase different software packages to tailor to different styles of work.
- The teaching staff. They are kind, knowledgeable and helpful.
- We spend a lot of time building models, and characters, and texturing them, then rendering them to make them look cool for a demo.

## q9 Areas that require the most improvement

- Animation. We need a teacher who really understands animation. The motions of object and how to get the precise timing that is required for a story to be told well.
- As an artist, I feel like the DAGD program is missing a lot in the traditional art and digital 2d art areas. A strong understanding of 2d graphics, composition, and colors would make the art that the students create much better.
- As explained in 8...though I am not a programmer, I do still strongly feel this half of the program (programming and game design) needs to be expanded on like the 3D modeling and animation half.
- Continue branching the degree off into other non-3D specializations and the degree will improve considerably.
- Drawing and animation require the most improvement as of right now. Animation would be the most useful of these two areas that need improvement because that would be the most helpful once we get out into the working world and they do not go into animation of vehicles at all.
- Get people to focus on specific skills eventually and expand the different programs (software) that are covered.
- I feel there is a lot we could do to market our program so that we can reach out to people from all over the country. If we can make a name for ourselves here in West Michigan, we can draw attention from animation and game studios, giving us an even stronger reputation for pumping out highly trained students.
- I think the assignments that the teachers come up with have to be more geared towards our portfolio. We don't have a lot of time between projects to polish what we have started. I would like to see stricter grading so students have to work to get a good grade, and end up with greater work overall.
- Making Instructor tone down some of his classes that aren't really the core of the DAGD program, I can find them sometimes hindering my learning in other classes.
- More lab time.
- More understanding of specific students needs is very important. Personally, I have been in classes that provide me no knowledge of what I wish to pursue as a career. Although I do believe that learning several facets of the business is important, at times I have felt that my time was wasted when I could have been learning things more relevant to my career path.
- Nothing much. More direction I suppose.
- Split the program. Take these classes for visual effects, these classes for game design.
- The classes need better instruction by people who are passionate about their art and bettering as an artist as well as educating.
- The desk chairs, they're uncomfortable.
- Updating the "out of date" classes and deciding really what the program is all about. I want to make 3D models for video games. When I came into this program that's what I thought the degree was about. I feel I have taken classes that are not hard focused in this area.
- We need to do more animation, and take more of our models and characters into game engines, only after we take our assets into a finished product to we learn the full process, and more than that we learn how to optimize our assets so that they work more effectively within the finished product (animations or games)

**q10 I am a**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Freshman (0-30 hrs of DAGD & Gen Eds finished)	2	10.5	10.5	10.5
	Sophomore (31-60 hrs of DAGD & Gen Eds finished)	4	21.1	21.1	31.6
	Junior (61-90 hrs of DAGD & Gen Eds finished)	7	36.8	36.8	68.4
	Senior (91 or more hrs of DAGD & Gen Eds finished)	6	31.6	31.6	100.0
	Total	19	100.0	100.0	

**q11 I came to Ferris to be a(n)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Animator	7	36.8	38.9	38.9
	Game Designer	5	26.3	27.8	66.7
	Both	6	31.6	33.3	100.0
	Total	18	94.7	100.0	
Missing	System	1	5.3		
Total		19	100.0		

### q12 Additional comments

- I enjoy this school, and my friend enjoyed hearing my success and is joining this semester also.
- I need an internship
- Question 11 is a bit limiting I think, as there are tons of other areas students can focus in, such as character design, digital video, web and flash design, and programming.
- Question 11 is a perfect example about how the degree should be divided into 3 or 4 degrees. I want to be a 3D modeler and the degree doesn't emphasize on that in its naming or curriculum. Even modeling can be divided up into many categories. Students would have better luck finding jobs after graduation if they focused on one thing and stuck with it, as opposed to be mediocre at a bunch of things that will be outdated in 3 years.
- Sophomore portfolio should be taken later in the degree. The Idea that one would make a useful portfolio there sophomore year before really taking any of the higher level classes seems irrelevant to me. I don't know if a whole semester class should be wasted on making a 1 day assignment of a resume or making a website that should have been made in the website class or printing out crappy 100 level stuff to put in a binder. The book was also a dumb self motivational book that was a waste of time.

### Statistics

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1.a Overall quality of your experience	19	0	3.05	3.00	.780
q1.b Overall quality of the instructors	19	0	3.16	3.00	.834
q1.c Overall quality of the software	19	0	3.53	4.00	.612
q1.d Overall relevance of the software	19	0	3.53	4.00	.697
q1.e Overall quality of the hardware	19	0	3.21	3.00	.535
q1.f Overall quality of the facility	19	0	3.37	3.00	.597
q1.g Overall quality of the curriculum	19	0	3.11	3.00	.809
q1.h Overall relevance of the curriculum	19	0	3.00	3.00	.882
q2 Elaborate on your responses to q1	19	0			
q3.a Foundations/Traditional Media	19	0	3.26	3.00	.872

q3.b 3D Modeling & Animation	19	0	3.95	4.00	.229
q3.c Game Design	19	0	3.26	4.00	.933
q3.d Digital Media	18	1	2.83	3.00	.924
q3.e Professional Development	19	0	3.58	4.00	.692
q3.f Programming - Scripting Languages	19	0	2.53	3.00	1.124
q3.g Other/Miscellaneous	19	0	2.79	3.00	1.134
q4.a Foundations/Traditional Media	19	0	2.79	3.00	1.084
q4.b 3D Modeling & Animation	19	0	3.58	4.00	.692
q4.c Game Design	19	0	2.84	3.00	.958
q4.d Digital Media	19	0	3.00	3.00	.882
q4.e Professional Development	19	0	3.32	4.00	.946
q4.f Programming - Scripting Languages	19	0	3.00	3.00	1.155
q4.g Other/Miscellaneous	19	0	2.95	3.00	1.129
q5 Additional comments regarding q3 & q4	19	0			
q6 Specific instructors that stand out as excellent	19	0			
q7 Specific instructors that stand out as poor	19	0			
q8 Strongest features of the DAGD program	19	0			
q9 Areas that require the most improvement	19	0			
q10 I am a	19	0	2.89	3.00	.994
q11 I came to Ferris to be a(n)	18	1	1.94	2.00	.873
q12 Additional comments	19	0			

# Appendix H – Faculty Survey Results

## DAGD APR...Faculty Survey

### Frequencies

Prepared by: Institutional Research & Testing, 03/10

### Frequency Table

#### q1 Satisfaction w/ overall prog quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

#### q2 Program comments

- Amazing considering where we started from. The work continuously improves. While there are still significant holes in our work, we are filling them every semester.
- None
- There are a few areas that we our failing our students; up to date computers and labs that are open more often. The amount of work that we demand from our students to ensure they will be marketable in this career field is enormous and not giving them the best possible computers and enough time to use those computers is effecting the overall work of our students.

#### q3 Satisfaction w/ overall instructor quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0

	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q4 Instructors comments**

- Top notch and a good blend between good technicians, good artists and real world perspective.
- We can all improve in one area or another. Having open sessions for training classes and conferences (GDC \$ Siggraph) would be a great benefit to all of us.

**q5 Satisfaction w/ overall software qual/relevance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q6 Software comments**

- All of the software that we use and provide to our students is top of the line in almost every possible field. The only area that is lacking is with the VFX software. The price point is the major factor in regards to that software though, at anywhere from \$8,000-\$250,000 a seat I can understand why we do not have everything needed for VFX, we also only teach one or two classes that would require the use of that type of software.

**q7 Satisfaction w/ overall hardware qual/relevance**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	2	40.0	40.0	60.0
	Somewhat Dissatisfied	1	20.0	20.0	80.0
	Very Dissatisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

#### q8 Hardware comments

- We could use dedicated lab space and communal areas. We could use more of an 'art vibe' around here. Bulletin boards are OK, but not easy for people to see as the 'back row' is not travelled space.
- need better projectors and also better student life areas or any at all :)
- The systems that we give our students to work on are becoming very dated. We're using a ten year old operating system that is only 32bit. We need to update our systems to a more modern OS and give them a much greater amount of RAM. 4GB of RAM isn't going to cut it anymore. The labs are not being used to their full potential because most of the students have a better computer at home. Having dated computers that cannot handle the polygon counts or the needed amount of video ram is making it nearly impossible for the students to bring their work into the labs to work, or even turn in their homework. When a 4 year old laptop can run better than the computers we have in the labs we have a problem.
- wish things ran properly in our labs

#### q9 Satisfaction w/ overall curriculum qual/relevance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	Somewhat Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q10 Curriculum comments**

- Could go deeper... trying to do too much in too little time makes some of the curricula thin. Students are just hitting stride, then they graduate.
- For the most part what we teach is exactly what the students are going to need in the future. I would like to see a tighter focus towards game art though. Characters, vehicles, props and environments for games are all starting to fall behind.

**q11a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Somewhat Important	2	40.0	40.0	60.0
	Very Important	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q11d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	25.0	25.0
	Somewhat Important	1	20.0	25.0	50.0
	Very Important	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q11e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Very Important	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q11f Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	20.0	20.0	20.0
	Somewhat Important	1	20.0	20.0	40.0
	Very Important	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q11g Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	3	60.0	60.0	60.0
	Very Important	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q11h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Somewhat Important	1	20.0	20.0	40.0
	Very Important	3	60.0	60.0	100.0

**q11h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	20.0	20.0
	Somewhat Important	1	20.0	20.0	40.0
	Very Important	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q11i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	4	80.0	80.0	80.0
	Very Important	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q11j Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	33.3	33.3
	Somewhat Unimportant	1	20.0	33.3	66.7
	Very Important	1	20.0	33.3	100.0
	Total	3	60.0	100.0	
Missing	System	2	40.0		

**q11j Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unimportant	1	20.0	33.3	33.3
	Somewhat Unimportant	1	20.0	33.3	66.7
	Very Important	1	20.0	33.3	100.0
	Total	3	60.0	100.0	
Missing	System	2	40.0		
Total		5	100.0		

**q11k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Effective	3	60.0	75.0	75.0
	Very Effective	1	20.0	25.0	100.0
	Total	4	80.0	100.0	

Missing	System	1	20.0		
Total		5	100.0		

**q12b 3D Modeling & Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	2	40.0	40.0	60.0
	Very Effective	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q12c Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12f Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**q12g Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q12h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	3	60.0	60.0	80.0
	Very Effective	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q12i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Ineffective	1	20.0	20.0	20.0
	Somewhat Effective	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q12j Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Effective	1	20.0	100.0	100.0
Missing	System	4	80.0		
Total		5	100.0		

**q12k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q13 Comments (including key areas not listed):**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	None	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14a DAGD100 - 3D Modeling - Animation 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14b DAGD101 - 2D Visualization - Storyboards**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	25.0	25.0
	Very Satisfied	2	40.0	50.0	75.0
	N/A	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q14c DAGD102 - Story Devel for Film - Gaming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0

**q14c DAGD102 - Story Devel for Film - Gaming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14d DAGD103 - 3D Visual Drawing - Sculpture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14e DAGD150 - Intr Game Design - Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	3	60.0	60.0	80.0
	Very Satisfied	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14f DAGD180 - Intro Digital Video**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14g DAGD220 - Portfolio 1 - Sophomore Project**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	3	60.0	60.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14h DAGD230 - 3D Modeling - Animation 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	3	60.0	60.0	80.0

	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14i DAGD255 - DAGD Programming 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q14j DAGD260 - Multimedia 1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q14k DAGD300 - Game Design and Theory**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0

**q14k DAGD300 - Game Design and Theory**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14l DAGD310 - User Interface Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	3	60.0	60.0	60.0
	Very Satisfied	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14m DAGD320 - Multiplayer Game Programming**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14n DAGD230 - 3-Dimension Computer Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14o DAGD335 - 3D Modeling - Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	3	60.0	60.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14p DAGD340 - Animation - Junior Project**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	2	40.0	40.0	40.0
	Somewhat Satisfied	1	20.0	20.0	60.0
	Very Satisfied	1	20.0	20.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**q14q DAGD355 - DAGD Programming 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	3	60.0	60.0	60.0
	Very Satisfied	1	20.0	20.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14r DAGD375 - Advanced 3D - Character**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	3	60.0	60.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0

**q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	4	80.0	80.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14t DAGD420 - Applied Digital Simulation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	1	20.0	20.0	40.0
	Very Satisfied	1	20.0	20.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14u DAGD430 - Digital FX**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14v DAGD460 - Multimedia 2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	2	40.0	40.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14w DAGD491 - Applied Internship**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14x DAGD499 - Capstone**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	20.0	20.0	20.0
	Very Satisfied	2	40.0	40.0	60.0

	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q14y GRDE216 - Digital Imaging**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	20.0	20.0	20.0
	Somewhat Dissatisfied	1	20.0	20.0	40.0
	Very Satisfied	2	40.0	40.0	80.0
	N/A	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q14z GRDE225 - Webpage Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	1	20.0	20.0	20.0
	Somewhat Satisfied	1	20.0	20.0	40.0
	Very Satisfied	1	20.0	20.0	60.0
	N/A	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q15 Instructors that stand out as excellent**

- Instructor is redefining how programming is being taught and learned within our Program. I feel that he

openly engages our students to make programming fun and interesting to learn even for our "artists". I feel that with his guidance and teaching we should have many more marketable graduates that can be proficient in both programming and 3D art.

- there is always room for improvement for everyone.
- All instructors are fine

#### **q16 Instructors that stand out as poor**

- No
- No one is poor... all carry their weight. Some excel technically and other excel at student interaction, motivation and softer skills. All pull together when needed and complement each other. While students don't all see this, it's critical to a healthy system.
- None of the instructors are poor, but we could all use some updates to what we've learned and what we teach. Having us attend seminars and conferences to help us keep up on the industry would be a great help to all of us.

#### **q17 Strongest features of program**

- individual communication and interaction with students and lessons
- The overall breadth of understanding. The skills learned in DAGD allow students to get into most environments and thrive. Our students will survive once they get inside the system.
- The strongest features include a strong desire to teach students the right tools/skills to find employment.
- We have a solid foundation to build from to help our students enter the job market with a broad collection of skills. We can produce quality VFX, character, vehicle, environment artists as well as programmers, web designers, graphic designers and audio.

#### **q18 Areas that require the most improvement**

- 2d art, basic animation
- A cohesive curricula that ladders all students to excellence. Real 'animation' is practically nonexistent and needs to be addressed to be world class. Additionally 'design' seems to be a dirty word around here! While technical skill is applauded, design is considered 'fufu' and not very well regarded. All courses should consider this aesthetic. Additionally, if we are to be a game design program, we need to make games. We have come a long way to making this a reality, but we need to go further.

- Digital Imaging needs to be overhauled. It currently teaches the use of Photoshop in far too broad of a spectrum. Photoshop can be used in so many different ways and many of them do not apply to the techniques and skills required within our degree program or careers that the majority of our students are seeking. It should focus more on the creation of textures for game art for current gen systems. It should also have a firm foundation in the use of 3D texture painting.
- processing of information, and also specific technology concerns (modern operating system, more ram, projector quality)

**q19 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	no	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**Statistics**

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1 Satisfaction w/ overall prog quality	5	0	1.20	1.00	.447
q2 Program comments	5	0			
q3 Satisfaction w/ overall instructor quality	5	0	1.20	1.00	.447
q4 Instructors comments	5	0			
q5 Satisfaction w/ overall software qual/relevance	5	0	1.20	1.00	.447
q6 Software comments	5	0			

q7 Satisfaction w/ overall hardware qual/relevance	5	0	2.40	2.00	1.140
q8 Hardware comments	5	0			
q9 Satisfaction w/ overall curriculum qual/relevance	5	0	1.20	1.00	.447
q10 Curriculum comments	5	0			
q11a Foundation/Traditional Media	5	0	3.40	4.00	1.342
q11b 3D Modeling & Animation	5	0	3.60	4.00	.894
q11c Game Design	5	0	3.00	3.00	1.225
q11d Digital Media	4	1	3.25	3.50	.957
q11e Professional Development	5	0	3.60	4.00	.894
q11f Programming	5	0	3.40	4.00	.894
q11g Project Management	5	0	3.40	3.00	.548
q11h Communication	5	0	3.20	4.00	1.304
q11i General Education	5	0	3.20	3.00	.447
q11j Other	3	2	2.33	2.00	1.528
q11k Other specified	5	0			
q12a Foundation/Traditional Media	4	1	3.25	3.00	.500
q12b 3D Modeling & Animation	5	0	3.00	3.00	1.225
q12c Game Design	5	0	3.00	3.00	.707
q12d Digital Media	5	0	3.00	3.00	.707
q12e Professional Development	5	0	3.00	3.00	.707
q12f Programming	5	0	3.00	3.00	.707
q12g Project Management	5	0	2.80	3.00	.447
q12h Communication	5	0	3.00	3.00	.707
q12i General Education	5	0	2.80	3.00	.447

q12j Other	1	4	3.00	3.00	
q12k Other specified	5	0			
q13 Comments (including key areas not listed):	5	0			
q14a DAGD100 - 3D Modeling - Animation 1	5	0	4.20	4.00	.837
q14b DAGD101 - 2D Visualization – Storyboards	4	1	4.00	4.00	.816
q14c DAGD102 - Story Devel for Film – Gaming	5	0	4.20	4.00	.837
q14d DAGD103 - 3D Visual Drawing – Sculpture	5	0	3.80	4.00	.837
q14e DAGD150 - Intr Game Design – Development	5	0	3.00	3.00	.707
q14f DAGD180 - Intro Digital Video	5	0	4.20	4.00	.837
q14g DAGD220 - Portfolio 1 - Sophomore Project	5	0	4.40	4.00	.548
q14h DAGD230 - 3D Modeling - Animation 2	5	0	4.00	4.00	.707
q14i DAGD255 - DAGD Programming 1	5	0	3.60	4.00	.548
q14j DAGD260 - Multimedia 1	5	0	3.80	4.00	.447
q14k DAGD300 - Game Design and Theory	5	0	4.20	4.00	.447
q14l DAGD310 - User Interface Design	5	0	3.40	3.00	.548
q14m DAGD320 - Multiplayer Game Programming	5	0	3.40	3.00	.894
q14n DAGD330 - 3-Dimension Computer Animation	5	0	4.20	4.00	.837
q14o DAGD335 - 3D Modeling - Animation	5	0	4.40	4.00	.548
q14p DAGD340 - Animation - Junior Project	5	0	3.20	3.00	1.304
q14q DAGD355 - DAGD Programming 2	5	0	3.60	3.00	.894



q14r DAGD375 - Advanced 3D - Character	5	0	4.00	4.00	.707
q14s DAGD385 - Adv Mod-Anim-Vehicle-Structure	5	0	4.20	4.00	.447
q14t DAGD420 - Applied Digital Simulation	5	0	3.80	4.00	1.304
q14u DAGD430 - Digital FX	5	0	4.20	4.00	.837
q14v DAGD460 - Multimedia 2	5	0	3.80	4.00	.837
q14w DAGD491 - Applied Internship	5	0	4.20	4.00	.837
q14x DAGD499 - Capstone	5	0	4.20	4.00	.837
q14y GRDE216 - Digital Imaging	5	0	3.20	4.00	1.643
q14z GRDE225 - Webpage Design	5	0	3.60	4.00	1.673
q15 Instructors that stand out as excellent	5	0			
q16 Instructors that stand out as poor	5	0			
q17 Strongest features of program	5	0			
q18 Areas that require the most improvement	5	0			
q19 Additional comments	5	0			

# Appendix I – Advisory Committee Survey Results

## DAGD APR...Advisory Board

### Frequencies

Prepared by: Institutional Research & Testing, 05/10

### Frequency Table

q1a Foundation/Traditional Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	25.0	25.0
	Very Important	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

q1b 3D Modeling & Animation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	3	75.0	100.0	100.0
Missing	System	1	25.0		
Total		4	100.0		

q1c Game Design

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	33.3	33.3
	Very Important	2	50.0	66.7	100.0

	Total	3	75.0	100.0	
Missing	System	1	25.0		
Total		4	100.0		

**q1d Digital Media: Web design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	2	50.0	50.0	50.0
	Very Important	2	50.0	50.0	100.0
	Total	4	100.0	100.0	

**q1e Digital Media: Video**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	25.0	25.0
	Very Important	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

**q1f Digital Media: Flash**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	2	50.0	50.0	50.0

	Very Important	2	50.0	50.0	100.0
	Total	4	100.0	100.0	

**q1g Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	4	100.0	100.0	100.0

**q1h Programming-Scripting Languages**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	3	75.0	75.0	75.0
	Very Important	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q1i Project Management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Unimportant	1	25.0	25.0	25.0
	Very Important	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

**q1j Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	25.0	25.0
	Very Important	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

**q1k General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	3	75.0	100.0	100.0
Missing	System	1	25.0		
Total		4	100.0		

**q1l Other**

		Frequency	Percent
Missing	System	4	100.0

**q1m Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

**q1m Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	100.0	100.0	100.0

**q2a Foundation/Traditional Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q2b 3D Modeling & Animation**

		Frequency	Percent
Missing	System	4	100.0

**q2c Game Design**

		Frequency	Percent
Missing	System	4	100.0

**q2d Digital Media**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q2e Professional Development**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q2f Programming-Scripting Languages**

		Frequency	Percent
Missing	System	4	100.0

**q2g Project Management**

		Frequency	Percent
Missing	System	4	100.0

**q2h Communication**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q2i General Education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q2j Other**

		Frequency	Percent
Missing	System	4	100.0

**q2k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------



**q2k Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	100.0	100.0	100.0

**q3a Adobe Photoshop**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Required Knowledge	4	100.0	100.0	100.0

**q3b Adobe Illustrator**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	2	50.0	66.7	66.7
	Required Knowledge	1	25.0	33.3	100.0
	Total	3	75.0	100.0	
Missing	System	1	25.0		
Total		4	100.0		

**q3c Adobe Flash**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Very Important	1	25.0	33.3	33.3
	Required Knowledge	2	50.0	66.7	100.0
	Total	3	75.0	100.0	
Missing	System	1	25.0		
Total		4	100.0		

**q3d Adobe Dreamweaver**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	33.3	33.3
	Very Important	1	25.0	33.3	66.7
	Required Knowledge	1	25.0	33.3	100.0
	Total	3	75.0	100.0	
Missing	System	1	25.0		
Total		4	100.0		

**q3e Adobe Premier (video editing)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	25.0	25.0
	Very Important	1	25.0	25.0	50.0
	Required Knowledge	2	50.0	50.0	100.0
	Total	4	100.0	100.0	

**q3f Pixelogic ZBrush**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	50.0	50.0
	Required Knowledge	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3g Autodesk Mudbox**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	1	25.0	50.0	50.0
	Very Important	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3h 3dsMax**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Very Important	1	25.0	50.0	50.0
	Required Knowledge	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3i Maya**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	50.0	50.0
	Required Knowledge	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3j SoftimageXSI**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Important at All	1	25.0	50.0	50.0
	Very Important	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3k Unreal**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	50.0	50.0
	Required Knowledge	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3l Unity**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	1	25.0	50.0	50.0
	Unknown	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3m CryEngine**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Not Important at All	1	25.0	50.0	50.0
	Unknown	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3n Python**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Important	1	25.0	50.0	50.0
	Required Knowledge	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q3o Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Required Knowledge	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q3p Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	75.0	75.0	75.0
	Final Cut Pro DVD Studio Pro Compression software	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q4 Comments/Software Suggestions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	50.0	50.0	50.0
	Furry Ball should be looked at.	1	25.0	25.0	75.0
	Zbrush and mudbox are used to achieve the same end. Z brush is the one if you want to focus. the eternal max maya debate...hard to figure that one..but you can't go wrong having both except the level of mastery required is difficult if you dilute the time you have trying to grok 2 very powerful packages to the same end. Modo is worth looking at apps for iPhone development too - but you can get that through unity.	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q5 Skills that were excellent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	25.0	25.0	25.0
	Character models and gaming.	1	25.0	25.0	50.0
	From what I've seen the program provides students with an excellent foundation in the hard skills - tech, tools and so forth. The soft skills such as work ethic, commitment, professionalism all that are good as well - that's due to your faculty's work.	1	25.0	25.0	75.0
	there portfolios are very strong	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q6 Skills/aspects that were poor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	75.0	75.0	75.0
	you need an intermediate writing for media/screenwriting course	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q7 Overall quality of program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Good	3	75.0	75.0	75.0



	Excellent	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q8 Comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	50.0	50.0	50.0
	I look forward to being an adjunct instructor each fall in this program, and hope we can expand into a Spring course as well.	1	25.0	25.0	75.0
	What keeps you from being excellent is what you don't know. The demand for specific kinds of talent is ever changing - driven by many factors - tech being one. The iPad for example. However, what never changes are the basic principles and elements of design. Lean into those as a sure foundation and your students will always be able to adapt to new tech, tools and opportunities.	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q9 Strongest features of program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	25.0	25.0	25.0
	Diverse programs.	1	25.0	25.0	50.0

	the quality of instructors on the faculty	1	25.0	25.0	75.0
	Your faculty and the quality of your students. Strengthen both.	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q10 Areas that require most improvement**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	50.0	50.0	50.0
	Transfer-ability.	1	25.0	25.0	75.0
	Your faculty and the quality of your students. Yin Yang kind of deal. Your faculty have to be alive as artists and using the tools they profess. Your students have to be willing and enabled to build on the success of the past and encouraged to grow beyond their own limitations.	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q11 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	75.0	75.0	75.0

	If FSU was a manufacturing plant...and students were your product...and companies were your buyers: What's your line up for the 2013 model year look like? What new features will be in the product. What's your 5 year product plan look like? Does your production process (your curriculum) match your strategic plan for the future? How will you encourage and integrate online tools into your curriculum? With the explosion of free and for fee online training available - how will you keep your classes fresh and relevant? Do you have an agile adaptive aggressive ability to respond to the changing landscape of entertainment?	1	25.0	25.0	100.0
Total		4	100.0	100.0	

**q12a I am: Professional in Animation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	50.0	50.0	50.0
	Selected	2	50.0	50.0	100.0
	Total	4	100.0	100.0	

**q12b I am: Professional in Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	3	75.0	75.0	75.0
	Selected	1	25.0	25.0	100.0

**q12b I am: Professional in Game Design**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	3	75.0	75.0	75.0
	Selected	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

**q12c I am: Professional in Video, Media or Advertising**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	2	50.0	50.0	50.0
	Selected	2	50.0	50.0	100.0
	Total	4	100.0	100.0	

**q12d I am: Employer/past employer of alumni**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	4	100.0	100.0	100.0

**q12e I am: Educator**

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	Not Selected	1	25.0	25.0	25.0
	Selected	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

**q12f I am: Architecture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	4	100.0	100.0	100.0

**q12g I am: Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Selected	4	100.0	100.0	100.0

**q12h Other specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	100.0	100.0	100.0

**q13 Brought DAGD student in as intern**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	25.0	50.0	50.0
	No	1	25.0	50.0	100.0
	Total	2	50.0	100.0	
Missing	System	2	50.0		
Total		4	100.0		

**q14 Satisfaction with internship experience**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Satisfied	1	25.0	100.0	100.0
Missing	System	3	75.0		
Total		4	100.0		

**q15 Hired a Ferris DAGD alumni**

		Frequency	Percent
Missing	System	4	100.0

**q16 Satisfaction with employment experience**

		Frequency	Percent
Missing	System	4	100.0

**Statistics**

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1a Foundation/Traditional Media	4	0	3.75	4.00	.500
q1b 3D Modeling & Animation	3	1	4.00	4.00	.000
q1c Game Design	3	1	3.67	4.00	.577
q1d Digital Media: Web design	4	0	3.50	3.50	.577
q1e Digital Media: Video	4	0	3.75	4.00	.500
q1f Digital Media: Flash	4	0	3.50	3.50	.577
q1g Professional Development	4	0	4.00	4.00	.000
q1h Programming-Scripting Languages	4	0	3.25	3.00	.500
q1i Project Management	4	0	3.50	4.00	1.000
q1j Communication	4	0	3.75	4.00	.500
q1k General Education	3	1	4.00	4.00	.000
q1l Other	0	4			
q1m Other specified	4	0			
q2a Foundation/Traditional Media	1	3	4.00	4.00	
q2b 3D Modeling & Animation	0	4			
q2c Game Design	0	4			
q2d Digital Media	1	3	4.00	4.00	
q2e Professional Development	1	3	4.00	4.00	
q2f Programming-Scripting Languages	0	4			
q2g Project Management	0	4			
q2h Communication	1	3	4.00	4.00	

q2i General Education	1	3	4.00	4.00	
q2j Other	0	4			
q2k Other specified	4	0			
q3a Adobe Photoshop	4	0	4.00	4.00	.000
q3b Adobe Illustrator	3	1	2.67	2.00	1.155
q3c Adobe Flash	3	1	3.67	4.00	.577
q3d Adobe Dreamweaver	3	1	3.00	3.00	1.000
q3e Adobe Premier (video editing)	4	0	3.25	3.50	.957
q3f Pixologic ZBrush	2	2	3.50	3.50	.707
q3g Autodesk Mudbox	2	2	2.00	2.00	1.414
q3h 3dsMax	2	2	3.50	3.50	.707
q3i Maya	2	2	3.00	3.00	1.414
q3j SoftimageXSI	2	2	2.00	2.00	1.414
q3k Unreal	2	2	3.00	3.00	1.414
q3l Unity	2	2	4.00	4.00	1.414
q3m CryEngine	2	2	3.00	3.00	2.828
q3n Python	2	2	3.00	3.00	1.414
q3o Other	1	3	4.00	4.00	
q3p Other specified	4	0			
q4 Comments/Software Suggestions	4	0			
q5 Skills that were excellent	4	0			
q6 Skills/aspects that were poor	4	0			
q7 Overall quality of program	4	0	4.25	4.00	.500
q8 Comments	4	0			
q9 Strongest features of program	4	0			



q10 Areas that require most improvement	4	0			
q11 Additional comments	4	0			
q12a I am: Professional in Animation	4	0	.50	.50	.577
q12b I am: Professional in Game Design	4	0	.25	.00	.500
q12c I am: Professional in Video, Media or Advertising	4	0	.50	.50	.577
q12d I am: Employer/past employer of alumni	4	0	.00	.00	.000
q12e I am: Educator	4	0	.75	1.00	.500
q12f I am: Architecture	4	0	.00	.00	.000
q12g I am: Other	4	0	.00	.00	.000
q12h Other specified	4	0			
q13 Brought DAGD student in as intern	2	2	1.50	1.50	.707
q14 Satisfaction with internship experience	1	3	3.00	3.00	
q15 Hired a Ferris DAGD alumni	0	4			
q16 Satisfaction with employment experience	0	4			

## Appendix J – IGDA Curriculum Framework



**version 3.2 beta Released: February 2008**



## Foreword

The IGDA Education Special Interest Group (EdSIG) has worked collaboratively to create this newest version of the Curriculum Framework. Working with many voices, ideas and areas of practice is never an easy endeavor. This version of the Framework is the result of many workshops, panels at conferences, and discussions. The curriculum committee has met over constant emails and multiple revisions throughout the year. Although there are undoubtedly bits and pieces missing and voices we have failed to capture, we have tried to provide ample opportunity for comment by opening the document for international peer and industry review.

The EdSIG feels that no single curriculum can apply to every school, or even departments within a school. The Curriculum Framework, therefore, presents a modular approach, rather than a single detailed curriculum. The Framework describes knowledge areas and practical skills required to make and study games, in a format that can be adapted to the resources and curriculum offerings of a range of educational institutions.

As a practical document, the Framework is designed to assist educators and students, from the creation of individual courses to the development of full degree programs. It is also a guide for students creating individualized courses of study at institutions without game-related majors. It is our hope that the Framework presents some fundamental ideas in relation to teamwork, writing, presentation, and cross-discipline experiences for students. We feel that students should be involved in these soft skills throughout their educational exploration. These fundamental proficiencies are often absent in graduates, and require special attention.

Special thanks go to Tracy Fullerton who led the overall curriculum effort, Magy Seif-EI Nasr for leading the knowledge base construction phase, Yusuf Pisan for leading the exhaustive document revision phase, and Darius Kazemi and Darren Torpey for their extraordinary work in building Wiki and coordinating activities. Tremendous gratitude goes to my Advisory Board: Rob Catto, Doug Church, Robin Hunicke, Katherine Isbister, Katie Salen, Warren Spector, and Eric Zimmerman; their support has made embarking on such a large wide-scale project possible. A very big thank you goes to IGDA's tireless Executive Director Jason Della Rocca for his commitment to an open and transparent working environment as well as constant encouragement, advice, and support.



Please use the Framework document as a guide and know that the [EdSIG listserv](#) is there for support to answer questions and provide advice. The [EdSIG wiki](#) will serve as a database of syllabi. Please feel free to use those syllabi and post the courses you develop to share with the community. All of these documents are free to use under Creative Commons.

Susan Gold Chairperson, IGDA Education SIG

## ***Contact Info***

International Game Developers Association Phone: 856 423 2990 19 Mantua Road Fax: 856 423 3420 Mt. Royal, New Jersey 08061 Email: [contact@igda.org](mailto:contact@igda.org) USA

[www.igda.org](http://www.igda.org) [igda.org/education/](http://igda.org/education/)

# **1 Introduction**

Digital games, a curiosity a forty years ago, are now one of the most popular forms of entertainment and a pervasive component of global culture. The ubiquity and growth of digital games require that we understand them not just as commercial products, but that we appreciate them from many points of view. Games are aesthetic objects, learning contexts, technical constructs, and cultural phenomena—among many other things.

For gaming and the study of gaming to reach their full potential, industry and academia must cultivate a deeper understanding of the ideas that drive games, the experiences games can offer, and the implications of those ideas and experiences on the social and cultural significance of this young medium. This kind of progress will only come about when academia and industry work together.

This cooperation has already begun. Developers, spurred by increasing risk and skyrocketing development costs, turn with greater frequency to academics for conceptual and technical inspiration. Similarly, as academics begin to recognize the cultural importance and technical challenges of games, they are enriching their research and studies through dialogue with developers. As universities begin to create programs for scientific and scholarly research on games, many institutions are including industry voices to help shape their curricula.

The mission of the International Game Developers Association (IGDA) is to advance the careers and enhance the lives of game developers by connecting members with their peers, promoting professional development, and advocating on issues that affect the developer community.

As one of the Association's special interest groups, IGDA Education Committee's goal is to help foster interaction between developers and educators, to facilitate the development of educational programs, and contribute to the evolution of games. Interaction between industry and the academy has many benefits: facilitating the transition of new technologies from research labs into products; enriching education by bringing industry experience into the classroom; engendering more critical approaches among game creators; enhancing understanding of contemporary media culture; and fostering a deeper exchange between academics and game developers.

## **1.1 Purpose of This Report**

The curriculum framework we present in this document is a conceptual guide for game-related educational programs.

Though the field of scientific game research and game studies is young, the number and variety of game-related educational institutions is already vast. No single curriculum can apply to them

all. Therefore, this document presents a modular curriculum framework, not a single detailed curriculum. We have described knowledge areas and practical skills required to make and study games, in a format that can be adapted to the resources and curriculum offerings of a range of institutions worldwide.

We have not suggested specific courses, appropriate credit hours, or specific degree program requirements. Nor is this framework an attempt to tell developers what areas of knowledge should be important to them. Instead, this framework proposes a set of Core Topics—a list of general areas relevant to the construction of a game-related curriculum. We intend for you to mix and match the Core Topics according to your needs, to include and exclude as you see fit. Rather than a menu of necessary ingredients, this document lists possible ways to grow or focus your program.

In such a complex field, there is no “silver bullet” approach. It is our hope that individual teachers, administrators, and students can adapt appropriate aspects of this framework to their particular educational needs and institutional contexts.

We have created this report to explain the character of the various games programs, and to serve a broad and varied audience. We think it can be helpful to:

- Educators and administrators who are developing curricula for games related programs at their institutions;
- Games companies wishing to know or influence what they can expect from new graduates seeking jobs;
- Students who are trying to determine which area of games suits their interests, goals and skills;
- Professionals who are considering how to continue their education in a rapidly-changing field;
- Public education organizations, government officials, accreditation bodies, and others who seek a deeper understanding of the games area; and
- Anyone who is trying to make a sense of the wide range of games-related programs that are now available.

## **1.2 Scope of This Report**

There are many types of games related programs. Some have obvious names, such as game design or game programming, while others are embedded as specializations within a larger program. Over the last ten years, there has been a dramatic increase in the number and type of programs related to games. It is beyond our goal and capacity to catalogue or categorize them. As part of the curriculum framework, we attempt to describe the current landscape of games education. The list of core topics in Section 3 attempts to capture all major areas that are related to games education. While we do not expect any program or any institution to cover all the core topics, the core topics do provide a framework for thinking about the different areas of games education.

The meaning and value of accreditation is vastly different in different contexts and in different countries. Currently, there is no accreditation for undergraduate university degrees in games in

the United States, although some states do approve and accredit community colleges and private training institutions. In the UK, Skillset (<http://www.skillset.org>) is the industry body responsible for liaison with the Audio Visual Industries and has accredited four games courses to date.

Since the study of games is a highly interdisciplinary area, it is not clear what type of accreditation would be most appropriate and beneficial. Although games degrees designed and offered by computer science departments look very different from games degrees designed and offered by film schools, the graduates from both programs are valuable contributors to the games industry. We leave aside the discussion of whether it is too early for accreditation or whether games itself is not a distinct discipline, and attempt to describe the landscape of the field. As different countries and organizations start accrediting games programs, we will add the appropriate pointers to this document for reference.

### **1.3 Background and History**

The IGDA Special Interest Group on Game Education was formed in 2000 with an unprecedented cooperative effort between game industry and academia. At that time, only a few pioneering educators viewed games as a sophisticated medium of expression – a cultural and economic force that deserved study and attracted increasing numbers of students. Similarly, only a handful of game developers saw the value in forging relationships with academia, jumpstarting valuable research programs, creating a common language, and building a shared knowledge base for discussing games.

In 2000, the Education Committee was created to improve collaboration and communication between industry and academia. Reinforcing the goals of the IGDA charter, the Committee began building bridges between game developers and academics from a variety of fields.

In 2003, the Education Committee put together the first version of the curriculum framework titled IGDA Framework: The Study of Games and Game Development version 2.3 beta1. The document was never intended to be a finished product. It captured ongoing practices, presenting snapshot in time.

Since 2003, many more universities and private institutions have begun offering games courses. The computer games industry has continued to grow, and by all indications it will keep growing, making it even more crucial to have a strong relationship between the games industry and academia.

The Curriculum Framework 2008 document builds on Curriculum Framework 2003. In putting together this document, we went through a two-phase effort. In phase one, we collected course outlines at the IGDA wiki (<http://igda.org/wiki/index.php/Category:Courses>) and developed a knowledge base for educators to use as a reference. We structured the knowledge base so that courses could be classified and easily browsed. The knowledge base continues to grow and has already proven to be a valuable resource<sup>2</sup>. In phase two, we revised the 2003 framework with new insights gained from the knowledge base and incorporated feedback from game developers. We sought additional comments from the larger community by making the draft document available on IGDA's web site, through posting it on mailing lists, and through workshops and panels at conferences.

*1 The first topics IGDA Curriculum Framework released in 2003 was given the version number 2.3 beta. It was beta because it was not a finished product. We expect this document to continue to evolve and always remain in “beta”. As to why it was version 2.3 rather than version 1 remains a mystery. One hypothesis is that it was labeled as version 2.003 reflecting the year the document was released and then shortened to 2.3. The current document is labeled as version 2.008 beta to reflect the year it is presented at the Game Developers Conference (GDC).*

*2 IGDA Curriculum Knowledge Base can be found at [http://igda.org/wiki/index.php/Curriculum\\_Knowledge\\_Base](http://igda.org/wiki/index.php/Curriculum_Knowledge_Base)*

The document is the result of a community effort and continues to be work in progress.

## 1.4 Guiding Principles

The principles that guided the development of the curriculum framework are as follows:

1. **Shared Identity.** The dramatic growth in the number of games-related educational programs and their collective impact requires that games education articulate a shared identity. Games have a significant impact on society. The impact is not limited to entertainment, as games are often used in education, training, recruitment, advertising, simulation, decision-making, and many other areas. Games represent a significant part of today’s culture. Given the importance of games to society, educators have a responsibility to help society understand what we do. The goal of this report is to articulate a shared identity and common understanding of this emergent field.
2. **Fields of Study.** The curriculum framework does not dictate a specific program, but outlines fields of study that make up a games education. We are creating, defining, and exploring the knowledge required to contribute to the current games industry as well as to produce the next generation of games. Our goal is to paint a useful picture that transcends disciplinary boundaries and is accessible to a broad audience.
3. **Collaboration and Shared Vocabulary.** As game industry and academic programs continue to evolve, the curriculum framework should also evolve to reflect what both industry and academia have learned from each other and to establish a common vocabulary to enable developers, academics and students to talk to each other with shared understanding of the field. Academic programs can support the industry through educating students with relevant skills and research into new areas of game design and development. Best practices established in industry can be fed back into educational programs to improve education.
4. **Theory and Practice.** The curriculum can help create guidelines on how to bring together theory and practice, encouraging a critical approach to development. This works in reverse, too—theoretical studies of games in the social sciences and the humanities should also be more aware of the nature of the development and business of games.
5. **Living Document.** The curriculum framework is a talking point for future work and encourages innovation and free thinking in game design education This is not a final draft,

but a living document. The more people who read it and comment on its contents (both the good and the bad), the stronger this document will become in future revisions.

The IGDA Education SIG web page at <http://igda.org/education/> and the IGDA wiki at [http://igda.org/wiki/index.php/Game\\_Education\\_SIG](http://igda.org/wiki/index.php/Game_Education_SIG) provide further resources on relevant mailing lists, web sites, and books, as well as large collection of course outlines and sample degree programs.

## 2 Games Discipline

Defining games as a field of study is extremely difficult. It has a unique cultural identity, utilizes distinctive theoretical and conceptual principles, and requires an interdisciplinary perspective to understand and appreciate its various elements. Currently, journals and periodicals define much of the discipline's special interests, and a full articulation of the field is often debated. This curriculum framework attempts to identify what is considered a common denominator within our collective knowledge, with recommendations on breadth of concept, detail of knowledge, and general studies within the area referred to as games. While our focus is on digital games, we recognize that digital games are an extension of non-electronic games and "play". The study of games should incorporate all stages of production (management, design, programming, audio, graphic design, writing, testing, QA) and provide a context of videogame culture (marketing, sociology, theory and criticism). This document outlines the areas that make up the games field. Since it would not be possible for any one program to incorporate all of these areas, we expect each institution to balance the depth and breadth of their programs based on their specific context.

### 2.1 What are Games

This document thinks of games in the broadest possible sense and any one definition would be limiting, giving preference to one discipline or perspective. Common to most definitions is the notion that games are systems that involve a player who makes choices that change the state of the system, leading to an outcome.

For the sake of having a working definition that is "good enough," we offer the following definition:

A game is an activity with rules. It is a form of play often but not always involving conflict, either with other players, with the game system itself, or with randomness/fate/luck.

Most games have goals, but not all (e.g. The Sims, SimCity). Most games have defined start and end points, but not all (e.g. World of Warcraft, Dungeons & Dragons). Most games involve decision-making on the part of the players, but not all (e.g. Candyland, Chutes & Ladders).

A videogame is a game (as defined above) that uses a digital video screen of some kind, in some way.



The definition above is not meant to exclude any type of game, but is included as a “working definition.” Readers should refer to the reference materials for additional definitions and perspectives on what constitutes a game.

Studying games involves understanding the many factors that impact the workings of this complex system. The three overlapping areas in studying games are:

**Game Design** – concerned primarily with interaction and interface design Game design is the process of crafting a system of play in which players’ actions have meaning in the context of the game environment [Salen and Zimmerman, Rules of Play, 2004]. Game design encompasses the set of principles, concepts, and practices that lead to the development of high-quality product. Implicit in the process of game design is the consideration of design trade-offs to allow the implementation of a game in some human playable interactive environment.

**Game Development** – concerned primarily with the production of games, especially technologies used in creating a game development is a process that involves the interdisciplinary cooperation of technical disciplines like software engineering and creative disciplines like art and music to implement a game design in a playable real-world format [Rabin, Introduction to Game Development, 2005]. Game development often involves implementing and incrementally testing potential game elements without knowing in advance which will succeed and which will fail. Game development also requires knowledge of project management to ensure that a game is completed with the available resources and within acceptable time constraints.

**Game Studies** – concerned primarily with examining games as cultural artifacts, as pieces of media and exploring theories of play

Game studies deals with the conceptual basis and vocabulary used to study and analyze games related to game audiences, game history and videogame history, technology/platform history, game criticism, games for educational and instructional purposes.

The definitions given above are intended as guidelines for reading this document; they are not meant to be final, definitive, or universally accepted. For each area, multiple definitions can be found in literature, and there are of course many different ways of dividing and studying games. While each of the core topics described in the next section can be attached to multiple areas, it is conceptually helpful to think of a core topic belonging mostly to one area.

### 3 Core Topics

Games are interdisciplinary on many levels. To create games requires collaboration among diverse existing fields, from audio and visual design to programming and project management. At the same time, digital gaming has given rise to new kinds of hybrid disciplines, such as game design and interactive storytelling. When considered as cultural artifact, a full critical understanding of games requires that we appreciate them in all of their social, psychological, historical, and aesthetic complexity.

For this reason, we strongly advocate a cross-disciplinary approach to game-related education. For us this means an educational approach that both respects what established fields bring to games and pays attention to new realms of study that games make possible.

One of the criticisms from the games industry has been that some graduates know a little bit of each part of game design and development, but do not have in-depth knowledge of any particular area. Each institution needs to carefully balance the breadth and the depth of the programs they offer based on their target students and specific circumstances.

The set of Core Topics we propose below reflects this approach. Some of the Core Topics are derived directly from existing disciplines like computer science. Others combine disciplines or synthesize new ones. We acknowledge that there are other ways to organize these overlapping fields of knowledge. However, we feel that the set of Core Topics listed below intuitively addresses the unique practical and theoretical concerns of games. As a whole, the Core Topics provide a bird's-eye view of the immense landscape of games-related education. These Core Topics are:

1. Critical Game Studies
2. Games and Society
3. Game Design
4. Game Programming
5. Visual Design
6. Audio Design
7. Interactive Storytelling
8. Game Production
9. Business of Gaming

It should be noted that there is a consistent overlap in this list, so that some subtopics may be part of more than core topic. This also means that there are some issues that can be tackled from different disciplines (e.g. play-testing as part of design, or as part of software development, or as part of focus testing in marketing).

At this point in time, there is no agreement on a small set of core topics that all games programs should cover or even what all students who are doing an arts-heavy (versus a programming-, design-, or business-heavy) games course should cover. In fact, we expect that while the essential topics for a game programmer and a 3D game artist would have some overlap, they would also have many differences. If/when a small set of core topics emerges, we will update the document to reflect that shift.

For each core topic, we provide links to relevant IGDA resources when possible; however, as these resources grow and change over time, interested readers are encouraged to search IGDA <http://igda.org/> pages directly for additional resources.

Below is a general description of each of these topics.

### **3.1 Critical Game Studies**

#### ***Criticism, Analysis & History of electronic and non-electronic games.***

This interdisciplinary Core Topic combines approaches from history, literature, media studies, and design. A key goal of critical game studies is to develop and refine a critical vocabulary for articulating the aesthetics of games. This includes both the distinctive features unique to games

and those they share with other forms of media and culture. Critical game studies, for example, offers insight into the textual analysis of game play, whereas established work on other media, such as literature, film, television, theatre, and interactive arts can provide rich critical frameworks. Also included here are: the history of computers and digital games and toys; the construction and critique of a canon of significant and influential games; and game criticism and journalism.

### 3.1.1 Game Criticism

#### Game studies

- Ludology – studying game and play activities
- Critical theory and research
- Critical vocabulary for discussing games and play, including the evaluation of game mechanics, game play, game flow and game design and forms of gameplay experience that influence game design
- Establishing and critiquing the canon of influential and/or important games

#### Experience-centered criticism (Player-centered approach)

- Study of interactivity, human-interaction technologies
- Function and uses of exploration in virtual worlds
- Encouraging and supporting player “agency”
- Creating and sustaining player immersion
- Supporting the suspension of disbelief
- Study of human virtual social interactions

#### Consumer-oriented criticism

- Analyzing and understanding the function and current state of the gaming press
- The function and current state of game reviews
- Tools, techniques and standards of print and media journalism
- Legislative and judicial impact on the game industry
- Game advertising

#### Genre analysis

- What genres exist?
- How are game genres defined?
- History of game genres (genres that have come and gone)
- Are genres useful? How does the application of genre analysis differ when applied to games as opposed to other media?

## Auteur studies

- Given the collaborative nature of game development, who actually creates a game?
- Does the concept of authorship apply to individual games?
- Does the concept of authorship apply to an individual's body of work as a whole?
- "Branding" of games as being the work of one author

## Analysis of Game Design

- Gameplay
- Narrative / Game writing
- Story and Plot
- Character Development
- Art design
- Sound design
- Interaction design (How do new interaction devices influence forms of play?)
- Simulation Methodologies

### **3.1.2 Media Studies**

Non-game media, such as literature, radio, film, television, art, theatre, graphic novels, architecture, Internet

#### Media Research Methods

- Data collection methods
- Ethnography
- Qualitative
- Quantitative
- Technology survey (study and comparison of different technologies, their performance and their potential)
- Experimental technologies (building new gaming technologies, particularly hardware)
- Introduction to mass media/pop culture research
- General media effects research
- Game-specific research
- Player-focused research

#### Core Experiences

- Write a game review
- Read game criticism
- Write game criticism

## 3.2 Games and Society

Understanding how games reflect and construct individuals and groups, as well as how games reflect and are constructed by individuals and groups.

In this Core Topic, sociology, anthropology, cultural studies and psychology offer important insights into worldwide gaming culture. Games and society includes scholarly work on online economies and community building, fan cultures and their creative modifications of game content, the role of play in human culture, and the relationship between online and offline identity. Also found here are issues of representation, ideology, and rhetoric as they relate to gaming. This Core Topic covers the psychological facets of games including studies of media effects and the ongoing debate about the psychological impact of games on individuals and groups.

This core topic also examines how individuals and groups construct games. It explores how values, identities, and cultural images shape game production. Finally, this core topic examines how technologies, legal institutions, government policies, and corporations mold the production of video games. Placing games in a broader social, political, and economic context can provide insight into how a game came to be.

### *Players and Effects*

Gaming demographics

- Gender and diversity of players
- Childhood, education and child development
- Understanding the choices and patterns of buyers and players
- Information sources, game related organizations

The “Cultures” of Gaming

- Pop Culture: Games as icons and cultural artifacts
- Fan Culture: Game communities and their members
- Why communities form
- How to encourage the creation of fan communities and how to support them
- Game merchandizing
- Fan communities from related media
- Online communities: design and dynamics
- Mass Culture: Cultural dialogue about games
- Games in other media (film, television, books, etc)
- Games in the larger perspective of cultural impact of computers

### *History*

- Famous designers, people and events that have defined the field
- Electronic games / Non-electronic games / Online Games
- Computers / Platform studies

- Preservation of Digital Technologies
- Games from other countries

### *Experience of Play*

Historical aspects of the experience of play

- History of play
- Cross-cultural anthropology of play
- Commonalities and differences of games across national boundaries
- Role of the economy in history of play (leisure time, spare money for toys...)

Social aspects

- Social games, online and massively multiplayer games
- How games create “safe spaces” for play: experimentation
- How they are used in social settings
- How they support and break traditional social roles
- Effects of cheating (during the game vs. while practicing/learning, using built in cheats)
- Stereotypes in games (characters, settings)
- Ethical and social issues in games

Psychological aspects

- How emotional responses are triggered and manipulated by games
- Cognitive theory
- Mental Models
- Problem-solving
- Theories of intelligence
- Applicability of developmental models
- Reactions to games by others (like reactions to comics and rock music, political legislation, law suits)
- How games rely upon and affect our understanding of ourselves and others
- Research into the relationship between games and violence
- Research into games and addiction

Economic aspects

- Push for larger sales – more sequels of successful products, more licensed products)
- The role of game quality and supply in the crash of the 80s
- Changing demographics, new opportunities

Human/machine interaction

- Usability issues (e.g. making game interfaces easy to learn and easy to use)

- Accessibility issues (e.g. dealing with users having special needs)

### ***The Construction of Games and Game Technologies***

Historical aspects of the technologies and institutions that frame the game industry.

- History of game technologies
- History of game companies
- History of video game litigation and patents Anthropology of the Game Industry
- Political and Economic Context of the Game Industry
- Practice of Game Development
- Cultural Context of Game Development
- Game Developer "Culture"
- The Intersection of Gamer Culture and Game Producer Culture
- The Transnational Production of Games and Game Technologies

## **3.3 Game Design**

### ***Principles and methodologies behind the rules and play of games.***

This Core Topic addresses the fundamental ideas behind the design of electronic and non-electronic games. Game design includes gameplay, storytelling, challenges, and basic interactive design, including interface design, information design, and world interaction. Perhaps most important for game design is a detailed study of how games function to construct experiences, including rule design, play mechanics, game balancing, social game interaction, and the integration of visual, audio, tactile and textual elements into the total game experience. More practical aspects of game design, such as game design documentation and play testing are also covered. This is the Core Topic most intrinsic to games themselves and is therefore in some ways the heart of the curriculum framework we outline here. On the other hand, because it is the least understood, trained instructors and quality reference materials are sorely lacking, making it among the most challenging Core Topics to teach.

### ***Conceptual Game Design***

Understanding the atomic parts of games

- Game objects (tokens) and game setting
- Rules
- Dynamics
- Play mechanics
- Goal(s)
- Conflict
- Theme/Color

Play Mechanics

- What are game "rules"?
- How should they be structured?
- How do you create the right balance of obstacles/aids, penalties/rewards?
- The nature of 'world' and interaction.
- Core mechanics: What are they? How do they shape gameplay?
- Types of play mechanics: discrete/continuous input, deterministic/random outcome, etc.
- Information flow as a key component of systems design
- Player input
- System output
- Information feedback loops
- The importance of maintaining a tight information feedback loop
- Game theory: two-player games and strategies, payoff matrices, Nash equilibrium, ...
- How are play mechanics shaped or influenced by the game genre or platform?
- When are games too hard, too easy? Why?
- How does difficulty influence gameplay?
- What are the consequences of a game being too hard or too easy?
- What sorts of play mechanics work best for what sorts of people?
- The study of strategic decision-making in competitive and cooperative situations (Prisoner's Dilemma, etc.)
- The role of balance in game design
- Situational Balancing techniques (Area vs. Point effects, Resist Gear vs. Combat Gear)
- Equivalency Balancing (Damage per Second, accuracy vs. power, etc.)
- Transitive versus Intransitive mechanics
- Modeling Methods

### Approaches to Game Design

- Thinking about design algorithmically
- Bottom-up versus top-down design
- Player experience approach – design for the moment
- World design – building gameplay from within a story and setting
- How are play mechanics shaped or influenced by the game genre or platform?
- What sorts of play mechanics work best for what sorts of people?
- Wargames
- Role Playing Games
- Collectable Card games
- The role of chance and probability
- Narrative and flavor versus mechanics

### Board game and Role-playing design Ideas

- Generating new ideas
- Individual and group brainstorming
- Seeing the systems in the world around you
- Turning ideas into game concepts



- Evaluating game concepts using design documents and game prototypes

## Fun

- What does “fun” mean?
- Different kinds of fun: exploration, character advancement/growth, social experience, challenge, etc.
- Does a game have to be “fun”?
- Why people play

## Abstract design elements

- Positive and Negative feedback systems
- Game balancing tools
- Player rewards and punishments
- Challenge and “flow”
- Emergent complexity
- Interactions among systems that lead to unique player experience
- Controlling emergent complexity to keep it from breaking the game
- Player intent, and making systems clear enough that the player can understand, predict and control them
- Simulation & Emulation
- Using systems that allow flexible response versus specific behaviors for preconceived situations
- Communication systems
- How much information does the player need?
- What’s the best way to get information to the player?
- Layered communication
- Subconscious communication

## Psychological design considerations

- Operant conditioning
- Flow states
- Addiction in gaming
- Rewards and penalties
- Difficulty curve
- Creating diverse social systems
- Keeping the players in the game / bringing them back over time
- Fostering variety of gameplay styles
- Interface design
- Interface design theory / Computer UI theory
- Human-Computer Interaction
- Novel or specialized interfaces
- Information visualization
- User task modeling

- Balancing player control schemes -- simplicity versus expressiveness.
- The impact of specific hardware constraints – controllers, keyboards, headsets, etc.  
Iterative nature of game design: create, test, change, and repeat

### ***Serious Game Design***

Uses of games in medical, training, therapeutic and other non-entertainment applications  
 Education Training Therapeutic uses Simulation Use of games for political statements Use of games as an artistic medium Working with content experts Instructional Design Assessment – Evaluation of the game as an educational or training tool.

## **Practical Game Design**

### Spatial design

- Gameplay spaces
- Representational spaces
- Abstract spaces
- Space and pacing
- Space and narrative
- Creating densely interactive, highly responsive worlds
- Goal communication through spatial design

### Task design

- Action and interaction
- World/geometry interaction
- Character interaction
- Puzzles
- Providing adequate feedback to players

### Design integration

- Melding space and task
- Integrating art and gameplay
- Design implications of platform choice

### Control schemes

- Direct/Indirect Manipulation
- Movement and Navigation
- Items and item manipulation
- Inventories
- Natural controller mappings
- Getting Design Concepts into a Game's Underlying System

### Custom Tool Use

## Training

- Teaching your players how to play the game / what can be done in the game; integrating tutorials within the game
- Supporting learning with consistent challenges and appropriate feedback.
- Communicating with the player regarding challenges, actions and abilities within the game world
- Keeping track of what the player has done in the game / giving feedback about remaining goals

## Game tuning

- Understanding games as dynamic systems
- What makes a balanced game
- Applying game-tuning strategies in light of feedback from actual play
- Balancing player advancement with challenge advancement

## Game player analysis

- Understanding who your audience is
- Designing for diverse populations
- What criteria to use to measure success with a given audience
- Working with Quality Assurance
- Bug tracking, bug assignment
- Understanding how to write feedback to others

## Play testing (used much more in production, but can also be used in design phase as well)

- Ethical considerations in human subjects testing
- Think-aloud protocols
- Differences and similarities between usability testing and play testing
- Interviews/Questionnaires
- Observation
- Beta testing
- Testing under different constraints: testing by yourself, testing with your close friends/colleagues, supervising a test with complete strangers, blind testing

## Prototyping

- Paper prototyping
- Rapid, light-weight computer-based prototyping
- Creating physical prototypes for turn-based videogames
- Creating physical prototypes for real-time videogames
- Creating digital prototypes of individual systems or mechanics

## Game Design Documentation

- Writing and maintaining a game design document
- Writing concepts, proposals, rules documents and design documentation

- Communicating design ideas clearly to the team
- Appropriate level of detail
- Making design requirements understandable to artists and programmers
- Change tracking

Content design

- Level design

## 3.4 Game Programming

*Aspects of traditional computer science and software engineering – modified to address the technical aspects of gaming.*

This Core Topic includes physics, mathematics, programming techniques, algorithm design, game-specific programming and the technical aspects of game testing. Much of the material in this area could be taught under the auspices of a traditional computer science or software engineering curriculum. However, games do present a very specific set of programming challenges, such as optimization of mainstream algorithms such as path-finding and sorting, and real-time 3D rendering, which are addressed here.

Math and Science techniques

- Basic Newtonian physics
- Computational mechanics
- Probability and statistics
- Geometry, discrete math and linear algebra
- Vectors and Matrices
- Coordinate spaces and transformations
- Collision Detection
- Computational geometry
- Basic calculus and differential equations

Style & design principles

- Coherency
- Object oriented programming paradigms
- Design patterns
- Game design patterns

Information design

- Data structures – data architecture, file formats, data organization, data compression
- Asset pipelining
- Computational geometry
- Environmental models, spatial data structures
- Database

- Machine Architecture
- Optimization (CPU and GPU)
- Embedded System Development
- Configuration Control and Source Control Systems
- Software Architecture
- Software Engineering Game

#### Engine Design

- Purpose and importance
- Architecture and design
- Data Pipelines
- Methodologies and practices to create stand-alone gaming applications,
- Limitations of implementing cross-platform technology
- Generic and universal issues in programming for 3D engines
- Graphics libraries and 3D hardware issues
- Programming object and camera motions
- Collision detection and collision response
- Performance analysis
- Special effects

#### Prototyping

- Tools and skills for fast, iterative development
- Building flexible systems, configurable by others Programming teams -- structure and working relationships
- Working in interdisciplinary teams
- Talking with programmers/artists/designers/producers/etc.
- Team programming processes and methodologies Design/Technology synthesis
- Supporting player goals and actions
- Building intelligent, coherent, consistent, reactive game environments
- Platform issues

#### System architecture for real time game environments and simulations

- Concurrent programming techniques
- Integration of sub systems (Physics, Collision detection, AI, Input, Render, Scripting)
- Incorporating and extending third party systems in a game engine.
- Resource budgeting (CPU, GPU, memory)

#### Computer Architecture

- Structure of a CPU with implications to program design (e.g., avoiding branching)
- The memory hierarchy with implications to program design (e.g., alignment of data structures in memory, locality of reference)
- Algorithm design considerations for CPU versus GPU implementation

#### Tools construction

- "Tool Development"
- GUI creation
- Tools for multimedia content creation, modification and management
- Custom design tools
- Building flexible systems for non-programmers to use

### ***Graphics Programming***

#### • Rendering

- Transforms, lighting, texturing
- Clipping, occlusions, transparency
- Level of detail considerations
- Using data structures to optimize rendering time
- Animation
- Forward and inverse kinematics
- Transform representations
- Interpolation techniques
- Camera animation
- Graphics System Design
- Procedural content generation (Textures, Models, etc.)

#### Sound / Audio Programming

- Physics of sound and human hearing
- Programming 3D positional sound
- Utilizing Audio Channels
- Audio Prioritization

#### Artificial intelligence

- Difference in goals between Game AI and traditional AI
- Path planning, search algorithms
- Agent architectures
- Decision-making systems
- State machine design
- Statistical machine learning

#### Networks

- Networking and Server design
- Performance metrics
- Topologies
- Protocols – TCP/IP, UDP, ...
- Security
- Game Servers
- Game Protocol Development

- Available Network Libraries
- Open Source Network Game Case Studies

#### Game logic

- Compilers
- Scripting languages

#### Play analysis

- Play testing to monitor player frustration, progress and enjoyment
- Monitoring player state -- gameplay data logging
- Player metrics

## 3.5 Visual Design

### *Designing, creating and analyzing the visual components of games.*

This topic includes visual design fundamentals, both on and off the computer, across a broad range of media. Content areas include: history, analysis and production in traditional art media such as painting, drawing and sculpture; communication fields like illustration, typography and graphic design; other design disciplines such as architecture and industrial design; and time-based media like animation and filmmaking. Special emphasis is placed on how visual aesthetics play a role in the game experience. Use of 2D and 3D graphics programs can be an important part of a visual design curriculum. However, our emphasis is on fundamental visual design principles rather than on specific software packages.

#### Basic Visual Design

- Art history & theory
- Visual design fundamentals
- Composition
- Lighting and color
- Graphic design and typography
- Fundamentals of drawing
- Painting techniques
- Sculpting
- Anatomy and life drawing
- Physiology and kinesiology
- Non-narrative graphics/Abstraction as expressive tool
- Visual design in an interactive context
- Visual narratives: painting, comics, photography, film

#### Motion Graphics

- Animation
- Cinematography

- Camera angles and framing
- Visual narrative / storyboarding
- Filmmaking: framing, types of shots and camera movement, editing
- Kinematics Visual asset generation

#### 2d graphics

- Pixel Art

#### 3d modeling

- Textures

#### Interface design

- Character design
- Conceptual design
- Character modeling
- Character animation

#### World Design

- Environmental modeling

#### Architecture

- Fundamental principles of architecture
- History of architecture
- Fundamental principles of architecture
- Real-world spaces vs. game spaces
- Space design
- Navigation
- Materials

#### Working with 3D Hardware

- Procedural shading
- Lighting Effects
- Game Art (digital based art with game content)
- Custom tool use – getting game art into a game's engine
- Information Visualization Procedural content

### **3.6 Audio Design**

#### *Designing and creating sound and sound environments.*

This core topic includes a range of theoretical and practical audio-related areas, such as: music theory and history; music composition; aesthetic analysis of music; recording studio skills; and electronic sound generation. Audio relating specifically to digital game technologies, such as 3D



sound processing and generative audio structures, is also included. Throughout, special emphasis is placed on the role of audio experience within the larger context of a game. As with visual design, the emphasis is on design fundamentals rather than on specific technical knowledge.

Audio history & theory

Basic technical skills

Basic studio skills

- Familiarity with hardware and software (e.g., microphones, mixers, outboard gear)
- Recording, mixing and mastering.
- Studio organization Audio Programming Audio Assets Audio Tools

Audio Design Fundamentals

- Setting mood, managing tension and resolution
- Processing, mixing and controlling sound for aesthetic effect
- General workflow for game creation
- Audio engine terminology and functionality

Introduction to Interactive Audio

- Designing sound for interactivity
- Sound effects
- Music
- Voice recording

Sound Effects

- Simulation of sound environments
- Ambience versus musicality in soundtracks

Music

- Composition
- Interactive scoring

3d Audio

- Fundamentals of 3D and multi-channel sound.
- Modeling for effects, echo, room size simulation

## 3.7 Interactive Storytelling

*Traditional storytelling and the challenges of interactive narrative.*

Writers and designers of interactive works need a solid understanding of traditional narrative theory, character development, plot, dialogue, back-story, and world creation, as well as experimental approaches to storytelling in literature, theatre, and film with relevance to games.

In addition, interactive storytelling requires familiarity with new tools and techniques, including the technical aspects of writing for this new medium, algorithmic storytelling, and collaborative story construction. In this Core Topic, these approaches are applied to the unique context of interactive storytelling in games.

## Story in Non-Interactive Media

### Literary Theory & Narratology

- Traditional narrative “act” structure
- Thinking abstractly and concretely about “story”
- Traditional Narratives (folktales)
- Structuralism/Narratology
- Post-structuralism (Barthes, Baudrillard, etc.)
- Post-modern literature
- Theatre
- Performance Theory
- Theorists: Aristotle, Brecht, Artaud, Boal, etc.
- Story creation
- Setting: time, place
- Character: Actions, motivations, dialogue
- Events
- Discourse
- Style
- Voice and Point of View
- Event Structure
- Characterization in fiction, film and theatre
- Introduction to film and literary theory
- Theories of game and narrative
- Context-setting versus traditional storytelling
- Back-story and fictional setting design
- Creating compelling characters

### Narrative in Interactive Media

- Theoretical issues
- Agency, immersion
- Interactivity vs. narrative
- Cybertext
- Algorithmic storytelling and process intensity
- Cohesion and “well-formed” narrative
- Interactive story in non-computer-based media
- Role-playing games
- Oral storytelling
- Literary examples – Oulipo, Nabakov’s *Pale Fire*, etc.
- Theatre examples – Forum theatre, theatre of the oppressed, etc.

- Alternating fixed story with interactive game
- Visual Novels (Japanese genre)
- Exploratory narratives
- Hypertext
- Branching trees: branching narrative, branching dialogue
- Emergent narrative approaches
- Story generators
- Interactive fiction
- Collaborative storytelling
- Web-based collaborative stories
- Alternative reality games
- MUDs, MMOGs Writing for other media
- Fiction-writing
- Dramatic writing
- Screenwriting
- Playwriting
- Writing for the radio Abstract audiovisual narrative
- Semiotics and symbology
- Creating mood and drama with music and sound

### 3.8 Game Production

#### *Practical challenges of managing the development of games.*

Games are among of the most complex forms of software to create, and game development and publishing are complex, collaborative efforts. Along with all the technical challenges of software development, issues of design documentation, content creation, team roles, group dynamics, risk analysis, people management, and process management are addressed in this Core Topic. Although there is growing literature on game production, there are also rich traditions in software engineering and project management from which to draw for this Core Topic.

People management and collaborative development

Budgeting a development project

Where to find industry standard info, industry info – trades, trades from different parts of the industry, other media trades

Typical budgets and budget categories

Team make-up

- Job descriptions
- Recruiting, training
- Balancing talent, experience, budget

The Game Development Lifecycle

- Pre-production / Production / Testing
- Shipping and maintaining customer loyalty
- Different approaches to production process
- Waterfall, spiral, v-shaped, evolutionary, Scrum/Agile, iterative/incremental development, rapid prototyping, etc.
- Strengths and weaknesses
- Issues specific to game development

#### Workflow

- Knowing which tools to use and when
- Evaluating and using computer-supported collaborative work tools
- Bug-tracking systems
- Wikis
- Spreadsheets
- Message boards/forums
- Databases
- Version-control
- Problem evaluation and investing appropriate resources
- Task breakdown
- Creating a backlog
- Dropping features

#### Group dynamics

- Team building
- Establishing clear roles and clear goals
- Realities of development teams
- Building effective teams
- Working as a team to realize a unified gameplay vision
- Leadership, delegation and responsibility
- Defining the interfaces between team members

#### Design and development documentation

- Why document?
- What should you document?
- How much documentation is enough/too much?
- Who is the audience for the documentation?
- To storyboard or not to storyboard?
- Non-text based documentation: using prototypes, physical models, pictures, ...

#### Design and Development Documents

- Concept Document/Proposal
- Game Specifications
- Design Document

- Story Bible
- Script
- Art Bible
- Storyboards
- Technical Design Document
- Schedules and Business/Marketing Documents
- Test Plan

#### Testing

- Code review and test harnesses
- Designing tests and incorporating feedback from Quality Assurance
- Bug fixing, bug databases, creating stable code bases

#### Scheduling and Time Management

- Creating a schedule
- Goals of a schedule -- milestones
- Balancing quality and reality
- Working with a schedule, using it to help you ship
- Typical schedules
- Crunch time issues
- Quality of life issues

#### Communication skills

- Rhetoric
- Communicating with peers, supervisors and subordinates
- Communicating clearly in print and in speech
- Collaboration skills - speaking the same language
- Collaboration skills – speaking across disciplinary divides (you won't always have a "same language." (bridging "language" gaps)

Coordinating the efforts of development, quality assurance, sales, marketing, public relations and finance

#### Localization issues, processes and skills

- Writing “around” the game
- Packaging
- Player manuals, websites, etc.

#### Product post-mortems

- Evaluating decisions, after the fact
- Design decisions
- Process decisions
- Business decisions
- Planning and QA Plans

Quality Assurance

Defect Tracking

Technical Reviews and Inspections

Architecture

- Software Testing
- Beta Testing
- System Testing
- Code review and test harnesses
- Designing tests and incorporating feedback from Quality Assurance
- Bug fixing, bug databases, creating stable code bases
- Game Testing Working with marketing
- Marketing plans and schedules
- Marketing asset needs

### **3.9 Business of Gaming**

*Economic, legal and policy aspects of games.*

The economics of the game industry – how games are funded, marketed and sold, and the relationships among publishers, developers, distributors, marketers, retailers, and other kinds of companies are addressed here. Market and industry trends, licensing management, the dynamics of company and product value, and business differences between major game platforms are all important aspects of the business of gaming. In addition, legal issues that affect games, developers and players, such as intellectual property and contract law, are part of this Core Topic. Lastly, social and governmental forces that impact the legislation and regulation of game content are included here.

Game industry economics

- Retailers, shelf-space, digital distribution: How audiences currently reach the games
- Platform choices – the tradeoffs of developing for consoles, PCs and handheld and mobile devices
- Internationalization / globalization of development
- Offshoring / Outsourcing
- Changing barriers-to-entry (knowledge, technology, manpower)
- Challenges of cultures, distance, time-zones
- Distribution channels
- Microtransactions, one-time payment, software as a service with monthly payments, free to play with some features available to paying members, etc.
- Real money transactions in virtual worlds and MMOs
- Different delivery method and revenue streams (MS Arcade, PS Home, ...)
- Independent vs. Publisher/Developer game development

- Piracy

#### Audience

- Marketing and sales: How games currently reach an audience
- Understanding audiences for different game genres
- How to reach and keep given audiences
- Consumer behavior and psychology (what do consumers of various sorts and various populations want?)

#### Publisher/Developer Relationships

- The deal
- What it covers
- How it gets done
- What it is likely to say
- Greenlighting process
- Day-to-day: Once signed up, what interactions and processes occur
- Milestone review

#### Intellectual property

- Technology and Copyright
- Key Cases
- Major players
- Content
- Licenses
- Acquisition of licenses
- Use of licenses
- Working with licensors

#### Piracy

#### Patents and the game industry

#### Contracts

- Publisher/developer
- Employer/employee
- Contractors

#### Content Regulation

- Game Ratings and Classification
- ESRB (North America)
- PEGI (Europe)
- CERO (Japan)
- Government regulation
- North America

- Europe / Oceania
- Asia

## 4 Degree Programs and Expectations of Graduates

For most students, getting an education in games is a step towards a career in games. However, many students (and some academics) are not aware of the full scope of games industry positions. Although games education will never be attached to a specific industry position, it is important to understand the types jobs that are available for games graduates.

The industry positions below are based on the annual Gamasutra survey of people working in the games industry. A more comprehensive list of job titles has been compiled by the IGDA Credits and Awards Committee and can be found at

[http://www.igda.org/wiki/I\\_%E2%80%93\\_IGDA\\_STANDARDIZED\\_ROLES](http://www.igda.org/wiki/I_%E2%80%93_IGDA_STANDARDIZED_ROLES)

- Programming
- Art & Animation
- Game Design
- Game writing
- Production
- Quality Assurance
- Audio
- Business & Legal
- Marketing
- Consumer support
- Community support

We will try to expand this section to include expected duties, responsibilities and education for each of these job titles.

## 5 Institutional Considerations

Games programs differ significantly from each other due to differences in institutional size, whether the program is part of an undergraduate/graduate/specialized degree, which department initiated the games program, whether the program incorporates industry experts, and how students are admitted to the program. Although a few courses or a cluster of courses can produce well-rounded students with a broad world view, fully-fledged, games-specific programs can produce passionate students who are well-prepared for their first jobs in the game industry.

While each institution will need to tailor their program based on their resources, existing structure and their specific context, some of the components of a strong program are as follows:

1. Advisory Board (local professionals if available)
2. Focus on portfolio development (graduation requirement, professional/academic judges)



3. Internship network with studios, companies and community organizations including non-profits.
4. Relationship with local IGDA chapter (student memberships)
5. Faculty with industry experience (especially for development-focused programs)
6. Labs and libraries (access to hardware/software/games students don't have)
7. Speaker program (bring current professionals on campus)
8. Mixed classes (courses involving programmers and artists on same project, team-based)
9. Extracurricular projects (student-led mods, projects outside the classroom)

Some general advice to educators starting a new course

1. Be prepared for your colleagues to be skeptical. This is a new field of study and often academic colleagues simply will not be capable of accepting it as an academic field in its own right.
2. Be sure you understand where your program fits within your subject area. Often undergraduate programs are created within an existing department of study. This obviously has a big impact on the nature of the program design, and institutions are well advised to be sure they have capacity within the subject areas before starting a program.
3. Students (and industry) can see very quickly if your program is not being taken seriously. With a large number of programs becoming available, they are very critical of institutions where programs are being set up not because they are academically credible, but because of the potential for recruitment. In our experience, students -- and perhaps more importantly employers -- are attuned to this and are quickly able to see through such tactics.
4. Understand that the technologies and tools involved in developing games can be expensive.
5. Play games and encourage your colleagues who want to get involved in the program to play. You do not have to become a hard-core gamer, but first-hand experience with games is essential for anybody teaching or researching the games area.

## 6 Next Steps

The 2008 Curriculum Framework will be presented at GDC 2008 (Game Developers Conference) at the IGDA Education Summit. The feedback collected at GDC will be incorporated into this document. The next major revision will be in late 2010 or 2011.

## 7 Further Information

For additional information please refer to

IGDA web site: <http://igda.org/>

IGDA Game Education SIG: <http://igda.org/education/>

IGDA Game Education Wiki: [http://igda.org/wiki/Game\\_Education\\_SIG](http://igda.org/wiki/Game_Education_SIG)

IGDA Game Education Listserv: [http://seven.pairlist.net/mailman/listinfo/game\\_edu](http://seven.pairlist.net/mailman/listinfo/game_edu)

## 8 Thanks

The Education Committee would like to extend a heartfelt thanks to all the academics, developers and students who have provided input and support throughout the development of this document. Apologies in advance if we have inadvertently missed any names.

*Mark Baldwin, University of Advancing Technology Katrin Becker, University of Calgary Robin Burke, DePaul University Philip Carlisle, University of Bolton Rob Catto, Full Sail Doug Church, Electronic Arts*

*Jason Della Rocca, International Game Developer's Association Mark Doughty, University of Lincoln Tom Dowd, Columbia College Michael Edwards, Parsons The New School for Design Clara Fernandez, Massachusetts Institute of Technology Tracy Fullerton, University of Southern California Paul Gadi, Anino Games*

*Kimberly Gregson, Ithaca College Susan Gold Mark Harmon, Westwood College Online Ian Horswill, Northwestern University Robin Hunicke, Electronic Arts*

*Katherine Isbister, Center for Computer Games Research*

*IT University of Copenhagen Michael J. Katchabaw, The University of Western Ontario Jay Laird, Northeastern University Jack Lew, Electronic Arts Samuel Lewis, Cartoon Network*

*Martin Masek, Edith Cowan University Bruce Maxim, University of Michigan-Dearborn Gary Miller, Full Sail Alex Mitchell, National University of Singapore Frans Mäyrä, University of Tampere Andrew Nealen, Technische Universitaet Berlin Lennart Nacke, Blekinge Institute of Technology Magy Seif El-Nasr, Simon Frasier University Casey O'Donnell, Rensselaer Polytechnic Institute Kevin O'Gorman, American InterContinental University Lisa Patacchiola Bristol Community College Yusuf Pisan, University of Technology, Sydney Mike Reddy Damon Redmond, Shaba Studios Norb Rozek, Frozen Code Base Studios Katie Salen, Parson the New School for Design, Institute of Play Ian Schreiber Marla Schweppe, Rochester Institute of Technology Warren Spector, Junction Point Studios Tom Smith, THQ Jolyon Webb, Blitz Games Elias Wyber, Murdoch University Catherine Wyman, DeVry Institute Eric Zimmerman, gameLab*

Matt Wagenheim, Ph.D.  
Chair, Academic Program Review Council  
SRC 103  
Ferris State University  
Big Rapids, MI 49307

Dear Dr. Wagenheim,

Thanks to you and the APRC committee for your efforts in the review of our program in Digital Animation and Game Design (DAGD). They are appreciated by the faculty and staff of the College of Professional and Technological Studies (CPTS). While we have made the review of DAGD an ongoing practice, the Academic Program Review Process allows us to focus, considering the history and progression of the program in relation to its future. Without your work, this would not be possible.

The compilation of the Academic Program Review Council report has involved the time and attention of several people. I wish to begin by acknowledging their fine work. My thanks to Ward Makielski, Instructor for Digital Animation and Game Design for his work on the Program Review Panel. I also wish to acknowledge Frederick (Rick) Baker, Instructor for Digital Media Software Engineering; Joseph Wist, Associate Professor, Manufacturing Engineering Technology; Robert Ewigleben, Director for International Development; and Tracy Powers, Assistant Dean of the College of Professional and Technological Studies for their careful review and edits. Special thanks go to David Baker, Program Coordinator for Digital Animation and Game Design for his detailed analysis, recommendations and the authoring of this report.

As you review this program, I hope you appreciate the rapid advancements taking place in computer graphics (CG) and the dedication our faculty members possess to the advancement of our program. Due to previous evaluations completed within the College, DAGD has added a portfolio process, increased our software offerings, expanded the internship program and developed many industry relationships.

The DAGD degree program primarily serves the interactive video game and animation industries but as computer graphic technology continues to progress, new applications in other industries are causing us to constantly evaluate our curriculum, hardware and software to provide the best instruction for our students. Some of the industries that will see massive impact from CG in the coming decade are education, medicine and homeland security. Through the careful analysis completed in the making of this report and our continued examination of the labor market, several initiatives will be undertaken to improve the adaptability of curriculum, increase the employability of graduates, and expand the qualifications of our faculty so that our program is better prepared for that next decade of change.

To summarize, DAGD has had a history of response to rapid change but these efforts will need to be redoubled to leverage our early accomplishments. Over the next year, CPTS will provide these services to make the DAGD program “one of the leading educational institutions in animation and interactive technologies not just in Michigan, but in the nation” as mentioned in this report.

I appreciate the investment made by the Academic Program Review Council. The faculty and staff of the College of Professional and Technological Studies look forward to recommendations which will serve Digital Animation and Game Design’s future growth.

Sincerely,

Donald J. Green, Ed.D.