

# UNDERGRADUATE FIRST SEMESTER AUDIO PROJECT

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There is currently a focus on the importance of first year experiences in the retention and success of undergraduate students. The Visual & Performing Arts department at Michigan Technological University developed a first semester course that immediately engages students in production work and supports a transition to self directed learning in a structured creative environment. This paper provides details of that course in a format that helps readers apply the ideas in other courses and diverse settings.

## INTRODUCTION

Grabbing your audience at the top of the show is essential. Those first few moments set the style and artistic vocabulary for the entire show. They set the ground rules and it is very difficult to deviate from those rules later. Education is no different and as soon as the undergraduates are on campus we want to hook them with "real" work, clearly set the expectations for quality, expand their perception of the field of audio, and define education as something they achieve not something teachers give. To accomplish this students are given a choice of short stories and in groups of 4 or 5 they adapt the story into a radio drama script; cast, rehearse, and record the actors; edit the dialog; create the sound effects and music track; and do the final mix. As the students navigate production tasks they have never done we work to support their success by guiding their process of discovery, establishing effective production methods, and engaging directly in a discussion of the pedagogical reasoning behind the course structure.

## 1 COURSE GOALS

- Students will have a concrete creative experience to support connecting more abstract courses (music theory, script analysis, sound design) to actual use.
- Students will create a significant work.
- Students will demonstrate good production habits.
  - Scheduling studio time, production meetings, and production
  - File management and organization
  - Good note-taking (particularly in tracking sessions)
  - Effective use of session time
- Students will engage in a process of revision working towards excellence and mastery.

- Students will learn the policies and procedures for using University studios and equipment.
- Students will use sound as an instrumental part of the storytelling and emotional strength of a production.
- Students will create artistic moments with a strong connection between the vocal performance, story, sound design and composition.
- Students will demonstrate key core artistic concepts and show examples in multiple art forms.
- Students will work on and discuss group dynamics and the importance of positive engagement.
- Students demonstrate skill at presenting their work to their peers.
- Students use basic skills in DAW operation in tracking, editing, and mixing.
- Students will use basic signal processing including EQ, Reverb, and Compression.

## 2 INSTRUCTIONAL GUIDELINES

- A "need to know" will be set-up that encourages deep engagement with the full breadth of a bachelors program founded in the liberal arts.
- The course will emphasize students feeling that they can do something they couldn't before they took the class.
- The course will push students towards independent exploration.
- The teacher will work to develop a supportive community of artists.

### 3 MEETING THE GOALS

#### 3.1 Bite Size

This course requires material to be carved down into manageably sized pieces. Our final goal is far outside of the students' capabilities, but the individual steps toward that goal are achievable and when organized and well structured allow the students to excel. Later projects and courses then slowly expand the size of the bites

#### 3.2 Just Enough Demonstration to Get Started

In class demonstrations of specific technical skills (EQ, Mic Technique, etc.) are done as close to the time students will use them as possible and are as short as possible. This sort of instruction is easily forgotten and can waste time in ineffective instruction. It is far better to do a short demo that gets students started and then provide students with videos (either your own or others) that reinforce the material and allow students quick access to demos when they are doing the task and need the information.

Not only is this instructionally effective but it is also an opportunity to point out that the students are responsible for their learning. They need to be preparing for a world where a teacher isn't there to hold their hand. They have to develop the skills and habits to teach themselves how to do audio and stay current. The teacher's job is to give them enough help to speed this process and to provide the challenges that focus their learning.

Great sources for instructional videos are YouTube (very good idea to give them a bit of help finding the good stuff), MacProVideos.com, lynda.com and many manufactures.

#### 3.3 Creative context

In order to get a radio drama that has an actual design with interesting sound (more than the required dog barks and footsteps) requires priming the pump. I use three methods: Movie Trailers, Script Spotting, and Multimedia Presentations on Scott McCloud's *Understanding Comics*.

##### 3.3.1 Movie Trailers

Watching movie trailers allows us to cover many sound design principles and clichés quickly in a cohesive whole. We are able to contrast very different styles of production and genres quickly and in a language that the students think they know. It also allows quick expansion of their view of sound. I like that they are a little over the top and fairly complete and each section of design is very short allowing us to discuss transitions and building and releasing of tension in a class. A movie scene often takes too much class time just to watch and

must be discussed in the context of the whole movie. This is a pretty standard practice so I will not spend much time on it but there are three trailers that I have found to be particularly good examples.

*Up The Yangtze* [1] has a sound design that strongly advocates a particular point of view. Additionally it has a significant amount of sound that seems diegetic on first listen but most likely isn't when you stop and think about it. This sound plays with our expectations and manipulates an emotional backlash against industrialization and melds with a stark use of images moving from a massive grey lock into romantically lit fishermen. Additionally, the score frequently creates confusion between the sound track and the music. Is that a boat horn or a score? What sort of instrumentation is used? How does that choice make sense for a documentary set in China? It also provides an interesting way to discuss Walter Murch's idea of encoded vs. embodied sound [2]. For Western audiences the encoded meaning of much of the language is unknown making it purely embodied sound and it isn't until pretty far in the trailer that we get the first encoded word "Cindy". At this point a girl is being given a Western name as she takes on a new life working on a cruise ship away from home. I love how powerfully this represents the upheaval in her life and China in general. There are other fabulous uses of sound all of which artfully support a strong anti-industrial emotional reaction. The trailer then ends bringing back the industrial sounds from the beginning and juxtaposing them with the mournful solo sound track. This provides a rich playground of discussion and listening. The documentary on the other hand is much more focused on honest story telling and exploration and doesn't use sound in such a manipulative way. Much less fun.

The trailer for *Prince Caspian* [3] provides our action-adventure example. On first listen, especially for first semester sound students, the trailer sounds exciting and nothing unusual sticks out. On further listening there is a treasure trove of sounds.

Starting with the first 6 seconds we analyze the opening music and generally arrive at three important components that set expectations: The dramatic boom that roots us to action/adventure, magic sparkles that hint at the fantasy, and some metal scraping sounds that heighten the tension and increase the expectation for violence. The boom and metal sounds combine to make it clear this is not going to be a rated G film.

In the next section we get some diegetic sounds and we talk about focus. About how relatively important the emotional/thematic story is to the real world and how that is represented in the mix. This bit is easier if the class has read the book or watched the movie, especially if they understood the religious underpinnings and what the story is really about.

Then we get to talk about trains. I love trains, and this is such a wonderful example of exploiting their romantic

potential and using tons of authentic train sounds that have no business being in this section except that reality is less important than the process of travel, the symbolism of the train. The breadth of sounds available to the sound designer in this section results from the fabulous set-up by the composer. The sound leading into the train is dominated by a score that has elements of the train's rhythm and uses a horn sound to meld seamlessly into the sound design. This fabulous set-up empowers the sound designer to utilize a wider more symbolic representation of the train possible only with the blurring of embodied and encoded communication.

As we did with the first 6 seconds we are again talking about setting up expectations. New sound designers frequently want to do crazy things, they want to push what they can do. They often need help putting those ideas into an appropriate overall style. Focusing the discussion not only on what can be done but also how it is set-up and integrates into the overall style is essential. Following these opening discussions we continue to analyze the use of sound to increase the power, emotional impact, and real feeling of motion as well as the continued use of symbolic sound, particularly lion roars.

The final trailer I use is for *Little Children* [4]. This uses no music and has significantly more power because of it. Especially with trailers we expect to be told what to feel, we expect to listen to the music and know how bad things might get in a movie. This trailer doesn't give us those expected parameters so when things clearly get bad in the trailer we don't know how bad they get. This trailer also has a wonderful overall shape and plays with camera angles and shots missing diegetic sound to increase tension.

### 3.3.2 Spotting the Script

Once this idea of emotional storytelling is established we can start working on spotting the script. In this process it is essential to assert repeatedly the need to focus on the story, the emotion, and finding all the possible tools. Spotting a short one or two paragraph piece in class can be a fabulous way to emphasize what you are looking for. I find that emphasizing the usage of graphical elements and colors that help convey the emotion of various cues can be empowering. The first step is to rearrange the text for maximum clarity of who is speaking and highlight essential descriptions relating to sound. Then along one side of the paper we draw in the sound effects with specific indication of exact sync points and the same on the other side of the paper for music. Each layer of sound also requires dynamic markings (either musical markings or graphically indicated).

This always sparks debate on what tools to use. I recommend that groups convert the short story into a

workable script digitally and then add the sound descriptions and graphical elements by hand. I have at times brought boxes of colored pencils to class to get them started.

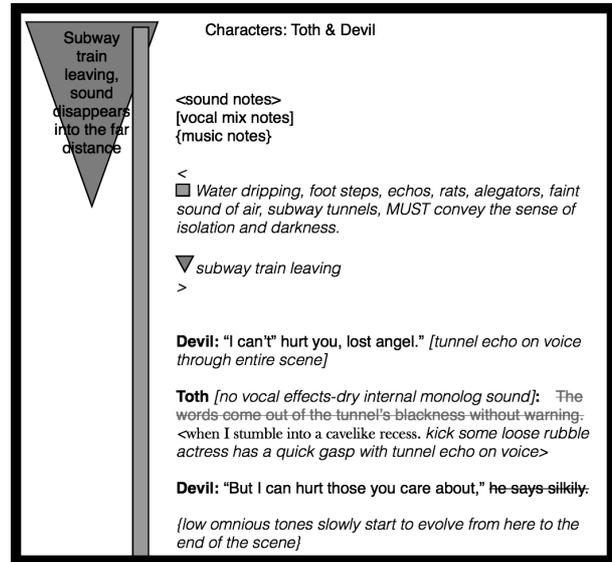


Figure 1: Example Spotted Script

We start with a short excerpt in an interesting location. This example is from *Acoustic Territories* by Brandon Labelle which he found in Jennifer Toth's *The Mole People: Life in the Tunnels beneath New York City*. The section above originally looks like this:

““I can't hurt you, lost angel.”

The words come out of the tunnel's blackness without warning when I stumble into a cavelike recess.

“But I can hurt those you care about,” he says silkily. In the dusty tunnel light, I feel...” [5]

It is very short and full of sound design possibilities. The results here are what we developed brainstorming in class. Hence the alligators which are not a great idea for New York. However, I generally emphasize edit your ideas later so everything is in the first generation of ideas, do not self-edit too soon. This reading also provides lots of opportunity to delete narration and replace it with action. In art we emphasize show don't tell and in education we emphasize do don't tell.

### 3.3.3 Understanding Comics

Finally, students are required to read several chapters of Scott McCloud's book *Understanding Comics* [6]. For each chapter each group of students is required to create a multimedia presentation where they show three of the ideas from the chapter used in moving image or music. This helps them think of their work as art, talk about their goals, and expand their creative options. The university curriculum is designed to immerse students in a broad array of subjects and the best students take full



educational comfort zones the more important it is to explaining why). Currently I focus this discussion around Ken Robinson's TED Talk "Ken Robinson says schools kill creativity" [7] available at: [http://www.ted.com/talks/ken\\_robinson\\_says\\_schools\\_kill\\_creativity.html](http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html).

### 5.2 Creating the Groups:

During the first week of class students must read both stories, write a design proposal for each story and indicate which job they would like to do: Director/Dialog Editor, Production Manager/Mixer, Sound Effects Editor, Music Director. The design statements provide enough information on their creative depth to be able to make roughly equal teams. The job preferences allow me to insure that different skill sets are appropriately spread among the projects. At the start of the semester the job definitions are pretty clear but as the semester proceeds students are encouraged to spread out and do what is needed to get the project done. While I engage one-on-one with underperforming students I continually focus the class on the idea that in the work world the client doesn't care if you hired someone who isn't working out they just want you to do a great job and deliver the product they are paying for.

Later in the semester we listen to the prologue of *This American Life 370: Ruining It for the Rest of Us* [8]. This story explores Will Felps research about bad apples in groups and their effects on productivity and quality. Essential to the story and its positive impact on class is one group that is remarkably resilient to the bad apple. There are always students that don't perform up to expectations and discussion around this story helps enable groups to overcome their inertia.

### 5.3 Beginning Project Work:

Students start project work doing a casting plan, auditions, and rehearsals with a faculty mentor from the acting area. The faculty organize mock auditions in class before the real auditions and they attend rehearsals giving the students ideas and feedback throughout the process. Auditions are scheduled by the faculty but once the casts lists for each group are decided upon the students must schedule rehearsals and they must complete four hours of rehearsal over two-three weeks. The recording sessions then start with their first session scheduled with a faculty sound engineer. This close direction is essential to setting up good working habits and connecting learning to the students work. Tonal opportunities of microphone locations, the importance and methods for insuring performer comfort, proper note taking, the importance of listening back to takes separate from the performance are all issues that need to be focused on at the beginning of the session. We usually have a half-hour set-up and training with the sound students before the actor arrives and then the

sound faculty member stays through the first 30 minutes of recording helping students establish clear and positive communication with the actor, constantly highlighting the importance of note taking and checking that they are notating important elements of each take.

Through this process students are asked to think about enabling the best performance. Especially how microphone distance impacts an actors ability to physicalize their performance. An actors ability to move can often have a huge impact on the emotional intensity and dynamics of their performance and because of the inverse square law close microphone positions can cause massive mixing head aches. This is easy to demonstrate during set-up. Students are also directed to listen for spittle, p-pops, and the thickness vs. airiness of the voice - a demonstration of the strong directionality of high frequency spittle and sss sounds, the resonance provided by proximity to the chest and the somewhat directional blasts of p-pop air, and the need for an actor to put their script somewhere. A two part problem of reducing comb filtering from reflections (which can be a big problem for groups using computers or iPads for scripts) as well as a comfort issue for the performer that can help or hinder their performance.

While we are working in production on auditions, rehearsal, recording, scheduling, and the development of sound effects and music we continue work on group dynamics and basic technical skills. There are demos and videos on basic operation of DAWs, EQ techniques, and discussion of reverb and narrative space. In addition we watch a few movie trailers to encourage a more creative approach to using sound as a storytelling element.

### 5.4 Mid-Semester Reflection:

Once production is up and running we read *The Way They Learn* by Cynthia Ulrich Tobias [9]. This book focuses students on the different needs of specific learning styles. After completing the reading students have to arrange themselves in the room according to their assessment of their learning style. In these groups the students discuss what aspects of college are easy or hard after which they report out to the class. This part of the class can be extremely powerful if a guest can be brought in that is capable respectfully giving the primary instructor a hard time (my wife frequently provides this service). This helps the students loosen up and actually discuss the class.

The discussion resulting from the report outs focuses on why the class intentionally challenges some learning style preferences as well as discussing the survival strategies we develop to cover our weaknesses. And we discuss how groups have to work around their understanding of each member's strengths. We also connect this to different jobs and the outward signs of progress. When working on the technical aspects of

system design and installation it is easy to regularly show progress. However, when researching and developing music composition ideas, despite hard work and significant progress, nothing may be visible as the student is developing these ideas and especially as they are part of a larger developing whole.

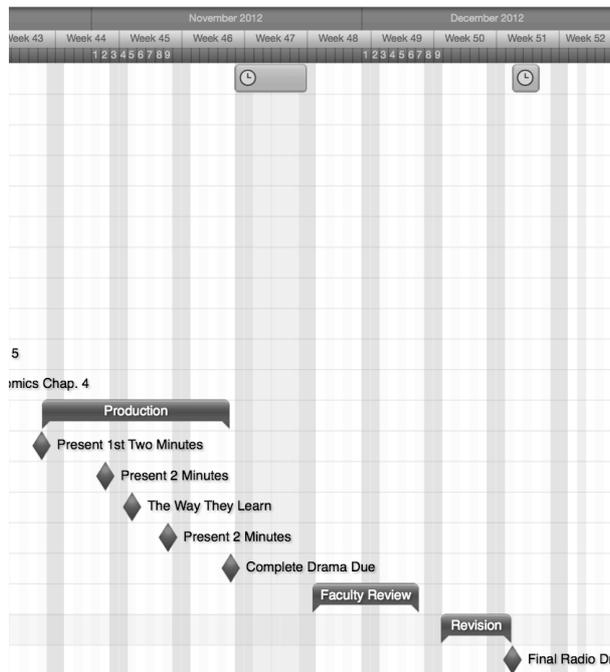


Figure 3: The last 7 weeks

### 5.5 Focus on creating a product:

Around the seventh week of the semester class focus shifts significantly towards production until around the 11th week. Every Friday students present 2 minutes of finished radio drama. This works best if they do not finish recording before starting on integrating music and sound. In this way the students are supported in discovering and developing a relationship between acting and sound, a relationship that is often far less successful when the project is done sequentially. They don't yet have the imagination to plan that relationship they need the integrated creation to be most successful.

After every presentation each group is given a detailed public critique. This is common in studio art and provides a learning experience for everyone in critical listening and in understanding other students artistic aims and the techniques they use to achieve those aims. Additionally, since the work isn't finished for any of these critiques these are more planning discussions than critiques. These are essential to help the students push their work further. Helping them use sound as a central storytelling element tightly integrated with the vocal performance and in adding polish to the mix.

After several weeks of incremental work the final mix is due for the full 20 minutes. We are on a semester

schedule and it usually works well for this to be due before thanksgiving break. It is good to have this big push scheduled away from the intense mid-term and end-of-term times of other classes. In our schedule this also allows 3 weeks for final revisions and polishing.

### 5.6 Revising the product:

To start the final revision process we take a week off of classes and instead schedule group meetings with a panel of faculty who have reviewed their mixes and provide detailed feedback. This provides a formal structure that honors the students hard work and increases the non-grade pressure to do exceptional work.

Students then have two weeks to revise their work before presentation to all of the sound students at our sound final. The sound final is an evening where sound students present their best work from the semester to all of the other sound students. This also increases the non-grade pressure to excel. At this point most groups have achieved an excellent product and worked extremely hard getting to that point and it is time to celebrate their success.

## 6 CHALLENGES

The biggest danger in this class is that it puts students in a group for an entire semester. This is generally something to be avoided as a bad group is that much more devastating. This makes the discussions and work on group dynamics extremely important. There must be significant support for helping a struggling group be successful.

## 7 RESULTS

This course is situated in a newer program which makes it difficult to directly attribute results to this class instead of other changes or program structures. However, after starting this class informal feedback on the Script Analysis class changed drastically with students noting how specific approaches to scripts would have been helpful in their production work. The first semester foundation of concrete production experience seems to have significant enrichment in later abstract courses.

The excitement that students get from creating something of substance and seeing what they can accomplish seems to be a significant boon to their dedication to production. And significant success seems to have been accomplished in focusing students relationship to education as one of active investment rather than passive consumption.

Students change drastically through their first semester of college. As this class has been refined it appears to be drawing more students into strong leadership roles

earlier in their college careers, particularly in clubs, and significantly aiding in their emotional growth. Key areas of success seem to be the specific engagement of students' relationship to education, discussion of group dynamics and resilient leadership qualities, and the focus on an iterative, mastery based revision process that leads students to the creation of excellent work.

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