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Artist or Artisan?

Preparing students for a career in the computer animation industry.

High impact movies such as Lord of the Rings have encouraged many students to enrol in courses that teach computer animation. Many short courses have appeared, usually offering training in computer animation software. However, it is not from these short courses that the quality graduates necessarily appear. The education provided by larger degree based institutes of University level continue to provide well rounded and highly skilled graduates that are sought after by employers in the computer animation industry.

Because of the way art and design schools have developed in New Zealand, most quality computer animation courses are located within other learning areas. At Massey University for example, computer animation is but a component of the larger visual communication major. Many papers that students take are not specific to computer animation and are in fact flavoured towards the more popular graphic design subjects. One could observe that this structure disadvantages students majoring in computer animation. However, year after year, Massey University graduates produce high quality work, and find favourable jobs in the digital media industry. How can this be? Is this proof that a generalist education is better than a specialist one? And is the New Zealand animation industry happy with the graduates that result from this type of learning experience.

Key attributes that graduates need to demonstrate

There are key attributes that a student of computer animation needs to develop in order to excel as well as gain attention from New Zealand employers:

- Identify their area of talent and develop it to a high level
- Show research, development and expression of a concept
- Be able to talk articulately about their work and their area of interest
- Demonstrate their expertise clearly in their show reel
- Demonstrate a sound general knowledge about the industry they seek employment
- Demonstrate independent problem solving ability
- Show good team working

Most of these attributes are common in any area of study and employment. However, being that computer animation draws on the talents of art and computer knowledge, it is easy for the student to assume that sheer talent and hard work will gain them recognition. While it is true that skill is noticed, employers and university lecturers alike look equally hard for the way students work, not just what they produce.

In a recent interview with a senior animation director, the discussion turned to what they like to see in applicants' show reels. The three main attributes sought were skill, knowledge of the production process, and aptitude. Even though the graduates that are employed are seen as trainees, they are expected to fit into a team quickly and solve problems independently, without constantly seeking answers from the senior animators. It was also mentioned that industry seeks artisans or specialists, and is not as interested in examples of story, concept development, and theoretical investigation. Though this point is accepted, it should be noted

that it is the very same process of story, concept and theory education that develops the student into the independent, skilled, problem solving individual industry are seeking.

Talent?

A good student of animation without fail already has a well developed sense for animation before they even specialise in the main animation papers. In essence, they are "naturals". Occasionally, employers will see this quality in a student, and offer them employment before they finish study. When students have this type of inherent ability, they are very rewarding to teach. With that sense of movement and timing already established, it is comparatively straight-forward to lead them through software training, conceptual development, production management and finally completion of high quality work.

So where does this innate talent come from? Without the benefit of a formal study, it is nonetheless clear that these students develop this ability over many years prior to enrolment. Informal discussion usually reveals a long held ability in drawing, art, cartooning, and of recent years, computer art and design. Whatever the starting point, once they arrive at University, the ability is already strong. The University's first role is to identify these students when they apply, and then provide the environment in which they can develop.

If a student has only a small amount of this talent, can it be nurtured, or does the student simply have to live with their allotted amount? Clearly, any learning institute will attempt to develop any spark of talent as much as possible, and in most cases, this talent will develop. The extent of their success is only governed by the pace at which they can grow. However, it must be said, that if a student exhibits no natural talent at all, the task is impossible.

Sometimes, upon realising their artistic limits, a student will turn to the more technical parts of computer animation such as character setup and programming. This is an interesting scenario for a creativity-based school. As the student explores the realm of programming, they run the risk of moving outside the school's area of expertise and experience, and may need to consult with staff from another department. They also run the risk of competing for jobs against highly skilled graduates from computing courses. However, students in a creative school may yet hold an advantage. A computer artist who can also programme may be more appealing to industry than the skilled programmer who is partially artistic. I would suggest that artistic talent cannot be learnt in a given space of time, whereas programming can. However, I also suspect that both areas require their own form of creative talent, and demand is probably determined by supply.

How do students become so independent and driven?

Like many art and design schools around the world, Massey's Bachelor of Design with Honours begins with a generalised foundation, progresses through various papers of increasing specialisation, and finishes with an independent, thesis-like major project.

In the 3rd year students encounter Alias Maya for the first time. This may seem to be rather late in their course of study, but because of their preparation in year 2 and overall general maturity, the students learn the software very rapidly. Most commercial beginner-level tutorials are paced too slowly for these students. Throughout this time, students are continually exposed to the "art" of computer animation, its purpose, its expressive and communicative capabilities. As the year progresses, the projects gradually change from being technically focused, to being creatively focused. However, this brings an extra challenge to the student.

Once students begin to explore their own individual expressive nature, their technical requirements and problems can also expand, with each student encountering very different problems. This could place enormous demands on a lecturer, who is at this time wanting to

concentrate on developing the art, and would rather not deal with technical issues. It is at this time, that the students are encouraged to identify the problem correctly and find the answers for themselves. This can take many forms, such as simply using the online help, or reading the manual, consulting books, consulting online forums and accessing tutorials from the web. Also, the strongest aid to learning of all, is to help each other as a group. If the students do not move into this stage of learning, they will not succeed later on. Ideally at this time the lecturer can move into the role of mentor and supervisor.

This can be a difficult transition for both students and staff, but is absolutely necessary. In the student's 4th and final year of study, they receive no formal technical teaching. Rather, the focus moves entirely to theoretical and artistic considerations. This is a time where the "why" of ideas is questioned. This is also the time where those students who have the ability to enquire and theorise, and adopt a mature attitude to study, can excel to a high level.

Story or skill

The final year in the Degree allows students to fully mature as much as possible in the chosen area of study. However, if the student wishes to get a job upon graduation, they also need to be aware of what industry wants. Industry at any given time requires certain skill sets, e.g. an animator, a modeller, a shots artist, a technical director, texture painter etc. In contrast to this, the University seeks to develop the potential of a student in a much broader sense. There may be a future visionary film director inside of any individual, and it is the University's role to ensure that the individual is able to realise this. The student must therefore satisfy both demands. Their work must meet all of the requirements of the University, but also be a great show reel for the job interview. This is not difficult to do, but it is very easy to overlook.

The Industry in New Zealand

If it wasn't for the exposure of Lord of the Rings and the associated companies Weta Digital and Weta Workshop, the New Zealand student could be forgiven for thinking that New Zealand did not have a computer animation industry. The computer animation industry until recently had very few visible access points for students, and until Weta was established, no similar large companies existed. Employment came mostly by way of children's TV programs, a few commercial post production companies, very small specialist companies and individually funded projects. Opportunities and productions came and went. There was no constant industry regularly employing graduates.

During the pre-production phase for Lord of the Rings around 1998, Weta Digital and Weta Workshop gave many talented students their first employment opportunities. However, as the production for Lord of the Rings commenced in earnest, the demand for highly skilled and experienced animators could only be met by overseas recruitment, and the opportunities for local students diminished significantly. This situation persisted for some years.

Though educational institutes attempted to provide higher calibre education, it was very difficult to achieve the high standard required. The experienced computer artists who would ideally pioneer such courses were busy in the industry, and they were not returning to pass on the knowledge. As a result, energetic individuals within the institutes began developing papers within their existing degrees, be it graphic design, film, or multimedia. Though this approach tended to limit growth, it did provide for some security, as papers could gradually develop within the support of the larger course. As it has transpired, this evolution may have been beneficial. Computer animation in New Zealand is not a large employment area. It is to the student's advantage that they are exposed to learning in associated areas, and do not risk being the absolute specialist. Also, in New Zealand it is generally expected that a graduate

of the creative arts will have several areas of skill. Certainly in the smaller companies, an individual will perform a variety of roles.

Recently, one event in particular has had a significant impact for computer animation graduates. Weta Workshop have set up a digital animation unit, and have embarked on an animated series for television. They have been actively recruiting within New Zealand for graduates, much to the relief of many a graduating student.

Summary

The computer animation and other digital media industry areas in New Zealand will no doubt continue to fluctuate, and remain a moving target for graduates seeking employment. However, the standard of animation and effects for TV and film in this country is very high, and industry will always welcome talented and skilled graduates. A good digital media artist is a special type of person – a person who is artistic, but also at ease in the complex computer environment. To be able to create magical and emotional digital imagery is remarkable when one considers the incredible complexity of computer software. And like the industry pioneers, educational institutes have a very important role in developing and maintaining high educational standards, and ensuring that this medium continues to evolve to its maximum potential.

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