Interactive Media and Game Development –Media Studio

A Proposal for a Thesis Project
Submitted to the program of

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Abstract

This paper discusses the research I've undertaken to create a student-driven multimedia studio for the Interactive Media and Game Development program. The purpose of this research is to create a for profit studio model that best works for Worcester Polytechnic Institute students. The Ideas Studio was created by Professor Jennifer deWinter. After its creation, research was shifted from creating a studio to using the collected data to give structured feedback on the current studio model in order to help it grow and nourish. The studio emphasizes the creation of more projects for our students to work on with the possibility of growing university-wide. I surveyed 73 Interactive Media and Game Development (IMGD) students as well as interviewed and made observations of successful studios at three universities: Rochester Institute of Technology (RIT), Carnegie Mellon University, and New York University. The results showed that students were excited about the idea of having a studio on campus to help them gain professional experiences. Results also revealed many challenges that the studio might face, such as students not having the required background and being too scared to participate. Risks revealed by the research included not having enough funding, having no client, and students not being able to run a studio. The studio observation helped me see the areas for improvement so that I can give my recommendation. This project shows the interest in a studio at Worcester Polytechnic Institute and the model that works best for that studio.

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1.Introduction

Multimedia studios are focused on creating different media types such as movies, games, websites, music, and many more. Some examples of multimedia studios are Gilbane 150 and FableVision Studios. Many universities have created a form of multimedia studio to help their students get some experience and a space to express themselves. Over the years, the IMGD program was often approached by clients to collaborate on interactive projects. As a result, some students from the program formed an unofficial studio to work on a "Hololens Project," an interdepartmental collaboration with the Chemistry department. The group was formed in the spring semester of 2020 by IMGD students Kate Olguin and Emma Lowry and worked throughout the summer of 2020. Although the team began work in the lab, they had to move online due to the pandemic. The studio's goal was to ultimately help students struggling to find work or internships gain valuable professional studio experience while they are at home. Students at Worcester Polytechnic Institute (WPI) are also able to be part of an indie studio, Sunburst Studio, where they develop indie games for profit. Overall, the students in the IMGD program have the experience to help create this project. How does the IMGD program create a for-profit studio that will help students gain professional studio experience while being encouraged to create their own?

2. Background

2.1 University Studio models

To help me understand the nature of this project, I researched six universities that have created successful studio models: Magic Spell Studios at RIT, Media Design School in New Zealand, American University Washington DC, University of Chicago, The University of Southern California, and New York University. I found that each studio has a unique identity and mission.

To best cater to their needs, Magic Spell Studios built a space dedicated to their studio. It is the first and only University-led commercial studio in the Northeast. RIT, alongside Rensselaer Polytechnic Institute and New York University, was recognized as a Digital Game Hub by Empire State Development, an organization that promotes a growing state economy. According to RIT, the hub's objective is to

> Establish solid foundations for long-term growth through outreach and community building activities and increase the economic impact of games to New York State. We do this by providing resources and mentoring to encourage students and indie developers to enter the growing games industry, by fostering innovation, and by creating collaborative activities that spur new games and start-up companies.

Media Design School in New Zealand thrives through the creation of exclusive content for the PlayStation console. American University Washington DC builds real-world games that touch upon mental health. In 4 years, they have received one million dollars in contracts, grants, collaboration with government agencies and non-profit organizations. At this studio, students partner with working professionals to work on projects. University of Chicago's studio was a gift

from Bradford Weston's alumni; the studio is new and is just emerging. The University of Southern California has a program called Summer Bridge; it is an incubator program that helps students create their own company. New York University's incubators run different programs every year. They open those programs to the public; students work with other artists in the community.

2.2 Conventional Studio Models

To compare, conventional studio models were also researched. FableVision is a professional commercial studio that focuses on developing and creating serious games and multimedia for the educational sector. In their model, clients approach them with educational projects on various subjects with a proposed budget; the studio decides as a whole on which projects to approve or reject. Its clients are broadcasters, publishers, non-profits, research groups, and museums, including PBS, The Jim Henson Company, Nick Jr, Smithsonian, MIT, and National Geographic Society.

Another multimedia studio that has a model we are interested in is Creative Propulsion Labs. Although their product is not similar to our planned products, the company model is identical to FableVision Studio. Clients approach them with a project and budget, which then undergoes the approval process before being created. These for-profit studios' success while collaborating with clients is similar to what we want for the new studio.

3. Methodology

3.1 Interviews

For the project, ten faculty and staff, who helped create their university studios were contacted through email. Contact information for faculty and staff was acquired via the school website. Once they agreed to participate, they were sent a consent form to read and sign; the consent form clearly states that all the interviews will be recorded. The interviews were conducted over multiple video communication platforms: Zoom, Google Hangout, Microsoft Teams, and Skype. This method allowed participants to pick the most convenient options for their interviews. The interviews were recorded on a recorder provided by WPI. The interviews' purpose was to learn how others were able to develop their studio model and see what advice they could offer to help us with our studio. They did not have to be concerned about sharing sensitive information except for the name of the partner companies and sponsors, many of which were already listed on their respective websites (see Appendix 8.3).

3.2 Student survey

Students will be an essential asset to the studio since they will be working on client projects. The survey's purpose was to get the student's input in the creation of the studio. Since students have faced many challenges in WPI's IMGD program, their input was helpful to learn the challenges and risks to better prepare for our studio. That data brought new ideas, allowed me to see the project from another perspective, and started conversations about topics or issues we never predicted (See Appendix 8.4).

3.4 Studio Testing

For the trial, I focused on a student-run studio. A studio was formed by Professor Jennifer deWinter, which consists of programmers and artists for now. With the help of Professor deWinter, the studio started finding clients. Every week, the students give a report on their projects, what is working, and what challenges they are facing. During their weekly studio meetings, I collected additional data that may have been revealed in discussions.

4. Analyzing Data

4.1 University Interviews

Multiple approaches were used while analyzing interview data. After all, interviews were recorded and transcribed, I started by comparing the answer given to each question by different universities. This was done to find any strategies and patterns between the different studios. Then, I studied the interviews individually to see what data would work for our model. In the interviews, I looked for risks that each studio faced and how they had resolved those problems as a team. One other critical aspect of the interviews I conducted was the advice that each university shared with us.

4.2 Student Surveys

During this research, all survey data was collected on Qualtrics, then imported into Excel to analyze the qualitative data further. Excel allowed me to better search and understand student expectations and worries about the studio.

4.3 Studio Testing

Every week during the project, I analyzed the data that I collected from the studios to give the best recommendation to studio leaders. Challenges that I found and could not solve were immediately recorded. These challenges were further researched to find possible ways to solve them.

5. Research & Evaluation

5.1 Student Surveys

There were 73 responses to the student survey. Results showed that students have been longing for a studio. They want a space to work on their personal and professional projects and learn additional skills that they lack. They stated, "I would hope to gain experience in an environment that emulates a professional studio, as well as gain team building and maybe even leadership skills." "I'd love to learn how the art development pipeline works, what's expected of a person in that position, and really experience the interactive design with a group of students all working in the same project." If they were part of the studio, students would like to advance their skills in production management, animations, major engines, and source control. "Practice with more digital arts skills like photoshop, illustration, and animation. Also, some advice on developing a professional career." "Personally, it'd be amazing to make animated short films or any sort of animated project." As stated before, their answers showed excitement to work on short animated films, games, illustrations, logos, and personal projects. Here is some responses from the students

In their responses, students also shared some risks they anticipate the studio to face organization, participation, the lack of funding, lack of experience to work on specific projects, lack of having time outside of school to work for the studio, and limited building space and technology. They stated "Not enough experience on projects for an extended period that could be genuine portfolio pieces (final projects are okay but only sometimes). Not enough industry connections/interactions." "Teaching people how to build for mobile is going to be an ordeal Students skill and motivation levels are going to vary substantially Version control is going to be crucial to use, teach, and understand, and its be good to have it consistent across the studio.

Plastic SCM works well in my opinion, and Perforce is perhaps a bit more awkward but gets significant industry use and has useful file check-out features (key for managing Unity prefabs / scenes or Unreal blueprints / levels)." Overall, students were excited to have a studio to gain experience before going to the professional world.

5.2 Interviews

All three universities had a studio type, but none had a studio similar to what we are planning. The participants were excited to hear about the plan for the studio but pessimistic about its success. There were concerns about the studio not being profitable, students not having enough time to dedicate to the studio, and that a student-only led studio could be chaotic and cause many problems for the studio. The interviews were not as helpful as anticipated; instead, they just focused on the risks that we could potentially face. From previous research, many of those risks were already anticipated.

5.3 Studio Testing

When I started my research, one of my experiments was to create a studio and test which model best fit. That method was changed due to Professor deWinter opening a studio around that time. My research changed from creating a studio to observing the new studio and giving feedback to help them become successful.

Professor deWinter created the "Ideas Studio" with some students; right now, the studio consists of many Ph.D. and Master students with some Seniors and very few Freshmen through Juniors. Professor deWinter reaches out to clients. The studio does have a website where clients can access all the studio's information. The studio is for-profit and student-led, with Professor deWinter as guidance. Different small groups of students work with various clients. As of the

date of this research, the studio is working remotely. It is the student's responsibility to find time to work on their projects. The studio meets every two weeks; during these meetings, every group gives updates on their projects. The studio uses Trello to keep track of the different sprints. Based on my observation, the studio is using the agile methodology.

Currently, the studio is developing for multiple platforms: augmented reality, web development, Microsoft Hololens, virtual reality, model simulation, serious games, and general web applications. Based on the studio's past and current projects, it is fair to say that the focus is on developing applications and websites that require a small amount of artwork. At this stage, it is hard to call it a multimedia studio that designs and creates a large variety of engaging media and interactives. Solely based on the project they work on; the studio is more likely to attract clients interested in developing apps and websites. The studio needs to start seeking other clients interested in different projects such as animation, so paint themselves as a studio that only works on app developing projects.

The studio model works similarly to other professional studios I have researched. Due to the global pandemic, most studios are working remotely, exactly like the Idea's studio. The few differences are that professional studios have regular work hours where every employee must log on; they have an onboarding or recruiting process, whereas the Ideas studio does not. The students get added to the payroll and get paid like every other employee through Workday. When new students join the studio, they get added to a team and start working. They also do not have a hiring process. Students get recruited by professor deWinter or other professors, there is also an email that get sent to the student body with the application.

6. Recommendations and Suggestions

6.1 Management

6.1.1 IMGD MS Students

Management of the studio should ideally be done by those with some knowledge of management. With a Production Management track already in place in the IMDG Program, the students following that track should be encouraged to work at the studio as paid interns or get credits towards their thesis. When they graduate, they would have had management and leadership experience in a studio setting. In addition, these students should be prioritized when the studio is looking to fill that position.

6.1.2 PhD

To disrupt the filled roles in the studio as little as possible, Ph.D. students should be considered for hire. Due to the length of their programs, a Ph.D. student would be perfect because it will allow us to have a production manager for an extended period.

6.1.3 Undergraduate

Not all students will participate in the MS or Ph.D. programs. For a student that goes directly into the workforce after their undergrad, production management experience is a good experience for them to have. Allowing undergrad students to apply for Production assistant roles would help the IMGD program elevate the quality of students being produced from its curriculum.

6.1.4 Expansion

To reach out and work with other departments, a production manager is needed. This position would be ideal for one of the many WPI Business School students who are interested in

project management; in the instance that the studio cannot fill the position with IMGD MS

Students or IMGD Ph.D. students, they can reach out to the business school. This position also

works if the studio just wants to include other students from different departments.

6.2 Job Positions

1. Communications Director

    a. Balances time between client services, business development, and marketing.

       Ensures ensure the highest possible success of projects by working with clients

       and the production team.

2. Production Manager

3. Production Assistant

4. Art Director

5. Programming Director

6. Artist

    a. Animation

    b. Modeling

    c. Technical Art

7. Programmers

8. UI/UX

9. Audio designer

6.3 Hiring

6.3.1 Management position

All who are applying for the management position should submit a resume and a cover letter. This will push for professionalism.

6.3.2 Art and Programming

Any students applying for art or programming positions should submit a resume and portfolio displaying their skills. Students should be recruited solely on their portfolios and resume. If a student does not get the position, the studio can give them feedback on their portfolio or resume and encourage them to attend the workshops to improve and reapply.

Students should be recruited based on portfolios solely to help them have a professional portfolio by the time they graduate. This studio should help the studio prepare for the real world by putting them through a real-world recruitment experience.

6.3.3 Hiring Process

1. The application will be sent to students.
2. Art directors and programming directors will receive all the art and programming applications and portfolios. They will filter through the applications and pick the best.
3. Once the directors have filtered through the applications, they will send them to the hiring committee, consisting of the art and programming directors, Producers, producer assistants, and anyone else of the studios choosing.
4. Together the Hiring committee will decide on who will fill the positions.

6.4 Studio Website

The studio has a website where they display their information and projects. I believe the website needs more work. First, you can't tell if the studio works with clients. As a client, I don't want to do extensive research to know what the studio does. Even when I read the description on the home page, it still does not explain everything clearly. on the website, it states

> This Intentional Design Studio (IDeaS) brings together artists and developers to work on innovative projects. Students and professionals work together using the newest hardware and software technologies in AR, VR, Mobile App Development, and simulation design. We do projects in medical imaging, architectural engineering, educational app development, simulated environments, augmented realities, and so much more. Don't have experience? Don't worry! We can help you learn how to work in a diverse media landscape.

The statement explains the project that they work on and for what industry. It does not demonstrate that they work with clients. Based on the website, it looks like they are looking for employees. One example of a studio that has a great statement is FableVision. Their statement is

> Looking for a creative partner for your next project? You've come to the right place. FableVision Studios is a **multi-media production studio** that designs and develops a wide array of engaging media and interactives that inspire, teach, and move people to action. Our collaborators include broadcasters, publishers, nonprofits, research groups, and museums, including PBS, The Jim Henson Company, Nick Jr., Smithsonian, MIT, and National Geographic Society.

In this statement, the first thing is a question letting you know they work with clients, then they continue to clearly explain who they are and who they have worked with. The Ideas Studio needs a statement that is like FableVision. The website also needs some help from an artist. It is a very clean website, but it is boring. It is missing some color and artwork; An artist will make the website livelier and louder. It has the potential to be clean and fun.

7. Conclusion

The IMGD program would like to create a for-profit studio where students can gain experience and be encouraged to open their own studio. To help create a successful model that would allow them to accomplish those goals, I researched six universities. I interviewed participants from those universities, collected data from student surveys, and executed a studio test. The interviews were not as helpful as anticipated due the how different other university studio models were. Most universities had an incubator space for their students to come work on their own projects or studio project that is not for clients. During the interviews, I was only able to talk about some risks the studio might face. Most of the data collected from the interviews were not used because students and faculty already anticipated all those risks. Unlike the interviews, the student survey was helpful. It showed how interested the students were, what they were looking forward to, and some risks the studio might face. My research was changed from creating and testing a studio to surveying the Ideas Studio that Professor Jennifer deWinter created. Surveying the Ideas Studio helped visualize how ideas were going to work. Examining the studio gave me the most data. I was able to see what was not working and give them insightful feedback. With the data collected, I can create a studio model that fits the Worcester Polytechnic Institute environment.

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9. Appendix

9.1 Email Draft to other universities

"Dear University X,

My name is Abdah St. Fleur, and I am a Graduate Student at Worcester Polytechnic Institute's Interactive Media and Game Development Program. My focus is on Production Management, and my thesis is based on creating a student-run and student-managed interactive media studio within our program. I would love to interview you to understand better how I can help my program create a successful studio model. I look forward to talking to you.

9.2 Draft of Consent Form

Thank you for taking the time to have this interview. The purpose of this interview collects data and advice on how you have successfully created a studio. The data from this interview will help us to better understand how to develop our studio model. The partnership questions are there only for us to see which companies are willing to work with universities; they will be released beyond this interview's purpose. That does not mean we will be partnering with them since every University is different. The interview will be recorded; if there is anything you would like to be off the record, please let me know beforehand. Please know that you can skip any questions you are not comfortable answering, and you can leave at any time during the interview. Please sign this consent form if you agree with our conditions.

9.3 Interview Questions

1. How was your studio established (how did it start?)
2. What were the goals when creating the studio?

3. Who are your clients?

4. How do you get your clients? Are you approached?

5. How many people are associated with the studio?

6. Budget—does it have to be self-sustaining and run on soft money, or is it in the operational budget?

7. Based on your experience, what did the best way to get funding for the studio and projects?

8. What does your typical studio environment/model look like? As in how many students on average work on any given project?

9. Who runs the studio and why?

10. How are studio teams typically broken up into specialized roles? And are all roles assigned to students? If not, why?

11. For the for-profit projects, do the students get paid? How do you support the students that can't afford to work for free?

12. Why did you go with the studio model you have?

13. Who are some of your partners?

14. Why did you partner with the companies you did?

15. How were you able to get the partners you have?

16. When you started the studio, what were some unexpected challenges you face and think other start-ups should prepare for?

17. As a University with a successful studio, what advice would you give another university that is just starting?

18. Are there any questions that I am not asking that you think I should be asking?

9.4 Student Survey

1. If you were to be part of the studio, what skill you hope you learn?

2. Do you think you should be paid to work at the studio, or are you willing to accept other incentives such as class credits?

3. What is the best ethical way to award students for working in the studio?

4. If the IMGD was to have a studio, what is your vision of the perfect studio?

5. What kind of projects would you want to work on?

6. What problems do you think the IMGD program face?

7. What are some challenges and risks you think we should anticipate when we have the studio?

8. Do you think it is best to have students work as freelancers and hire them for specific projects or have one team that will work on all projects?

9.5 Interviews

9.5.1 Rochester Institute of Technology (RIT)

Speaker 1:
Okay, it's recording. Um, so my thesis to give you a little background, um, I'm helping my department, the gaming department, um, create their own studio. They want it to be a for-profit studio, but we're having we're in the process of coming up with a successful studio model. So we're talking to different universities that have a studio, um, similar to what we want a multi-media studio. Um, it doesn't necessarily have to be for-profit, but, you know, just to get some advice, um, to understand what route to go down and like some risks to, to, to look, um, to prepare for. So right now we're just starting with like interviewing different universities and

you're like, you're my second one. Okay. So, um, do you have any questions about the little background?

Speaker 2:

Yeah. Makes sense. We've been through that. So I feel like I understand it pretty well.

Speaker 1:

I did, I did, um, do some research on the magic spell studio, um, and I'm not sure if you know, one of our professor Charlie, um, he he's, um, he left RIT and came here and he's also like really excited to talk about the studio himself.

Speaker 2:

Oh, cool. Great. Yeah.

Speaker 1:

Um, so if you don't mind, um, giving me a little background of like how the studio function and like how it started.

Speaker 2:

Sure. So, uh, our, an intentional balance of academic and commercial activity and our effort is splits at the studio pretty evenly between, uh, supporting students in either their learning or their research. Uh, and then, um, supporting commercial activity, both in what we call the inward out focus and the outward end focus. So, and specifically those two mean, um, inward out as supporting entrepreneurs, supporting our students who would like to stand up their own studios. Uh, we have a very heavy emphasis on growing the games ecosystem and this part of the tree

and in this part of new York's. So we want the students to feel supported, uh, incubated in their ambitions to go off on their own upon graduation and to go off on their own with successful titles. That can be the cornerstone of a new studio endeavor, but we also have, um, outward in where based on our its long, long history, uh, I've experiential education, which effectively is co-op.

Speaker 2:

We have vast majority of our degrees require co-op for students to even graduate. So there are many, many disciplines. I watched a game art and, um, art and graphic design in general were earning or achieving a paid co-op is not, um, not as feasible. Well, they're not the norm just because those industries don't have a historical connection to that employment modality. And so we turn the tides a little bit and we said, all right, well, what if we operate a studio which attracts business, and then the workforce for that studio will be our own students. And that way they can fulfill their co-op obligations, they can get real professional experience. And as the studio itself, which attracts the projects as opposed to students needing to go to the career office and, you know, sticking, um, seeking outside groups, seeking outside companies that are hiring co-op students.

Speaker 2:

Uh, so the, the, the background has been all along to intentionally balance that I will tell you, we, um, we went back and forth on this for profit versus not for profit because, uh, half of our identity is academic. It is, it can be very tough to balance the needs of a for-profit enterprise with the not-for-profit academic delivery. Uh, I myself come from the film side. So I think it's not surprising in your world to understand that games and film are converging. So many of the

technologies are converging. The players are converging, the companies are converging. And so, uh, I come at the games industry from the film side and then have been excited to see so many, so many beneficial synergistic relationships between games and films professionals. The, um, in my background, I have worked, um, with our organizations, uh, for example, my Alma mater is the University of Texas, and they had a for-profit film studio that operated a product 10 years ago, maybe a little bit longer, but about 10 years ago.

Speaker 2:

And it's, um, it was a struggle, it was a challenge because the for-profit motivations and keeping that studio operating though, it was a wonderful, wonderful opportunity for students who were in the middle of their education. Um, the demands of student time and the demands of the business rigor to be a for-profit operation were often in conflict with the academic mission and say, yeah, um, faculty who are predominantly on the learning and teaching side, the academic side, who were, you know, at some level they were appreciative that they were professional opportunity for their students to pursue. They weren't so appreciative when the students continue to have to ask for, uh, absences from class because of working production, uh, waits for no class, it waits for no class schedule. So, um, I think that, uh, you know, we, we, we took examples like that. We also took examples of the economic reality of the situation and said, okay, if we make this for profit, how many years are we going to be operating at losses? And, you know, will that be sustainable? Um, it, uh, for, for, for many, many reasons, our, our, uh, decision was deck actually go the not for-profit route, uh, and, uh, attempts to balance those missions of the organization a little bit better, but again, that's our personality, right? We try to give equal attention to the academic and the commercial activities, knowing that both are beneficial, but both can also be in conflict if you don't check them.

Speaker 1:

Yes. Uh, you said you went from, for the non-profit route. So, for the co-op, do you pay the students or do they just get like class credit?

Speaker 2:

No, no. We pay when, uh, when we attract, so on the, on the commercial side are not not-for-profit. Um, so magic is magic center, which is the academic unit and magic spell studios, which is the LLC. And when the LLC earns a project, a research project or design project, or a games project with an outside client, uh, that client funds the project costs, including the wages of the student workers. So, they do earn a fair market rate for their experience level. Now they're a little bit cheaper than a studio pro because they are still students they're still learning. So, they don't quite carry the credentials to earn the exact same pay rate that a, um, you know, veteran game designer would make. Uh, but we do still get them, uh, a fair wage. That's definitely more attractive than working in the cafeteria on campus or being a TA or things like that.

Speaker 1:

Yeah. Great. Um, and how many students would you say, like apply for the co-op or how many students are in the studio?

Speaker 2:

Yeah, so it varies. Um, I'd say at any one point in time, during a semester, we have, uh, between 20 and 30 students working there in service to commercial projects or who are working on their own start-ups and an entrepreneurial model that we also have funding to be able to see those efforts. Uh, so we can, we are we're non equity investors in, uh, student teams who have an

entrepreneurial ambition, and we have a competitive process where they have to basically go through a shark tank style, uh, application to earn admission to our entrepreneurs and program. And so when that, when that cohort is joined with the cohort that are working on client projects, um, and we've been operating in this capacity for about two and a half years, maybe almost three, we average about 20 to 30, I would say.

Speaker 1:

Oh, okay. Yes. Um, so for if, um, this is more of an advice that I've asking if we were to, to start, um, would you recommend us starting straight away with 20 to 30 students or start small and then grow up? Well, I think that, um,

Speaker 2:

You know, busy business climate or business opportunities will dictate that decision, right? We didn't, we didn't make a conscientious choice to start with a given number. Um, we, we staff according to the work, the projects that are in the studio, so, you know, like any studio business, this is not a steady state business, right? You can't look at January through December, know exactly how you're busy, you're going to be any week or any month. Uh, you are clearly ebbing and flowing with the commissioned activity from outside clients. So, uh, the easy answer there is you should only staff as needs arise with those projects. You end up earning where we do exert a little bit of control as the size of our entrepreneurs in class, and that we try to keep manageable so that my staff can coach them and mentor them. Cause that's part of the structure is that we don't just give them a space and a few dollars. We actually also give them mentorship and sponsorship, and that we give them a time with business faculty who can help them write their business plans and identify their marketing strategy. And then we also give them time with

media specialists and game design specialists and faculty who will support them on the thing they're actually making their business around. And, uh, we, we can't get too big there, or else we over extend our coaching network and not be able to support all those teams.

Speaker 1:

Yes. Yes. That makes sense. Um, for the, for the studio, is it mostly faculty led or student led or do you guys bring in professionals for when you get, um, sorry for when you get clients that comes with the project?

Speaker 2:

Sure. Yeah. So we have two answers to that question. In the current examples, we have used faculty and staff to be the project leads on all the projects and then the students are the predominant workforce. So in most situations that project lead is acting simply as an administrator or a subject matter expert. They're not actually doing any meaningful work towards the project. So the students are contributing all the code. They're contributing all of the design services. They're contributing all the hours of iteration on, um, whatever it is that the project demands and the staff and faculty are just there to make sure they're staying on track, make sure they're using their time effectively, helping them avoid getting stuck in traps, where they would spend a lot of time not doing something effective and basically being a manager, right, like at a normal private corporation, being a manager who keeps their staff, um, focused and attentive to the, to the requirements. Um, the entrepreneurs and teams are basically the dynamics a little bit different because they're the staff and faculty are participating only as coaches or mentors. And the students are completely leading that effort because they're standing up their own business

entity. They are wanting to be a self-sufficient Dan in charge. And they're just looking, they're leaning on advice in that capacity, not being managed so much.

Speaker 1:

Okay. Yes. Um, um, so the next question I have is more towards the client side. The, do you get approached by clients or do you seek out clients

Speaker 2:

A little bit of both? Um, I would say that the opportunities we have attracted have been probably one thirds, our outreach, and two thirds, these groups find us and these groups have found us, um, regionally through press. So as the story of magic spell studios was told in the press, we had lots and lots of, uh, folks from the community call in and say, okay, well, what is this model? How does this work? Because this is not a, and I think you can understand, right, this is not a studio we built to compete with other existing studios in the region. This is simply to grow the studio capacity in the region and to provide outside clients the chance to work with students, if that's in their interest, right? The student talent is not veteran talent. So we don't pretend we don't, we don't offer things that, um, would be sold as completely comparable because they're not right.

Speaker 2:

I mean, there's some elements of design where, where youth and inexperience is actually a benefit because you're not constrained by the ways things have always been done. Uh, but in other instances like absolute technical proficiency or efficiency students aren't as good, right? They just haven't had the experience yet. And so the clients ask the questions of us. They're, they're not typically shopping their projects to other professional studios. They literally are

intrigued by access to students. So it's actually the word of mouth that the notoriety, that the project would be fulfilled by students that, that brings them in, um, projects where there's a little bit more of an anticipation of comparison to pro studio fulfillment. Um, those are fewer, fewer, much fewer opportunities there. And, um, we always have to be very, very conscientious about communicating capability and, you know, warranty of, of quality, right? That the students are often doing things professionally for the very first time and not a single one of us in our lives did the very first professional thing we were asked to do well.

Speaker 2:

Right. We all, we all kind of learned those first few and got better and better and better and learn from our mistakes. So, um, I think that, you know, because you're not playing that advertising game, I mean, like I said, we, we, we, our website talks about what we do and we are active on social media. We're active in circles where people could find us. And so, yeah, we're, you know, we're touting our services and we're showing off our portfolio, but that's about the extent of our pursuit of projects, right? We're not, we're not publishing a, um, an advertisement in a periodical or buying Facebook ads or, you know, trying to get people to come in and use the studio for your next project. We are, um, a little more passive and we are fulfilling our client lists mostly by word of mouth and recommendation. Um, also our, it has a, you know, 140,000 member alumni network. And so a lot of, uh, the interest is attracted through, uh, our liaisons. We have 130,000 people who if they read about magic can talk about our it and tell their friends, and we've gotten some like that too.

Speaker 1:

That's awesome. Um, so our next, uh, next, um, worry is budget. So are you guys partnered with any, any other company or any other school that kind of help with budgeting?

Speaker 2:

Yeah, so we, we built a brand-new building and, um, I would say being motivated to be partially academic and partially commercial helps with that because funding agencies who can appreciate economic development will love the commercial story and funding agencies like workforce development and education will, uh, that story. So, uh, New York state was a healthy participant in the project of building the building. Um, I will say that our operating budget is sustained on the activity that the studio generates. So, um, we, we, uh, well, I, I gotta be fair when I say that, but because, you know, half the things that happened in the building are academic. And so when any university builds a building that has classrooms in it, and those classrooms need heat and electricity and an know air conditioning and, um, and plumbing, there are fixed costs to operating that. And of course, um, the academic half of our building is funded by tuition.

Speaker 2:

It's funded by the students who are attending class, but the commercial staff is fundamentally funded by the projects that earn revenue. And so that's the operating, but of course it was a tremendous investment, a capital investment to build the thing in the first place. And a New York state was very, very intrigued by our its mission to grow the media ecosystem in Western New York and to be a hub of new businesses and new employment opportunities and new studios that would spring up around us. And so they participated in an economic development con and taxed, and then not surprisingly, a lot of corporate sponsors love the idea of all of these students using their software and their hardware while they're students, so that they get addicted to it and buy it

when they become professionals. So we do have a couple of corporate partners that outfitted many of the larger spaces.

Speaker 2:

And then in third category, um, you've got faculty like me, whose research is connected strongly to current commercial projects for some corporations. And so, um, things I study help, some companies do things better in the commercial segment. And so I talked to them and I say, Hey, if you give me, uh, equipment either for free or at a deep, deep discount, you are automatically getting a laboratory and they researcher to play with your equipment. And that's really intriguing to some of those folks. You should lean on your, you should lean on your faculty expertise and see if any of the hardware, software vendors would be attracted to access to your faculty who have unique experience and expertise.

Speaker 1:

Yes, yes. Um, so my last question is, um, how has, how have COVID affected the studio or how, or have you guys been able to like continue it remotely? Or are you guys still struggling to figure it out?

Speaker 2:

I know we've figured it out pretty well. We don't like it. You know, it's not how we prefer to work, but we've also not been hindered by it. Um, RIT is a synchronous resident semester, so our students are studying on campus and they're studying, uh, remote synchronously. Um, the rule of thumb is generally the courses, which are lecture only are being run over online platforms. Um, the laboratories, including natural science, laboratories, engineering laboratories and media laboratories, like ours are offering, um, studio courses and laboratory courses in person with all

the appropriate safety precautions. So the student population on campus is probably, you know, 30 to 40% of what it normally would be, uh, at any one time. And that diffusion helps tremendously. And then, uh, obviously, uh, we've put into place lots and lots of physical protocols and safety measures into the spaces themselves, the, um, the studio activity or the research and development and design activity progresses just fine.

Speaker 2:

Uh, we also have a model where we ship our hardware and our software licenses, especially, you know, if you're running a studio, you can't use ITI licenses anymore. You gotta have all commercial software. So we will ship our licenses to our student workers who are working at home, and if they need a specialty piece of hardware, and I say, you know what I normally would have had you sitting up in my co-work lab as a student employee, but you don't want to work in the co-work lab and we don't want you here either because we want to diffuse the population and we want fewer people here. So tell you what, I'll just, I'll, I'll pack up your computer, your tablet, your software, and everything else. And I'll just come by and we'll drop you, drop it off at your car and you'll take it home and you'll have it for the semester. And then you'll turn it back in when you're done. So we've, we've operated that way.

Speaker 1:

Okay. Um, I just want to say, thank you so much. Do you have any last advice that you would like to give to us as we start on down this road?

Speaker 2:

Um, have a clear vision, um, be open to the practical parts, uh, projects like this typically involve a visionary and a project manager. And if they don't work together, you're going to have lots of

trouble. If one is more aggressive or more powerful than the other, you're going to have lots of trouble because the visionary is going to try to do stuff that's not sustainable. And the project manager is going to perhaps be too safe and not go out there and try to do wild things. So you need a little bit of both.

Speaker 1:

Oh, thank you. Thank you so much. I know you've been very busy, but I really appreciate you taking the time to talk to me.

Speaker 2:

Sure. No, that's fine.

Speaker 1:

Yeah. I'll let you know. I'll let you know any outcome when I finished my thesis. Very good. Good luck to you. I have a great night. Bye-bye.

9.5.2 Carnegie Mellon University (CMU)

Speaker 1:

Thank you. Um, so Carnegie Mellon has like a gaming department and studio like classes that I saw. So, um, yes,

Speaker 2:

Sure. Well, sure. I can expect, uh, sort of, uh, so, so in the department that I work for is the entertainment technology center. Uh, primarily we are a, uh, two year masters degree, a graduate degree, uh, is jointly conferred by the, uh, school computer science and the college of fine arts.

Uh, although we sort of operate independently, in fact, we're even off campus in a building down by the river. Um, it was started about 20 some years ago, uh, where most people have heard of it is if you've ever heard of Randy Pausch, he's the guy who did the last lecture. He gave a lecture about following your dreams while he was dying of pancreatic cancer. And he talked about like building, you know, putting together this dream factory, the etc is, is the program that he created. I say that we're primarily for treating initially a graduate degree because over the past six years now, uh, we've also been involved with, uh, with, with main campus in teaching courses in game design that are geared towards undergraduates, uh, through a program called ideate, which is integrated design arts and technology.

Speaker 2:

Uh, and the idea there is that students from any major, like regardless of what college or department they're in, uh, can get a minor in a number of different areas, uh, like physical computing, sound, design, entrepreneurship, and, uh, game design, which is obviously the most popular of the winders because it's rat. Uh, so I, I teach, um, I'm an alumni of the TC. I graduated there about nine years ago and, uh, I am now teaching for the EDC, primarily teaching undergraduate, but also doing project advisement at the grad level. So, and then there were a number of other campus, uh, programs are on campus or departments are on campus that have some game offerings, uh, human computer interaction does some classes, uh, college of fine arts does some classes. So, um, ideate helps to kind of gather those disparate efforts together into one curriculum to help students take those in whatever path they choose. So the,

Speaker 1:

Do you guys have like an incubator like space or like, like I explained my project, anything similar to that?

Speaker 2:

Um, we, we, we do at the graduate level, we do a lot of work. I don't want to say for clients, we do a lot of work with the clients. Um, the graduate degree, the first semester the students are in their immersion semester, we call it boot camp. It's just learn how to do this and how to work on a team with people who were artists and engineers and sound designers and whatever else. Right. Um, then the remaining three semesters, uh, the students, every semester, they are on a project and that is their class. They have 16 weeks from start to finish. Here's a design challenge go, and they can take one other elective, but primarily it's, you know, it's a conservatorship model where, uh, they are conservative conservatory model where they are working as a team on a project and they will be evaluated on that development and on the quality of the project.

Speaker 2:

And oftentimes those projects have, uh, clients, they have, uh, sponsors. Now we are, um, we're not an incubator. Um, the, the clients who work with us, um, understand that the students, for the most part, unless there's a special arrangement, the students own their intellectual property. And that's just something across the board at Carnegie Mellon, unless you're working on something that is like specifically funded in a particular way by a grant. For the most part, you think of it, you work on it, it's yours. Like the University claims no royalty or anything other than just let us use it royalty free and let us use it for display purposes. So when the clients, um, I've also been a client when I worked for electronic arts, we hired the etc to build, uh, games for us. Um, it, it was more, you build this, we have a question we want you to explore.

Speaker 2:

You've got 16 weeks to explore this. And at the end, um, in a couple of cases, we liked what they built and we bought it from them. The company outside of the University, the company approached, the students said, we like this. We'd like to pay you this much for the rights to continue to develop and distribute this and sign over all rights to it. Um, that happened maybe 15% of the time, right? Most of the time. And the project is thank you. This is interesting. We've learned a lot from this and that company will then go to do something else with it as, as an R and D model. So we're not like our it where like they've got the magic studio where they're half students and half working on it. We don't do that. We, we just do the, um, the early work and then we've got some undergraduate classes.

Speaker 2:

Now, one of them that I teach where we made a studio at basically a semester long project, we organized it like you would organize the game studio. Um, our client was internal. It was the, we have these, um, the buggy race is a Carnegie Mellon. Basically they strap somebody inside a fuselage with some wheels and roll them down a hill. It started a hundred years ago. It was like drunken frat guys doing something silly and has since turned into like this engineering ridiculousness. Um, this year was the hundredth anniversary. And so they asked us to do something special. And so we made like a, sort of a Mario kart style racing game, uh, about campus. But, uh, again, there's not, you know, that there's none of the games that we build are intended before profit, but there is one pathway which a few games have sort of come to light where at the graduate level students can pitch their own game and, um, and could work on that.

Speaker 2:

Or even if they worked on something as part of a project that, you know, if it wasn't for a client, even if it was for a client, um, they can take that and create something out of it. So they're, they're having a few games to released that have started out as projects at the etc. Uh, world of goo is probably the most famous one. Uh, if you've ever played that, um, there's a new one out now called I think it's called subliminal. Um, that's by a group called pillow castle. That's a forced perspective game that is just absolutely bonkers. Mindblowing started out as a student project. Um, the last of us was actually, uh, the, uh, Neil Druckman is a, uh, an alumni of the program. And he, he apparently pitched that as a student project that the faculty were like, nah, But he held onto the idea. Um, so you know, some of the ideas happen there, but in, in terms of doing stuff for profit, not really, um, we had one project this summer. That was, it was still relatively internal. It was a thing that we were doing for the software engineering Institute, which is another department within Carnegie Mellon. Um, but now we really haven't turned any of our work into, um, for-profit development. Okay,

Speaker 1:

Awesome. Um, so for the projects you talk about, how are they mostly funded? Is it by grants or, or what are the other forms

Speaker 2:

Part it's, uh, w we don't really pursue grants, um, for the graduate program, uh, every now and then there was a project that is funded through a grant, but usually it's somebody else's department got a grant to do something. Uh, and so they, they become our client. Um, we've had that where, uh, uh, you know, other professors will get a gift to explore something or a grant to explore something. And as part of the funding, um, they will build in some funding to do an etc

research project, uh, with them, um, for the corporate projects, there is just a flat out sponsorship fee that they pay. And then there's, I think, a slightly different fee if you're a non-profit entity, um, that, that you pay for that, that is, that is lesser, you know, taking into account that if we're working with, you know, museums and libraries, they don't have the same amount of money is EA or Sony, or a company like that. Like a student pitch projects, self-funded, there's a little bit of funding available from the University. Um, and then other projects are faculties sponsored, but again, there's, there's usually not money attached to that. Um, it's just, if you are a external client, um, then there's usually some expected funding that's being provided.

Speaker 1:

So for the, um, like graduate students, um, their projects, do they, is it like all the, all of them that leads the project? Or do they have like advisors that really support on the side? How mostly does that work? Uh,

Speaker 2:

Boy, I wish there was one answer to that. Um, yeah, so projects have advisers, uh, th the students get to really decide the direction of what, what happens, but the advisors and the faculty as a whole definitely say, you should probably do this, or you should try this, but in terms of the design and implementation, it's generally it's all the students. Um, sometimes we have clients who come in and have a very good idea of what they want, and they've got a kind of a well boxed out space for the students to, to play and explore within, um, other times they come in, we we've had a couple of experience where somebody comes in saying, I want this product, and we've had to say, sorry, we're not working for hire. Like, that's not what we do here. Um, so it's, sometimes they'll just the, the, the client will say, we just want you to explore something.

Speaker 2:

And, uh, those, those tend to be troublesome for our students because having constraints kind of helps push the design process. There's nothing scarier than that blank page and blank check. And what are you going to do with 16 weeks? So, uh, every routine will have two or three project advisors who will be guiding them through the process. Um, there are multiple check-ins throughout the semester where they show their work, uh, to the faculty, either, either we walk around in, in small groups and meet with them and they, they, they present to everybody. They have to do about 15 presentations across the course of those days, or they do one large presentation to the entire, you know, faculty and student body, um, in between, you know, within those, they get feedback, they get grades, they get advice for where to go. We'll meet with them individually. Um, or we'll say, you should go talk to Chris because he's our story expert, or your visuals here, your camera angles are really weird. Go talk to Ralph, he'll give you advice or something is wrong with the tech. You need to talk to Dave remote, you know, so we'll point them and guide them towards who is the content subject matter expert that would be helpful to them. Um, but at the end of the day, they're just decisions are there to make

Speaker 1:

How big are usually like those groups from smallest to five to eight, five to eight. Yeah. Um,

Speaker 2:

Generally the size occasionally we've had on one or two occasions, we've had larger teams, or we've had multiple teams combined to work on the same project, but those, those are rough five to eight is a good organizational number. And if you're going to go larger than that, you need to subdivide into teams by disciplines. So the, the, the, um, advanced the, the buggy class that I was

telling you about, um, that we had 23 students in taking that class as an elective. And so we had a programming team in our team sound design, and then a leadership team, and one person on that team was responsible for managing the people below them. Like, we, we set it up like a really nice studio in that case. Okay.

Speaker 1:

Yes. That, um, you've worked with like undergrad and graduate student. Does it, um, what are some risks that you're seeing having an all student led type of studio?

Speaker 2:

The, the biggest risk is you don't know what you're going to get. Right. I mean, if, if you're, you know, if you're out in the working world, you've probably got a good sense of what somebody's capable of. They've probably worked somewhere else before. Um, they probably understand what this environment is like. Um, and you know, there is the expectation that you do your work and we pay you to do this work. And if you don't do the work, we don't pay you to do the work. Um, students have, uh, you know, all sorts of competing things, some of them Excel and do very well. The environment, some, um, are not used to a very open environment where they have a lot of control. And you'll get that question a lot, like, but what do you want me to do? And, you know, a lot of what we're doing is helping them get over that hump and feel comfortable as professionals.

Speaker 2:

Um, but you know, for that reason, like I said, you, you don't know what you're going to get. Plus you're making a new team every time. So, you know, if I've got, if I'm working for EA, I've got a team building this product, I knew who I have and what they're capable of, and I can move

them over and focus them on this other project. Um, if it's students, every time you get a class, I mean, I'm going through this right now for the spring semester. We're doing buggy too. And, uh, I'm like, oh God, I don't know if I have enough artists. Right? Like, who's gonna sign up. Don't know. Um, I think for us, it helps that the students own their intellectual property. If you're actually looking to have the University or some for-profit entity generate this, then, you know, having them working for you, but paying to do that work sort of enters into co-op realm. But also, you know, I, I don't know what the, what the rules are at your University, but, you know, there, there might be some questions about, um, you know, the, the appropriateness of that arrangement.

Speaker 1:

Um, going back to like the way you divide your teams, especially the leadership team. Do you just pick any type of student or do you look for like a student that majors in a specific, um, major, um, how do you pick the leadership team?

Speaker 2:

Um, for my class, um, sorry, uh, for my class, um, I hand picked who I wanted for what position, like I had a good idea of who I wanted. And there were a couple of positions where I wasn't sure who was going to apply, but once they did apply, like I had a good sense of who I wanted to ask to take that role. Um, and that's, you know, my, uh, when I was at EA I was associate producer. I've done a lot of team based stuff before. And so this is just me drawing on my experience. Like, if you really want to be successful with this, get somebody who has done this, um, you know, who has run some projects, run some teams, if you can find somebody who's done that in games even better. Um, just so they can kind of have a sense of what the process is like, I've worked on

projects before where somebody has, has not worked in games before, but done other types of production and thinks it's the same thing.

Speaker 2:

And it's, it's really kind of not it's, you've got all of the, either they're, they're too technical and thinking about it as software, and you got to say, no, there's this whole creative thing we got to go through. Or they used to like the creative side. And I was like, no, no, no, there's all these technical constraints you got to stick with. So, so, um, having somebody who can bounce between those is definitely worthwhile if you're trying to, if you're trying to set up the team. So I think the team we had last year worked well because I had, I had good people sign up. Um, I knew all, I knew everybody on that team save for one person, um, ahead of time. Cause I'd had them for another class. I've been able to observe them in that class. And I had a sense that they'd be good for that role.

Speaker 2:

Um, if I were doing this out of the blue, I probably, I would not stand up something, this large doing it out of the blue, a fiber or eight person team. I'm sure. Then I'll do like a skill survey and say, what's your background? What do you know? Right. I want programmers to be programmers. I want artists to be artists. Um, you don't do either, but you're in the business school or you're in psychology. Great. You're a producer now, or a designer or something like that. Um, a lot of times we'll let them self sort like the ATC projects. Um, they, they have a sense of what type of role they are looking for. They'll say, I, you know, these are the projects I'm interested in. They get a list ahead of time. Um, these are the roles that I'm interested in for this project.

Speaker 2:

This is my first choice and second choice, and we'll do our best to sort them. So that has the right balance. And everybody has something that fits what they're looking for. Um, and then as the project sort of comes into existence and as they figure out what this thing looks like, bring it off with a blank page. Um, they're responsible for really self sorting. And sometimes, uh, they'll go in with one intent saying I'm going to be a character modeler and then going well, we've made a game with no characters, so I'm going to be something else. Um, when sometimes they'll take on multiple roles, right? Sometimes they want to try producing end art at the same time. And that's, you know, it's meant to be a safe place for them to experiment in these roles and try these different hats on before they go professional and then spend a year finding out, oh, I don't like production at all or whatever it is.

Speaker 1:

Yeah. We do have like business students and like psychology students, but like, just like you just mentioned, they might lead other teams, but they don't know the production pipeline of gaming. So we're not sure if like it's good to bring them on board because then we have to teach that part to them or to just go with the gamers and, um, teach them like more and mold them into a producer.

Speaker 2:

Well, what you do is you, you know, you have a course that does that. I mean, that's the only reason I could do this with the undergrads is because I was already teaching a couple of other courses that, that do that. Um, the main course that I teach in the spring is called game design, prototyping, and production. And it's like, it's big, it's, it's 15 credits, which is, you know, like I

think three, three credits. This is like one credit normally is similar. So this is like a five credit course. Um, and the way that we've set this up, um, it's, it's two hours a day, three days a week in person. Plus the expectation that outside of class, each one of them is spending at least 10 to 15 hours working on this project. They're there, they're put on a small team, five or six people.

Speaker 2:

And over the course of the semester, they built four different games. So it's very rapid fire. The challenge gets a little bit bigger throughout, you know, the, the first assignment is they have to participate in a game jam. So for one weekend they're slammed together and it's like build something, but what, like, I don't know, figure it out. So do it and then learn how to do it. Um, which I love that, that model because then people really pay attention afterwards once, once they've done it and it hits a roadblock. Um, and so it's, you know, it's lessons about game design, it's lessons about production it's lessons about the roles and how to manage between which lessons about how to tell a story it's lessons about how things like statistics and probability work it's lessons about what the industry is like and what the expectations are.

Speaker 2:

Um, it's experience working with one another. It is experience, uh, presenting work and play, testing your work and receiving, uh, you know, uh, critique and constructive criticism and sometimes not constructive criticism. Um, and so throughout the semester, they really get used to that production cycle of like, you know, I can't just find something. And at the end, we've got to really plan this out and build it over the course of the week. And by the end of the class, by the end of the semester, um, for the most part they're ready to go and they understand like what that process is. And again, this is why I interview or require one of my other classes as a prereq for

the game for the semester long game studio is because if you're coming in out of the blue and you've never done this before, and we tell you like, okay, go work on this.

Speaker 2:

We come back in the week and you haven't done anything. We've just heard a production. We can't get like, we, we need to know you already understand the expectations. And so that's where this other course has been really valuable is in laying that foundation for them, that they understand it. Um, at the EDC, that bootcamp semester, um, the big class there is called building virtual worlds. And it's every two or three weeks they're scrambled onto a different team. Um, artists, engineers, producers, you know, others, they, they have certain roles that they're expected to fill. And it's like, okay, you've got a prompt here. You're gonna use, uh, the Oculus rift. And your prompt is character a is afraid of character B come back in a week and show us what you have. And in two weeks, this is all better be done. Uh, and, and that's that, that is their primary class.

Speaker 2:

They take some other courses, but that one's big, that's like a 24 credit class. Um, it's, it's intense to having gone through it. I could easily say I spent an 80 hours a week on that class. Um, but at the end of it, you come out like you really understand the project and what has to happen and all the things that go into it and how you have to test. So now you're ready for a semester long thing, which is less, um, less supervision, more opportunity to really kind of explore some of these avenues and build this larger, greater thing. You can get it to a much finer level of Polish. Um, but I think that, I think that foundation is important. I wouldn't just take a business student and

say, you're running a team of all these people you've never met before. You don't know what they're like, it's going to take a semester it's for money, so you better get it. Right.

Speaker 1:

Okay. Um, so the way we think of having like one option for the studio would be like something that's, um, always from like the curriculum, as in like something they do after outside of class. Um, and like one, one risk is like demanding too much of them when they already have all these classes that they have to take. So

Speaker 2:

You're saying outside of class, like they would, they would be doing this for pay afterschool, like part-time job. Yeah. I mean, if it can work, but I'd also have experienced people on the payroll that they're augmenting rather than giving them primary control of it, especially because, I mean, you know, it's, it's a university, people are going to burn out or somebody's going to get overloaded or somebody gets sick or a laptop dies. And you know, that, that throws everything off. So I'm relying on them to do something that a client is paying you for and expecting you to hit a deadline, you know, in, in a secondary role where they're shadowing somebody, you know, they're assisting somebody who knows what they're doing. I could see it functioning. Um, and we do that to a certain degree. We've got, um, uh, we've got a couple of projects that non-profit projects that work with the etc.

Speaker 2:

There's the Alice project, um, which makes, uh, I think it's alice.org. Uh, it, it's a coding application, teach kids how to code. Um, and we will have students who to work for them. Um, but there's a team of developers who are, who were running that, that are, that are full-time

developers dedicated to it. We also have, um, we have somebody in house who we do so many things for non-profits, uh, and school districts, and we do educational stuff. And the problem is, as soon as the students are gone, the software just languishes right. I mean, stuff just goes obsolete right away. Unity releases a new version, or, you know, I O S 13 comes out and all of a sudden like, oh yeah, your stuff doesn't work anymore. You have to republish it like, will everybody's calling, I don't know what to do.

Speaker 2:

So we, we do have a group now. Um, w we've got somebody who's managing, uh, well, it's not a great small guy. It's John is running it. Um, and, and his job is to kind of help maintain those relationships. Say, here, we have this software for you, but also as this stuff gets out of date, um, you know, they'll, they'll pay some people to, you know, some students to maybe work over the summer, uh, and help build that. Uh, I would say like, if you are looking to do a model like this summer is a better time to do it, then, then during the school year, uh, just because I, I don't know how WPI students are Carnegie Mellon students, aren't insanely, uh, competitive. And like everybody sees everybody doing these awesome things where like, I need to do those things too. And a lot of times people will just get in over their head. Um, and then you get something that's kind of rushed work. Right. And, and either they neglect their studies cause they're trying to get their work done or they neglect their work because they're trying to get their stuff done. Um, but if you do it during the summer, when there isn't that competition, uh, you, you might have more success with that.

Speaker 1:

Oh, thank you. So coming towards the end, um, now knowing a little bit more about like our project and with your, um, expertise, do you have any other advice the, um, you think would be useful for us? Well,

Speaker 2:

Let me ask this, what is the goal of this?

Speaker 1:

So the goal of this is to have basically this studio where clients can come and pitch a pitch, a project to us. And, you know, as a studio, we get it done, um, with a budget, with a tie or with a due date. Um, basically just like a professional studio, basically. Okay.

Speaker 2:

And, and is the goal for the students to get experience or is the goal for the, to get the client's money? Well, it's kind of both,

Speaker 1:

It's kind of both the studio or the students would, um, get experience from it. Um, before they go into the real world and the clients will get their, what they asked for for their money. Um, and also one goal is to also kind of encourage the students to kind of pursue their own studio by creating their own studio. So that's also one thing to encourage them to, but like, we're trying to find the best model that will work for everybody.

Speaker 2:

Yeah. I mean, part of the problem is I don't know that there is one model that works best for everybody. Right. Um, the, the thing that I would say is, you know, with, we have not done an incubator at the etc. That's not to say that our students haven't gone through incubators before they have, but they've like after graduation had found some other incubator, there are a number of tech incubators in Pittsburgh, and they've gone through that process. Um, we, we haven't focused specifically on that. I think because for us, it sort of falls out of our core mission. Like we're not, um, you know, our, our money comes through tuition dollars and, you know, to a certain degree project sponsorships, but that's it we're, we're not looking to, um, we're not looking to generate something that will be like, you know, revenue or royalty, uh, uh, that, that is a product because that, that puts us into a different business.

Speaker 2:

Um, I guess I would say, like, I, I definitely see the value in it. I think you would probably want to be careful how you structure it because, um, you're, you're built, you know, you're building software for somebody they're paying you to build software. And so you definitely want to make sure that you've done stuff like talk to your legal department about what can you offer, right. And are you offering that software as is, or is there some sort of warranty and if something breaks a year out going to fix it right. Um, I would be making sure that you're set up in such a way that, um, your students are shielded in their liability, right. That it's not like, well, so-and-so was the producer and they fell down. So I'm going to Sue them like that. No, that would be terrible, terrible. Um, the legal is one of the things people forget about in games all the time, but it's huge.

Speaker 2:

It's hugely important. And, um, uh, the joke at EA was that, um, we were the largest law firm that also made video games, but the legal department is massive because if you think about all the licensing for everything that goes into that, and even when we do these projects with, with sponsors, right, the, the, um, with it, so many things just get stuck with the contracts group for so long, because there's argument over the language of, well, you know, we've got to put in here that, you know, they're using unity, but we can't use their version of unity or, or whatever. Like, there's a lot of stuff that ties this stuff up. So, um, I guess what I would say is, you know, w what you're really gonna want is somebody who, um, has some experience running these projects and, and also experience with academia, because it is, it is weird to bridge the two.

Speaker 2:

Right. I mean, and, and I think the etc works because it's okay if we fail. Right. Yeah. Sorry, clients, you didn't get what you wanted. I don't think we've ever had to return anybody's money for dissatisfaction items. Maybe we have, but, um, you know, people have gone like, well, okay. You know, it, the, the cost benefit for somebody like, um, for somebody like EA is, you know, 50 or $60,000 as a sponsorship fee, um, you know, they, they would spend a third of that. You know, that that would be a third of one engineer for a year with a starting engineer, a 30 minute, it's starting in here for a year, something like that. Um, so, so it's a lot of, it's a lot of work for a small amount of money, and it's a, it's an R and D budget. And it's a write-off because the school's not for profit.

Speaker 2:

Um, it is also an opportunity for them to interface with, um, with some of the students and see if there's somebody there that they're interested in hiring. That's, that's where the real prop is

position is the, the work that we do for non-profits. It sounds much more like what might be like the right target for what you're going for, where, you know, it's a small client, they have a challenge and they just, they, they can't afford, uh, I don't want to say a real studio. They can't afford a big studio. Right. They can't afford a professional studio is going to be like 20,000 bucks is not enough. You know, that that's, we, we could give you a graphic designer for two months for that. And you're like, no, no, we need a whole team for four months to work and run all these platforms and all this other stuff.

Speaker 2:

But, uh, so, so I think you'd definitely want to kind of have a sense of who, who your audience is, know sort of what warranty you're putting on this, or is it as, is definitely involve your legal group sooner rather than later, because even things like the licensing of the games and what version you can build with and all of that, like you may, if you're going to do this, you may have to set up, you may have to stand up some for-profit entity by itself that this project is run through. Um, and then the other thing I would say is, you know, quite honestly get somebody who's done this find, find somebody in the game industry who's burning out and wants to move out of Silicon valley is looking for a job. Um, there's a lot of them right now, probably. Um, yeah. Do, do you guys have a lot of game classes or what's, what's the curriculum like? Um, we, we, we have

Speaker 1:

A multi-media and game department, so kind of like, we animation also go under it, um, audio writing, so we have the whole thing here.

Speaker 2:

Okay. All right. So, okay. So, so often times when I hear game design, um, it usually means something like we're communications department with the game design minor, or where a media stays with game design or we're computer science, and we're teaching people graphics. It's like, it's very rarely as a comprehensive. So it sounds like here's a little more,

Speaker 1:

Yeah, it's called interactive media in game development. That's basically, um, so it's basically the whole, if you go to a studio the whole, like all the teams you'll see is what we teach animation rigging, um, 2d, animation, 3d animation modeling, audio writing. So it's the whole thing, undergrad and graduate, um, undergrad and graduate. So I'm doing the graduate program right now.

Speaker 2:

Okay. And are you pulling in like, how so, so what, what are the, what are your programs getting a degree in? Are they getting a degree in computer science? Are they getting a degree in the, in the IMR or integrate? Sorry, I am the games.

Speaker 1:

Yes. We get a degree in IMT. D

Speaker 2:

I am D okay. Yeah. Okay. So it's okay. So I get a degree at IMG D and I've specialized. Yeah.

Speaker 1:

And yeah. Animation thing.

Speaker 2:

Yeah. Th the interesting about it is like, you know, 10 years ago, there wasn't a game design degree. I mean, there were a couple, but now everybody kind of has one and it's like, okay, well, what does that really? What does that mean? And it's like a, some, a little different everyone else. I'm getting involved in a lot of VR stuff right now. And that's, that's, um, uh, that's another area that everyone says like, yes, we do. Virtual reality is like, well, what does that really mean? How comprehensive is it? Um, that, that, by the way, is one area that, you know, you may want to look at in, in terms of development, if you're looking at emerging technologies, um, there might be an advantage to doing some development there because you, you have like, especially men museums right now would love to do something virtual understanding.

Speaker 2:

We, oh, God, what if we ever had the shutdown again? Like, how do, how do we extend our reach beyond, beyond the brick and mortar? Um, and, and that's where they turn to us for a lot of those products. Can we do a lot of virtual reality? We do a lot of augmented reality. We do a lot of, um, educational games, transformational games. And so we built up some expertise in, in those spaces. Uh, and I think that makes, uh, that makes us a little valuable as well. Like, I, I don't, I don't think EA would be knocking at your door right away until you had something kind of released. Um, but there might be a number of, like I said, kind of smaller education or non-profits who have very specific needs that need to be built and are being priced out of a larger development market, um, that there might be opportunities there. And V VR, especially VR and AR is one, especially that, um, not many big companies are touching it yet because the value isn't there for them yet, but indie companies can take the risk. And so that's where a lot of the development has been happening. Um, and like I said, I mean that, that's where there might be

some opportunity as well. You can play a little more and you have, you have the expectation. We might fail.

Speaker 1:

Thank you so much. Everything has been, you've been so helpful and I know you're busy, so I really appreciate you taking the time. And I'll be you to give you an update at the end of the project.

Speaker 2:

And if you've got any questions, just reach out after next week, I'm done in board for the next six weeks. How could I have you guys been remote?

Speaker 1:

Yes, we are. We, the undergrads, um, are able to go on campus. They've been on campus, but the graduate students are all remote. Okay.

Speaker 2:

Well, I don't like remote. I want to shoot people again. Every time I was like, love to stay home. Like when this started, I was like, oh, I can just stay home and play video games for a while. That sounds great. I'm like, Nope, awful. I never do that. How bad I wanted by, uh, uh, the, the library cafe sushi.

Speaker 1:

That's true. Yeah. We've also been a synchronous, so no lectures, no nothing. It's just, yeah. So whole semester, I've never, and haven't seen my professors, um, they just post all the

assignments and record the lectures and put them on canvas. And then we get the assignments then.

Speaker 2:

Well, I mean, I have one course that I'm doing sort of asynchronous. Like I do an in-person like, we'll, we'll run through your games and we'll try stuff out. You have questions, we'll share the screen and, you know, we'll figure out the unity issues. Um, but my other, yeah, my other classes are like, a lot of them are very studio based. It would be very difficult to do anything asynchronous. Like the game engine. I could probably record lectures, but no, the others are so much, we got to discuss, we gotta talk. We gotta respond. Oh God, I can't imagine doing it. Yeah.

Speaker 1:

Yeah. It's fully asynchronous. I didn't know what it was at first. And I was just freaking out at the beginning because I didn't see any lecture time, but then when I Googled it, it's like, oh, you, we don't meet at all. We just get the homework done and post it. And you get a grade.

Speaker 2:

I, I will say the, the shift to remote. Um, it actually worked well for the gaming studio class, um, just because everybody had their own role. And so it was like, great, just leave me alone and I'll do my stuff. And we'll go, I'll check in at the same time. And I don't have to come to campus for anything. It worked really well in that regard. So this may be something that even the future, like I could see us saying, yeah, we maybe meet in person once a week. And otherwise it's, to me, we don't to be anywhere. Um, the, the game engine class I teach like prerecording, those lectures was, was it pain? And it took a lot of time, but I noticed I had more students keeping up with the

material. I think that's because they could go back and rewatch it and relisten to it, as opposed to, you know, three hours on a Friday, if they fall asleep and miss something and it's never coming back. So I, I think there's value in it. Um, but man, the main stuff that we do, I, I can't imagine trying to do that

Speaker 1:

If you're

Speaker 2:

Not, I, my first job out of college was, um, working for Virginia tech in their distance learning department, building stuff in 20 some years ago. And like, so when this started, there was like, oh God, what is distance learning? I'm like, I got this, you've been through it. Um, but man, if you're not, if you're not super disciplined and super organized, it is,

Speaker 1:

Yes. It's been, I'm always paranoid that you're missing an assignment or you're missing something because there's no communication at all.

Speaker 2:

Oh my God, that sounds, that sounds awful. Well, I mean, we, I have a couple of students who were doing a semi asynchronous thing where they're checking in remotely or, um, you know, they'll watch the lecture later, but like presentations they're either there or they're prerecording parts of their stuff. Um, but it's only a couple it's it's for the most part. It's like the students who were like, you know, over in China and Singapore, you know, 12 hours behind and like, uh, a 4:00 PM class here was kind of inconvenient

Speaker 2:

But yeah, well, good, good luck. Is that the plan for next semester too? For the first?

Speaker 1:

Uh, it seems like it because still, now I still don't have any lecture, um, times for, um, for my next semester. So we'll see.

Speaker 2:

All right, well, good luck with that. Do you graduate next semester? Is this, is this the last,

Speaker 1:

Um, I'm hoping to graduate next semester. Cause I'm all, I'm doing two masters right now. So, um, I'm almost done with the gaming one. The other one is UX design and that one I'm trying to also finish, but if I don't I'll push it till the summer. There's no need to stress.

Speaker 2:

Yeah. That definitely don't don't force yourself. This, this I've noticed that even though I don't have a commute, I am somehow like 20% less effective. Yeah.

Speaker 1:

I also work. So it's like, um, so I'm like if, since I already have a job, there's money to be like in a rush to finish. Yeah. So if I have to put it in the summer, I will go to you.

Speaker 2:

Well, best of luck. Like I said, if you have more questions, let me know. And, and um, you know, if you've got stuff to share at the end, definitely send them my way. Thank you so much. Nice meeting you too. Have a great day.