Reframing Co-op

Professional Partnership Program
An Alternative Real World Experience within a Digital Arts & Design Environment

Jurgen Faust
Cleveland Institute of Art

1 Background information

Over the past decade in most Art Schools and Universities, new digital art and design programs have been implemented. These new programs provide a variety of education for animation; mainly 3D, special effects, web design and interactive gaming. In 1999, I was hired at the Cleveland Institute of Art (CIA) as an integral part of a school wide taskforce, including faculty from various disciplines, to implement a new digital art and design program. In order to prevent conflicts regarding support, I was provided a platform to work from: Technology and Integrated Media Environment (T.I.M.E.) - Digital Arts. CIA is America's only five 5-year art college and during the five-year undergraduate program students study two years of liberal arts foundation and are taught basic design, drawing and color theory. In the third year, students are required to select a major art directive. CIA offers sixteen art majors. For example, students may choose to major in painting, sculpture, industrial design, photography or T.I.M.E. Every student graduates with a Bachelor of Art degree within a defined art major. The T.I.M.E. major is structured differently. The student who choose Integrated Media in their third year has the opportunity to cross disciplinary study with an individual emphasis in the following directions: digital film/ video, installation/performance/ robotics, CD-ROM/Web/DVD authoring, and animation, sound design, gaming and broadcasting.

2 Challenge

Based on my experience and as the chair of a digital arts program in Germany, I was aware that educating students through a college environment and not as a trade school proved very difficult in preparing the digital art and design student for the professional business world. Traditionally, the only real world experience would be during the student's internship. My experience with internships in Germany, especially in small and midsize companies can substantiate that these companies and institutions did not have the time, expertise or tools (software/hardware) to educate the students during their internship. These companies hired students to work as interns for the company in a limited art defined capacity using the students as cheap labor to work on corporate projects. The same holds true in the United States. Exceptions offering great internships are bigger companies like Disney and Electronic Arts, which have an internal education platform setup to select the best and right fit and train student interns for future jobs.

3 Solution: The Professional Partnership Program

Most corporate student internship programs expose the student to a limited professional experience. An efficacious Professional Partnership Program is the solution to the following:

1. How can students attain a real professional experience within their desired field of work?
2. How can a responsible non-profit academic institution revise learning objectives and the outcome of its educational framework whereby students and professional partners profit and all are satisfied?

In 2003, I introduced a program at the Cleveland Institute of Art, which I originally developed in Germany at the Freie Hochschule Metzingen now the University of Applied Sciences Schwaebisch Hall, where this program is required curriculum for all students attending the University. The program is offered at The Cleveland Institute of Art as the 'Professional Partnership Program' (PPP). Similar to a Co-op Program within the science and management realm with the following major differences:

1. The PPP student will have responsibility for an entire project for the profit and non-profit organization over a defined time frame, usually a semester or even a year.
2. Faculty - not the company supervise projects because the company is the customer who has expectations regarding the product.
3. A PPP coordinator, provided by the University will accompany the project in order to keep the relationship between the three partners in good shape.
4. Students working in the PPP work through an entire production cycle. Exposing themselves to various challenges and learning outcomes of their decisions while creating a 'real' project for the 'real' world.
5. The employer, the PPP Program Partner compensates students with an adequate salary.

Specific details of the PP Program can be downloaded at www.cia.edu/time/ppp

4 Success

The success of this type program is astonishing if correctly structured. First, such an advanced Coop program needs the right setup and environment. Advising faculty need to be interested in such a program and have to have the expertise to advise these students. If faculty sees within these projects the potential to make additional money outside of the classroom, there could be a conflict for them supervising these projects. The traditional model of faculty *as the one who knows everything* must change to a position of coaching. Faculty will now apply their knowledge and coach students on how to solve a problem through research and to find correct and effective solutions.

Secondly, the academic institution needs to support the program by hiring a well-qualified PPP coordinator. Preferably, an expert and designer within this field with excellent communication and negotiation skills functioning as a mediator between the employment institution, the student and the academic institution. The Cleveland Institute of Art does not admit program participation to students at the undergraduate level, only highly selected students within their 5th year can participate. Additionally, these fifth year students must be mature, encompass quality technical and design skills as well as, excellent communication skills to enter the program or they will find it difficult maintaining current curriculum demands concurrently with the demands and their relationship with a company. The PP Program will be a requirement of the recently accredited Master's in Digital Art Program beginning fall semester 2005 at the Cleveland Institute of Art.

5 Project based learning

The key to understanding the entire success of such a program is through project-based learning. Notably, the highly motivated student performs on a very different level within this real world experience than in a classroom. Quite a lot has been written about Project-based learning. Here are some aspects I observed over the years; the model shifts away from the classroom practices of short, isolated, teacher-centered lessons and instead emphasizes learning activities that are long-term, interdisciplinary, student-centered, and integrated with real world issues and practices. Resulting in motivated students who pursue the opportunities to develop specific interests, to question and make their own decisions and problem solve. It can be described as interdisciplinary learning utilizing a "real" production pipeline, establishing connections outside the classroom, addressing "real" concerns, and developing "real world" skills. These skills include the ability to work well with others, make conscientious decisions, take initiative, do research and solve complex problems.

In effect, there is an added workload for coaching faculty members and each faculty member must adjust to their varied roles of coach-facilitator-co-learner but these faculty members are rewarded through their participation in the program as being an integral part of the learning experience. Moreover, faculty can use their insight to rewrite and adjust curriculum and teaching practices as well as establishing new outside contacts to bring into the classroom.

6 Curriculum

The curriculum for this program is structured along the production pipeline:

1) Preproduction:

a. Assignment analysis
b. Define the goals
c. Define the audience
d. Identify limitations and solutions
e. Describe the content
f. Specify the delivery plan

2) Design

a. Organize the content
b. Write a script
c. Explore design ideas, create style guide
d. Specify interactivity
e. Create storyboards, flowcharts, and preliminary scripts
f. Create and test a prototype

3.) Production

a. Development
b. Select tools and standards
c. Gather and digitize existing assets
d. Audio/Video/Animation/Text
e. Create new content
f. Finalize planning documents
g. Authoring: Bring it all together

4.) Postproduction

a. Evaluation and Testing
b. Implementation
c. Packaging, Publicity, Promotion, and Support materials
d. Deployment: Roll It Out
e. Evaluation

5.) Maintenance and Analysis of Work:

a. What is working well?
b. What are the strengths of this project?
c. Are the stated goals being accomplished?
d. If Version Two were developed, what would be changed?

7 PPP Working Example - Spinal cord injury Learning CD-Rom

Spinal cord injury Learning CD-Rom as a joint venture between The Cleveland Institute of Art and the Metro Health Medical Center in Cleveland

Over the last two years, two students of the Technology and Integrated Media Environment (T.I.M.E.), a digital art and design program at The Cleveland Institute of Art, produced a learning CD-Rom for spinal cord injury patients. Under the supervision of chairman and Prof. Jürgen Faust, Ben Kinsley and Ryan Faraji worked with Metro Health Medical Center for Health Care Research and Policy in Cleveland in a cooperative agreement as part of T.I.M.E ‘s project-based learning platform to produce a media project which allows patients to learn about their new life conditions independently. The CD-Rom contains over 1-1/2 hours of training and instructions on various levels.

The very complex task, reaching a broad audience with computers that are not always state of the art, required a lot of technical tricks in order to make the product compelling. Originally, the CD-Rom was intended to contain a large amount of video but in the end, the information did not fit on a 700 MB disk, even using video compressions. The pair moved to using an old trick: still images with a lot of voice over. The final product reflected the day by day changes, which spinal cord injured patients have to face. The medical knowledge which documents the changes in the body of such patients, however, is delivered in a compressed video format, containing 3D animations to inform the patients in the best and most accurate way possible.

The CD-Rom includes an executable file which makes sure that the entire project will get downloaded to the local hard drive. This is necessary for two reasons: first to make sure that older CD-Rom drives don’t bottleneck the applications and make the videos choppy; and, second, the application is entirely interactive and tracks the learning progress of the patient. This adaptive system allows the user to determine the learning progress individually and allows for revisiting the application without going through all the learning steps again.

The entire application is currently in a beta stage. Necessary user testing will make sure that there are no bugs or problems with the instructional CD-Rom. Since the medical instructions as well as the day by day instructions are very different for female or male patients, two versions have been produced. They include themes such as leakage of urine, lifestyle issues, appearance, odor, cost, intimacy, work life, but also a lot of information about the bladder as well as technical solutions to live with these conditions.

In addition to the CD-Rom, the production of an adjacent website is currently in the final stage. This will allow the hospital to use the CD-Rom for a longer period because the newest and latest research as well as techniques and products which will ease the lives of such patients can be updated on a daily basis.

The responsible team from the Center for Health Care Research and Policy at MetroHealth Medical Center at The Case Western Reserve School of Medicine has been Patrick K. Murray, MD and Mary Joan Roach, Ph.D., who directed and managed the project from the instructional side. The entire design, programming, and production was completed by students from The Cleveland Institute of Art under supervision of the chairman Prof. Jürgen Faust. It is also a great example of cooperation within the academic field. Images of the application can be seen at: www.cia.edu/time/metrohealth.

Summary

Within the first two years of running the Professional Partnership Program at the Cleveland Institute of Art my experiences have been phenomenal. All relationships and projects have been exceptional. Profit and non-profit organizations are more than satisfied with the program's outcome. Foremost, the students earned credible pay to aid their tuition, achieved a far-reaching education from their "real world" experience to include an incredible portfolio (you usually do not see in an undergraduate portfolio) and an excellent opportunity for future employment with their partnering institution. In one case, students started their own company and contracted the partnering institution as their first customer.

For the academic institution the results have been well received and skepticism of the program shifting towards a trade school is nil. Design issues and critical thinking dominate the classroom because of the "real" world experience inclusive of this type program. Those students who participate in this program will be highly prepared for the "real" professional world of integrated media and design.