Collaboration Station: A Memoir

An Honors Thesis (HONR 499)

By

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Abstract

What happens when an English major unintentionally stumbles upon a class about serious gaming? She learns fascinating new jargon and is exposed to an entirely new way of thinking! And, what happens when she decides to enroll in an immersive learning experience in which she joins a team whose mission it is to create a cooperative educational video game? She learns that the third floor of Robert Bell isn’t such a bad place to hang out and be introduced to new things like coding, networking, and the ins and outs of serious game design. And, what happens when this English major has so much more fun than she ever thought possible? She writes about her experience, of course! Games are meant to be fun, and to convey concepts and meaning in an enjoyable way. Likewise, this memoir uses humor to capture the trials and tribulations of stepping outside of one’s comfort zone and into the very real world of creating an imaginary space in which to play.
Acknowledgements

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I would also like to thank the members of Space Monkey Studio for all of the fun times, but especially Kaleb Stumbaugh, Cole Ludwig, and Zach Sexton, for being unapologetically themselves, and for encouraging me from pitch to proposal to polished product with this project. You guys are the best!
Author’s Statement

In the fall of 2014, I fulfilled one of my colloquium requirements by taking Dr. Gestwicki’s “Serious Games” class. Then, in the spring of 2015, I joined his immersive learning studio team, and created a video game. Before signing up for these classes, I had no idea what game design was all about. I hadn’t played very many board games or video games, and all of the terminology was new to me. I came into the experience as a mostly blank slate, ready to figure things out.

I quickly decided that gaming was fascinating, and that the process of designing a game actually had many parallels with things I had already learned as an English major. Games obviously tell stories, but more than that, they can be analyzed in much the same way as a piece of literature in terms of author’s intent and audience reception, just to name a couple of similarities.

One of my favorite genres is creative nonfiction, and I especially enjoy works by authors who use humor to relate their experiences. Therefore, Collaboration Station: A Memoir will be a memoir detailing the (often amusing) experience I had of learning about gaming, computer programming, and working as part of an immersive learning team. This memoir will allow me to utilize what I’ve learned about literature and creative nonfiction in a work of my own.

The finished project will capture an important time in my life in a way that I will be able to look back on in years to come. It will also appease my studio teammates who have been asking for an account of our best and worst moments since the semester ended. But, more importantly, because gaming is an especially hot field right now, I think that this work will appeal to gamers who want a good laugh at a novice’s expense; to those who are trying to figure out how to incorporate game design elements into their classes and curriculum; and lastly, to those who are looking for connections between game design and other majors and fields. With that in mind, please enjoy Part 1 of this work, and the outline of the rest of the work that follows.
"The value of a game is based on your experience." ~ Paul V. Gestwicki (PVG)

So, I guess we should start at the beginning with my game experience...I grew up just after the Nintendo Revolution, but before the PlayStation Phenomenon. My childhood was pleasantly situated in the Sega Genesis Generation. During this time, I watched my brother play Sonic the Hedgehog and Cool Boarders 2 (I must note that it was version 2. In the world of games, the version number is almost as important as the title). I played occasionally when he was absolutely desperate for a two-player experience, but overall, I just sat and watched.

In high school, I dated plenty of guys who played video games, and......ummm.....ok, so I guess what I'm trying to say is that I have no real experience with video games. I'll watch other people play games, but I've never been THAT in to playing them myself. I can't actually make my hands do two different things at once. It's very stressful. For the record, this is the same reason that I gave up on trying to learn to play the piano. In fact, playing video games is EXACTLY like playing the piano if you ask me. In both cases, your eyes are following something - trying to assess the situation - while your hands are both moving independently from one another, under the direction of your brain, which should be processing what you're seeing and translating that into actions for your hands. If that doesn't sound complicated and convoluted, I don't know what does. What I do know, is that I can't handle it.
"Playing games changes your brain in ways you cannot control - just like drugs." ~ PVG

So, what on earth possessed me to sign up for a colloquium that focused on educational games?

"Game Designers are... Artists, Architects, Party Hosts, Research Scientists, Gods, Lawyers, Educators." ~ PVG

Well, you see, I needed two colloquia still in order to graduate. And, of the available offerings, this one sounded interesting at least AND promised a trip to the Indianapolis Children’s Museum. And, I mean really, who doesn’t love a free trip to the place with the most amazing Chihuly exhibit outside of Vegas? That last point is obviously debatable. Unless you’re me. Then it’s a fact. I was also interested in the educational aspect of this process, as this course focused on educational games.

Full disclosure time...I have three kids. They’re currently 13, 11, and 10; and they play a lot of games. So, I figured it couldn’t hurt to find out a bit more about some quality games and what all goes into them, if nothing else.

"Mechanics - The system of rules; Dynamics - How real people play with the rules; Aesthetics - How the game play feels. The challenge of game design is that games are designed left to right, but are played and experienced right to left." ~PVG

I should also mention the fact that I love to pick things apart. Please don’t confuse this with a need to TAKE things apart. Because I am not mechanically
inclined. At all. But, I do enjoy looking at things...in the form of ideas...from different angles, exploring meaning in something that many assume has no meaning, and learning about the psychological side of game play. The idea of looking at what games do to your mind interests me greatly.

I'm also always up for expanding my jargon repertoire.

So, I signed up for this class with every hope of an interesting semester. And I was right - for the first five weeks. For five weeks, I was absolutely in my element. I was reading articles and books, and talking about what I'd read as I learned about the psychology and the history of games. For the record, I can read and talk about what I've read better than anyone I've ever met. I thrive and flourish in a good group discussion. Also, it didn't hurt that Raph Koster put pictures on every other page of his book. ¹ So, the required reading for this class really wasn't too heavy.

"If you're playing a game with the Monopoly board, and you're not playing by all of the Monopoly rules, then you're not playing Monopoly. You might be playing a fine game that's fun, but it's not Monopoly, it's a different game." ~ PVG

Things were going well. Really well. I was having fun and bragging to all of my friends about the fact that I got to play different party games in class and have discussions about what a person internalizes when they play a game. I was spouting off gaming fun facts and catchy new words all over the place. I was wowing friends and family (only occasionally unwillingly on their part) with my intense amounts of newly acquired knowledge and the connections I was making to literature and popular culture. Oh yeah. People were jealous. Like, seriously jealous. It was a great time to be me.

And then we hit the second part of the course.

Or, should I say, it hit me.

"Instead of making excuses, provide options. 'I didn't read today's assignment, but I brought donuts!' Make options, not excuses." ~ PVG

It hit me that all of a sudden this class was going to be real work. Because, all of a sudden, I was responsible for coming up with game concepts. And, once I had concepts, I actually had to MAKE these games. And, not just make the games, but con friends and family into actually testing out my horrible, awful, monstrosities! Ugh. I can work Publisher with the best of them, and I'm a copy and paste pro, but actually making cards that looked and felt real (and that you couldn't see through), well, this was beyond the scope of things I actually wanted to devote time to.

Also, at this point, I should mention the fact that I am terrible with rules. Like, really, really bad. It takes me several turns to understand what everyone else is doing when I play a game. And, before you immediately judge me, let me say that I am actually a very intelligent human being. I graduated in the top of my class in high school, and I've had all sorts of real world experience that has enhanced my book smarts over the years. But, game rules simply baffle me sometimes. And, there have been so many times in my life when I bluffed my way through the first two.....ok, three.....ok, fine, it's usually like four...rounds of a game before I really understood what everyone else was doing.

For whatever reason, it simply confounds me that a single card in a tabletop game can be a building, a good, AND currency! ² Oh yeah, AND it's worth

² If tabletop games with cards that are many things all at once happen to be your thing, check out San Juan, a game designed by Andreas Seyfarth, and published in the US by Rio Grande Games, a fantastic example of this type of design, and the game that inspired this particular tirade.
points at the end! It's just too much. It's not natural for one thing to be so many things. It's just not right. And, don't even get me started on what A, B, X, and O do or don't do in any one video game. Because I couldn't even tell you. And now you want me to hit those buttons AND go up or down or sideways on the screen? No, thank you! I'll just sit here, eat Cheetos, and watch YOU make the man with the big gun do things. Because, I don't need to kick the ball straight into the goal post or drive the car off a rainbow. I'd rather just laugh at you when you do.

"Quiddler is a fantastic word game. 5 Crowns is a terrible game, and if anyone ever asks you to play it, you should say, 'No! I want to play a good game!'" ~ PVG

So, back to this notion of creating games. Apparently when you create games, it's not enough to make pretty cards or boards or clever spinners. Apparently, players also need rules. And furthermore, the rules are what make the game interesting. They're what make the players do things and interact and win or lose. And I had to come up with some. Me. The one who understands no rules. Now all of a sudden I was responsible for making up rules that everyone else can understand and enjoy. Understand. And enjoy. SO. MUCH. PRESSURE. No joke.

"The medium is the message. The rhetoric (the way that you present yourself) is important to how your message is delivered and received" ~ PVG

Up to this point, I've griped about games in general. Now you get access to special griping about educational games. Because the "educational" part adds a whole new level of gripe to this process.
We spent ample time in class going over the elements of game design, breaking down the parts into the smallest possible pieces to study, and discussing how everything works together to produce the desired result - or an undesired result if you’re not careful. I thought this would be cool, sort of like going backstage at the Victoria’s Secret Fashion Show. I had this idea about being an “insider” in the game design universe. But, instead, I felt like I was falling into a black hole of pieces and parts that were so tightly interwoven that studying each on its own was nearly impossible. I never realized how many components went into making a game, and I never would’ve guessed that changing some of these things that seemed so minute would have such a profound effect on the way the game played and was reacted to by the players.

All of a sudden I was being forced to think about questions like, “Can a player leave the game during gameplay?” and “Can the teams be uneven?” Who would want to leave in the middle of a game!? What kind of person does that? And who invites an uneven number of people over to play games? Have these game players never thought to have someone just sit out? Or, maybe you start the next round while someone is in the bathroom - that always makes deciding who sits out an easy choice. I was struggling to understand why all of this responsibility fell on the game designer...aka...me.

The idea of “competitive vs. cooperative” was also a bigger deal in educational games than I ever thought it’d be. Deciding whether your players worked together or against one another in order to win the game became a major source of study, as did the idea of resource management. Which specific parts of the game does a single player get to control? And, how is the player allowed to use those things? How much information is available to each player? Do they all get the same information, or do they each get a different part of the information?

Changing even one of these things is the difference between a successful game and an unsuccessful game. If you give the players too much agency, the game isn’t challenging enough, and players lose interest. If, on the other hand, you make it so that the player has no choices to make, the player will also lose interest. Basically, you can fail no matter what.
"The difference between exercising a skill and practicing a skill: You can play the piano without learning anything new or getting any better; that's exercising. If you are actively trying to improve your performance, that's practicing." ~ PVG

So, how do you make a game that is interesting AND that teaches something while players play? You come up with a concept, you test your ideas, and then you make modifications to improve the game play experience based on player feedback. And, you do this over and over and over again. And, just like practicing the same song on the piano all day, everyone in the house is eventually ready to throw you and your project out the door. But, hopefully, before your friends and family suggest that you take up a different hobby, you have a product that is polished enough to make a public appearance, and then you can subject...I mean entertain...new audiences with your endeavors.

"Creativity comes from our experience. It's in the things that we take for granted that there's room for innovation." ~ PVG

You know what's really fun? Field trips. I've always been a fan of a good field trip. Actually, you know what? If I'm being completely honest, I'm even a fan of bad field trips. Because when you go on field trips, you get to see new things and meet new people, and, even if the content is SUPER boring, if nothing else, you've taken the day off to hang out with your friends. So, the way I see it, ALL field trips are worthwhile.

Our class went to The Children's Museum of Indianapolis to meet with The Director of Interactive Technologies and one of the most amazing Exhibit Developers, and it was the coolest thing ever! Before this trip, I thought that going to the Children's Museum was fun. It's a fantastic museum, and I can stare at the giant Chihuly glass sculpture all day long, say nothing about my interest in the stuff that you can actually interact with.
But. I realized that my previous museum experience was nothing compared to the behind the scenes experience that I got on our field trip. There's something about putting on an official Visitor Pass, being led through doors that say things like "Authorized Personnel Only" and walking down concrete hallways containing bits and pieces of previous and future museum exhibits to really get your excitement level up. I was experiencing the museum in an entirely new way, and I was too much in awe to even make any snarky remarks about it. This was the Victoria’s Secret Fashion Show moment that I had been waiting for! And it was SO worth it.

Our group spent an hour discussing the ways in which the museum uses educational games to enhance the content of their exhibits, and the differences between playing games at home and in a museum. The best part of the meeting was obviously the time that we spent talking about how kids break parts of exhibits in ways that normal adults would never dream possible, and how the exhibit developers try to anticipate these things, but usually end up dealing with unforeseen problems after the exhibit opens. It was comforting in an odd way to know that even people who get paid to do this stuff full time still have problems arise, and they still have to go through an iterative process to make changes and find the parts and pieces that will work together best. It was almost enough to make me not completely fear the imminent failure awaiting my game making in this class. Almost.

"I turn up in funny places. . . Once I was looking for something online, and I ended up on my blog. And, I was like, 'Wow! This is good stuff!' And, I had forgotten I had written it. And it was only two years old! But, that's why I'm glad I keep a blog. Because that was a good idea."  
~ PVG

Ideas. They’re funny things. You wanna know how much I knew about the International Space Station at the time? I knew nothing. Literally nothing. And yet, I was supposed to come up with game ideas that were not only fun, but
factual as well. Yeah. Ummmm......Once again, I was questioning my sanity and the decision making process that had led me to this class. The behind the scenes museum high was gone, reality was back, and I was more than a little overwhelmed. I didn’t have a stash of ideas to draw from. Heck, I didn’t even have any real knowledge to draw from.

Oh yeah. And, have you been on the NASA website? Talk about information overload! I had no clue where to even begin. It was like someone had dropped me into a labyrinth of information with no discernable way out because each thing I clicked led me deeper and deeper into outer space - literally. Just the blog that the astronauts aboard the ISS publish was more technical than I was really prepared to deal with.

But wait! I finally stumbled upon a link for students. OK, the link was actually on the NASA homepage. But, I was so focused on trying to find “usable information” that I missed it the first time around (and the second through fifth times as well. But, that’s neither here nor there). This students’ link - this was going to be my saving grace, and my ticket to the idea train. I just knew it. I mean, I was, after all, trying to make a game for kids about the International Space Station, so, what better place to look for information than the students’ page on the NASA website, right? Right?

Wrong. SO wrong. As it turns out, I’m pretty sure that I’m either really bad at navigating websites or understanding sciencey things or maybe both. But, this was not my ticket to anything - except more frustration.

"Find the game in the content. The best games do this. It's like making a game about rhetoric that requires rhetoric. Math Blasters is the opposite of this. Shooting answers at problems has nothing to do with actually learning math. It's just an interesting quiz. Your game should aim to teach concepts, not drill skills." ~ PVG
Luckily for me, other people in the class didn’t seem to have the same sorts of idea problems that I did. Or, maybe they did, and they were just really good at hiding it. Or bluffing. I suppose those are also possible options. At any rate, in this class, it was considered acceptable to prototype someone else’s idea.

So, say for example, you really liked some part of a person’s game, but you thought that the rest of it was just an abomination (or maybe even really good - whatever). It was considered perfectly acceptable to harvest the bits and pieces that you liked, and do your own thing with them. In fact, you could even Frankenstein a bunch of other people’s ideas together if that’s what made you happy. The main thing was that you tried something every week, and that you presented about your iterations in class (ideally so that people like me could get more new ideas).

**3 Tips for Getting People to Your Talk:**

1. *Talk about games.*
2. *Have co-presenters - because they have friends!*
3. *Require one of your classes to attend“*

— PVG

Speaking of people with lots of ideas, one of the things you should know about Dr. Gestwicki (Previously quoted as “PVG”, and subsequently noted as “Dr. G” - This is the kind of trickery that happens when you have a long last name and the person writing about you takes creative liberties with the version of your name and initials that works best for her purposes) is that he is ALWAYS presenting. He’s forever on some board or project team, or the one organizing conferences and colloquia. I’m not exactly sure when he has time to do all of the things that he does, but I’ve come to the conclusion that he possibly doesn’t sleep. And, really, I suppose it doesn’t even matter HOW he does it all. The important thing is that he does.
During the semester that I took the Serious Games Colloquium, Dr. G and his immersive learning team from the previous spring did a presentation about the video game that they had created, and our attendance was encouraged. There was free coffee, and they had these amazing half and half cookies - half chocolate chip and half double chocolate chip - so, I figured if nothing else, it was worth attending for the snacks alone.

This presentation was my first look at immersive learning, and it gave me the opportunity to see Dr. G in his presenter role, as opposed to the professor role that I was used to. He was just as funny as he was in the classroom, and it was interesting to see how the concepts that we had been discussing at the theoretical level translated into the real world of game creation.

"Enough about that. Let's talk more about me." ~ PVG

I don’t remember being particularly impressed by the game that the previous year’s studio team had created. This is probably due to my lack of understanding about both video games and computer programming, and not necessarily a reflection of their game creating abilities. At any rate, one of the presenters, Elmar Hashimov, happened to be working on his dissertation in an English field (Rhetoric and Composition), and I found his work to be rather fascinating as he connected writing and technology. He focused his work on Activity Theory, which explores human activities in different contexts, and he spoke specifically about Genre Ecology, which is the idea that habitual activities and one’s surroundings are important to understanding how people live and work and think and do things. ³

³ For more information about Genre Ecology, members of the Ball State community can check out Elmar’s dissertation, "Immersive learning, multiliteracies and reflective practice through scrum" available online at http://cardinalscholar.bsu.edu/handle/123456789/199822 or "Left to their own devices: ad hoc genres and the design of transmedia narratives" found in SIGDOC ’12 Proceedings of the 30th ACM International Conference on Design of Communication (pages 251-260)
Now, before your eyes start wandering off the page, let me give you an example that will help this whole Genre Ecology thing make infinitely more sense. So, for example, if you always have a mug of coffee next to you as you sit at your computer writing code, that mug of coffee is part of your personal Genre Ecology. Likewise, if there is an inspirational poster of a T-rex hanging over your desk as you create a video game about paleontology, that poster is also part of your Genre Ecology. Each of these things affects your experience as you program, and without either, your particular experience wouldn’t be the same. Does that make sense? Hopefully it does, because we’ll be coming back to that concept in the very near future.

"Don’t be cynical, but do be skeptical." ~ PVG

So, not long after the presentation with the good cookies (and all of that creating video games stuff), our class was given the opportunity to apply for a position in Dr. G’s spring studio course. I read the email just like everyone else, and I didn’t completely hate the idea. But, I wasn’t entirely sure about it either.

Dr. G had told us that he was looking for a certain number of programmers, but that he also would accept non programmers. But, even though he had made a big speech about needing all kinds of people in order to make his team work, and even though I had personally met with him after class one day to ask about what exactly a non programmer could possibly contribute to the team, I still wasn’t exactly sure that it was my kind of thing. I mean, I had bluffed my way through being knowledgeable about games for the better part of a semester at this point, but did I really want to keep up the charade for a second semester?

I decided to ask some of my newly made friends in the colloquium what their thoughts were about applying for Studio. And, to be fair, that was possibly one of the worst ideas I’ve ever had. More than one person told me that it sounded like a lot of work. In all honesty, it did. And, I wasn’t totally sure how the required non-scheduled time would fit into my life.
Someone said that they didn’t want to be on campus Monday, Wednesday, Friday. I didn’t either. Tuesday/Thursday schedules are really more my speed.

Someone else asserted that they didn’t actually have any more room for elective credits in their graduation plan. Did I? I didn’t actually know. But, I did know that I didn’t need any computer science credits. Hmmm.....

Basically, I let my friends talk me out of applying. Which was sort of fine. I was busy prototyping my game for class anyway, so it wasn’t like I had tons of extra time to fill out applications. And, the thought of actually applying, only to be rejected, was also not super thrilling.

“My friend Bri wanted to play Candy Land...” ~ Kaleb
“You need better friends.” ~ PVG

I let the deadline pass.

“Some of the stuff I’m saying is true and noteworthy.” ~ PVG

It wasn’t too long after the final deadline to apply for Studio had passed that I received an email from Dr. G:

I didn’t see an application from you for the game studio, and I just wanted to make sure that this was intentional and not an oversight. I ended up with no English-types in the applicant pool. There is one other person I’m pinging over email, who had expressed some interest but hadn’t applied either.

Enjoy the break!
Ugh. I totally got called out. Or, I got a second chance. It’s all about perspective, I suppose. I decided that Dr. G’s email was a sign that I should branch out of my comfort zone and try something new. In the interim, I had actually looked at my graduation requirements, and determined that I did indeed have some credits that I could devote to the studio experience, and that I had maybe been slightly (ok, a lot) more interested than I had led myself to believe that I was. I guess it’s pretty bad when you play it cool even in front of yourself. So, I took a deep breath and I emailed him back before I could talk myself out of it again:

I appreciate the follow up. I read over the information, and I wasn’t exactly sure what the additional 12 hours a week outside of “class time” would involve. And, I was going to inquire, but then I figured that you probably had plenty of non-design applicants, and I figured I didn’t really have a shot, so I never did actually ask (as you know). So, that’s where I’m at on it. :)

He wrote back with a rather lengthy and incredibly reassuring description of the many tasks that could be done by someone with absolutely no programming knowledge, and a basic overview of the design process and methodology of the group. I won’t make you read the whole email, but this bit at the end was too good not to share:

Think about it, but I do need a bit of a quick turn-around so that I can stay on my schedule. I’d be happy to answer any questions, but it would be optimal if I could hear back by the end of the day, fine if I could hear back by the end of Monday, and still reasonable if I hear back Tuesday or Wednesday.

Whoa! The end of the day!? No pressure……but……tons of pressure! As a non traditional student (read: I have three kids, a job, and numerous volunteer activities) I only take nine credit hours a semester, and this studio experience would be six of those credit hours. So, no big deal, but I needed to decide my entire spring semester by the end of the day.
I forwarded the email to my best friend and said, "HELP!" We talked about the opportunity, the responsibility, and my interest level in the project. And, ultimately, I wrote an even longer email back to Dr. G detailing all of the ways in which I thought that my experiences, skills, and community connections could allow me to not only meet his expectations, but exceed them. I ended it this way:

So, I guess I made you read my lengthy list of accomplishments? Abilities? Experiences? (I'm not sure what exactly to call that list) in order to say that, yes, I'm interested. And, yes, I suppose I could contribute to a design group in a meaningful way - even though my actual design experience is limited to the Java that I used to design my digital portfolio, and before today I had never even heard of scrum.

I did it! I took a risk. I tried something new. I put myself out there. And then, I crossed my fingers and hoped for the best. Just kidding. I worried and fretted for the entire four days that it took to hear whether or not I had made the team. Because that's the kind of person I am. I realized that I had told my mom that I was basically invited to be part of the studio team, so if I didn't make the cut now, I would really look like a loser. In my mind, the stakes were even higher than if I had just applied like a normal person.

"And that's unlike anything else - except the things that it's like." ~ PVG

Like I said, it's a good thing I only had to wait four days for my response or it's quite possible that I would've worried myself into a frenzy. So, maybe it's ok that I didn't even apply until AFTER the deadline. Can you even imagine how much longer I would've had to worry myself about all of this if I had applied before? I cringe just thinking about it, so we probably shouldn't go there.
And, I guess the whole premise of this story is a giant spoiler. So, I won't spend tons of time elaborating on it, but I obviously made the team:

Thank you for your application to the Spring Game Studio. I am glad to welcome you onto the team! There were more applicants this year than ever before, particularly from artists and sophomore Computer Science majors. It was challenging to try to craft a team from this talented pool, and I'm glad to have you aboard.

It was a fantastic day to be me. Or any of the other nine studio members who made the cut. I was thrilled! As it turns out, I kind of sort of really wanted this opportunity. And now, I was about to have it. I thought about how cool it would be to tell all of my friends that I was making a video game, and I thought about how much better this studio experience would be than taking a random art history or scuba diving class to fulfill my elective credit requirements.

I still wasn't 100% sure what to expect, but I wasn't as worried anymore. I knew that my skills and experiences would allow me to contribute to the team, and I had finally allowed myself to admit that I was ready to try something new. This was going to be my chance to take my college credit game to a whole new level.
Thanks for reading Part 1 of *Collaboration Station: A Memoir*. What follows is an outline of the quotes that compose the remaining five parts of the book. The stories that accompany each quote detail the (mostly hilarious) happenings during the Spring Semester of 2015 when I was part of Dr. Gestwicki’s Immersive Learning Studio, and show that you really can have fun and be productive at the same time.

These quotes take the reader behind the scenes of game design, and show how our team struggled with mechanical aspects (i.e. “Networking is hard.”) as well as social and cultural obstacles (i.e. “Kids know nothing about the International Space Station” and “No one likes to be the Chinese.”) as we endeavored to create a game that would not only teach about the Space Station, but also wouldn’t inadvertently teach anything inappropriate.

Another thing that emerges in the text (and the quotes) is the interesting way in which team members’ personal lives intersect and influence what happens in the studio. During the course of the semester, Dr. Gestwicki and his wife welcomed a new baby; Justin and Nick focused on everything that they still needed to do for graduation; Kait and Nick prepared to spend a month in Italy; Kaleb performed in various theater productions; Cole toyed with the idea of taking on a leadership role in the Fencing Club and involving himself in the politics of that decision; Zach stressed about the number of credits he had accumulated and ultimately decided to drop out of the Honors College because of it; Kaleb, Cole, and Zach all prepared to move to off-campus housing; and I started a new job, attempting to maintain my volunteer work with the PTO and the Cub Scouts, while launching a campaign to save my kids’ school (#savestorer). It was an eventful semester - and those are just a few highlights!

Computer Science is linked in my mind with the other sciences, and therefore with objectivity. Things are part of a binary system - either the code works or it doesn’t; either Jenkins sends you an email saying that the build became unstable, or your inbox is (momentarily) Jenkins-free because the code is working. Game Design, however, is more than keystrokes, more than letters and numbers on a screen. Game Design includes art in the form of images, music, and writing, and is therefore subject to emotion, bias, and interpretation. And, looking back over the semester, one of the trends that I can see through the quotes that I
documented is the way in which our team brought all of our outside influences into the Studio and then collectively either accepted or purged those influences into the design process.

On a personal note, what these quotes show me are the ways in which our Studio Team transformed from eleven people who either didn’t know one another or vaguely knew one another, into a group of friends. You can see the familiarity and the personal nature of the quotes and banter increase as the semester progresses and as we learn about each other as individuals, not just as class acquaintances. Sharing a workspace and six hours of scheduled time a week (plus more time outside of those six hours) creates a closeness that is like that of a real world work environment. You talk to these people more than you do your friends and family, and you become invested in their stories and their lives in a way that fosters relationships outside of the work environment as well.

Standing at the distance of a year, with all of the perspective that I’ve since gained, as well as the ability to see both the parts and the whole of my game design experience, I can honestly say that the design process is a fascinating roller coaster ride that combines all of the elements of learning, of hard work, and of triumph and failure, with the beauty of friendship, of art, and of finding meaning in something that previously did not exist.

I’ve learned to see my life as a game. The design process is college; it’s where the idea of who I want to become is transformed into a reality. College is what helps to shape and frame my thinking as well as provide me with opportunities to learn and grow and improve upon my already existing skillset. And, ultimately, after all of my hard work, I have something to show for it - a product, a degree. The game itself is my life; it’s what I’ve created through countless hours of effort and reflection, and it’s represented by that piece of paper that will tell the world that I have devoted myself to a purpose, and that I’m capable of using that focus for good.

With that in mind, please enjoy a peek inside the rest of Collaboration Station, and please feel free to laugh - we certainly did.
Collaboration Station: A Memoir

Part One

Included Thesis Text

Part Two

Introduction to the Studio Team
★ “4720” ~ Kaleb
★ “We are Capricorns - just like Jesus!” ~ PVG
★ “I am a bearded, bespeckled scientist; I am every man.” ~ PVG
★ Genre Ecology….aka….the team gets a Keurig

SCRUM
★ “User stories keep us from navel-gazing or focusing only on ourselves and what we think we want.” ~ PVG
★ “Things you create on the way to creating what you want to create are intermediary work products. We are not interested in those.” ~ PVG

Sprint 1: The Most Best Foundation Ever!
★ “A leader board tells you who did good and who sucks.” ~ Kaleb
★ My Big Hard Butterfly Princess….aka… do we need a profanity filter? (~ Justin)
★ “Merging time is wasted time! Communicate!” ~ PVG
★ “Things that still puzzle us: Is a benevolent dictatorship better than a democracy?” ~ PVG
★ “A sideboard doesn't always hold food. Sometimes, it's a board - that holds ideas.” ~ PVG
★ “It doesn't necessarily have to be artists who put it up on the walls.” ~ Justin
  “Though, there's would probably be better.” ~ PVG
★ “Schedule PP Time - that's 10 o'clock for me!” ~ PVG
Part Three

Sprint 2: Being Intentional About Our Designs and Identity

★ “This reminds me of a joke, but I don't remember it right now.” ~ PVG

★ “Technical Plumbing’ - it's kind of fun, really.” ~ PVG

★ “Naughty is what we’re dealing with... So... You could call yourself ‘Bum’, but not ‘Ass’. Because ‘Ass’ is naughty, but ‘Bum’ is not.” ~ PVG

★ “Kids will get into it, and they'll be like, ‘Hey, I made a picture of... Space.’” ~ Justin

★ PCMCIA: People can't memorize computer industry acronyms

★ “We really need to lift and separate these pieces!” ~ PVG

★ “You can read the man page for us, Carisa.” ~ Justin “Which is not sexist, it's short for manual.” ~ PVG

★ “Hofstadter’s Law says that for any task, it's going to take longer than you estimate it will, even factoring in Hofstadter’s Law” ~ PVG

★ “Kaleb, why are you hot?” ~ Justin

  “Because I woke up at 8:38, put clothes on, and ran here from Elliot.” ~ Kaleb

  “And, we appreciate both!” ~ PVG

★ “We almost got universal child care in the seventies, but then Ford? Nixon? One of them didn't let it pass.” ~ PVG

  “One of them was an asshole.” ~ Kait

  “Well, I'm not sure which one was the asshole, but Nixon was definitely a dick!” ~ PVG


★ “I think you were trying too hard to be angry.” ~ PVG

★ “This is still going to fail, but in a slightly nicer way.” ~ PVG

★ “You know, I posted that picture of those Stormtroopers that I painted on Facebook, and it got like 12 likes. I spent like 120 hours working on those things! For 12 likes! Now, I posted a picture of the new baby, and I had over 120 likes! And I only
spend about five minutes on that! Social media is a confusing
ing thing." ~ PVG
★★ Like Bone Wars, but with more space!” ~ PVG
★★ “Let's see who else it's talking to. The device is pretty
promiscuous.” ~ PVG
★★ “Continuous Reflection, and a little bit of primping.” ~ PVG
“like to practice continuous reflection.” ~ Kaleb
“Yeah, I like to look in the mirror, too.” ~ Carisa
★★ “You've got 100,000 lines of bad code in you. The sooner you get
them out, the better off everyone is.” ~ PVG
★★ Remember to change your partners - were you promiscuous
today?
★★ “We need some more TLAs!” (three letter acronyms) ~ Kaleb
★★ “You’re lucky I started with one, and not zero.” ~ Kaleb
“I will count my blessings tonight!” ~ PVG
★★ “If you don't have to drive anywhere, you don't have to wear
pants... I have a funny story about that, but we don't have time for
it right now, so it'll have to wait.” ~ PVG

Space Monkey Studio is Born
★★ SMS: Data Charges May Apply
★★ Kosmo

Sprint 3: Clearing the Runway
★★ “It's a good thing there's only three Star Wars movies. Can you
imagine if they made the first three prequels, and they were
terrible!?” ~ PVG
★★ “I concur.” ~ Carisa
“It's pronounced conquer.” ~ PVG
★★ “This week we want to have five Twits.” ~ PVG
★★ “TMA - too many acronyms - it's a good title for a blog post!”
~PVG
★★ “Create an idea repository - which is better than an idea
suppository - where people can post game ideas. We're looking
for fully flushed-out ideas.” ~ PVG
"My dad taught me that it's okay to steal Bibles. I mean, after all, people want you to have them. My dad taught me a lot of strange things." ~ PVG

"Your results need to be good enough, but only good enough." ~ PVG

DGO - Dr. G Obsession

"This memory board need some tender care." ~ Zach
"Well it's Valentine's weekend, so show it some love" ~ Carisa
"I'm going to love it all night long!" ~ Kaleb
"I'm going to hit it in the morning." ~ Zach

Collaboration Station is named

"Hamsters are the bacon of the pet world!" ~ Cathy Hamaker

"Dull, dangerous, disgusting - the 3 things you want robots to do for you." ~ Cathy Hamaker

"No one wants to be China - we need to see if Chinese people feel the same way. Or, maybe we need to see if everyone's kids are as racist as Carisa's." ~ Kaleb

"Alastair Cockburn, said something to the effect of, 'What do you do with the owner's nephew who can't write code? You don't give him any code to write.'" ~ PVG

"QA testing allows you to see your stuff in the game, no matter what kind of stuff maker you are." ~ PVG

"This isn't sci-fi, it's actual sci." ~ PVG

"There's a fine line between fishing and sitting on the dock like an idiot." ~ PVG

"'Satisficing' - Good enough, not good." ~ PVG

Part Four

Sprint 4: Engage Your Core

"And then we can juicy the living shit out of it!" ~ Justin
"Reminds me of my weekend!" ~ PVG
"SO many things right now." ~ Kaleb
"You can't just not do stuff and expect it to work." ~ Justin
"We need someone to revisit the Learning Objectives in light of the fact that kids know nothing about the ISS. And present." ~ PVG

"Did You And Your Partner Get Tested?" Poster debuts

Sprint 5: Won't Somebody Think of the Children!

"...to distinguish between graceful termination and accidental termination." ~ PVG

"The robonaut needs a scarf. You know, at the risk of giving too much information, my wife gave birth to our fourth son wearing a scarf." ~ PVG

"I'm going to put an 8 on this. But, it's a contentious 8. So, with a little push, it could easily become Infinity." ~ PVG

"The categories you need our science and maintenance, but during gameplay, they become 'S&M'." ~ PVG

"Really guys? We really made it S&M!?" ~ Kaleb

"I want everyone to know that I - for once - had nothing to do with this!" ~ Carisa

"Only during gameplay do you get S&M." ~ PVG

"Beef Jerky Chocolate tastes exactly like what you think it would." ~ Kait

"It should be a quickie if everything goes well. ((Giggles)) Why does this get a laugh, but I got nothing for 'insertion'!? I think we need to be consistent." ~ PVG

"You're not designing the game for yourself." ~ PVG

"Nick, let's put this on a neutral background so that we can take a picture of it. Unless you want me to take a picture of your crotch. But, I usually charge for that." ~ PVG

"Oh, when I was young and dumb...so...like now." ~ Kaleb

"Is it wrong to ask your professor how many times you've missed class?" ~ Carisa

"Yes." ~ PVG

"I can tell you that the number of times I've missed math class is greater than or equal to the number of times I've attended." ~ Kaleb

"I guess it was a rough weekend; I'm feeling snarky." ~ PVG
“So...let me take a step back...GPL is a general public license. And...let me take a step sideways and explain that you have to now provide source code to people who want it.” ~PVG

“I think it’s important to remember that we actually have packages.” ~PVG

“We need to get things ‘Androidized’!” ~Cole

“Hold each other...accountable.” ~Carisa

“Hold each other...like accountants would.” ~PVG

Ball State Student Symposium

Part Five

Sprint 6: “Technically,” the Penultimate Sprint

“We need to compress our assets.” ~PVG

“Like a minimizer bra...or Space Spanx!” ~Carisa

“According to President Eisenhower, ‘Plans are useless, but planning is indispensable!’” ~PVG

“I like networking!” ~No One Ever

“I don’t need you judging me, Kaleb.” ~Justin

“It’s not judgment, it’s sass.” ~Kaleb

“I get enough of that from my six year old.” ~Justin

“You know, we really could ask that. But, I don’t really care.” ~PVG

Dress Like Cole’s Vagina Day

Cole went to Wikipedia to find circle images instead of just drawing them. The studio erupts with laughter upon hearing the news.

“I don’t know why this is funny, but you guys are all laughing. So, I'm laughing.” ~Carisa

“It's like people who have never used paint before.” ~PVG “Hey, hey! Someday, I'm going to master paint, and when I do, you guys are all going to get an email!” ~Carisa

“Yeah. Maybe you can send a survey about predictors of Master Painting.” ~PVG

Everyone erupts with laughter again.

“Show me how you Master Paint!” is born
★ “There's a difference between robbing Peter to pay Paul, and violating Peter to pay Paul.” ~PVG
★ “On failure, layers shake.” ~ Kaleb
   “Babies, too!” ~ PVG
★ “Grab your junk, and head to space!” ~ PVG
★ The Studio team acknowledges the Story About Ping. “Oh! He’s Asian, not a demon!” ~ Zach
★ “You must be this tall to play. Yes, your age/height ratio must be a certain amount in order to enjoy it.” ~ PVG
★ “People are much more open to games having a legitimate purpose now than they were, say, ten years ago.” ~ PVG
★ “Vacuum cleaners and hungry babies - things that suck” ~ PVG
   “And networking.” ~ Justin
★ “She follows my theory of office organization: put things in piles and hope for the best.” ~ PVG
★ “No email should be longer than 3-4 lines. If it’s longer than that, it should be a blog post or a document. Because long emails are where ideas go to die.” ~ PVG

Butler Undergrad Research Conference/ TCM Visit
★ “The key value of academia is infectious snobbishness.” ~ PVG
★ “If you believe in transactions, you’re a Level 1 Christian.” ~ PVG
★ “That reminds me of a joke! ‘Did you hear about the dyslexic, insomniac atheist? He stayed up all night wondering if there was a dog.’ ” ~ PVG
★ “She’s very traditional; she’s very Chinese; and she’s never shown a President Dancing gif.” ~ PVG
★ “If you’re in space and you miss on the bris, you’re a castronaut!” ~ PVG
★ “Stick it to the man! It doesn’t matter which man, as long as someone pays!” ~ PVG
★ “If you can’t have fun at the Symposium, where can you have fun?” ~ Carisa
   “Fun is where you put it.” ~ PVG
• “Have you ever noticed that Chinese people have Chinese babies, and fat people have fat babies?” ~ PVG quoting *The Simpsons*
• “So many commas! She’s a comma chameleon!” ~ PVG
• “The content is more stable, but we’re still uncertain about whether or not the content is being conveyed.” ~ PVG
• “Be careful about yellow text on stuff - throw a shadow on it or something.” ~ Cathy Hamaker
• “Cole and I arted yesterday.” ~ PVG
• “We’ve learned that kids know nothing about the ISS - or even astronauts in general.” ~ PVG
• “Adults are more apprehensive about playing video games. So, they’re more likely to read the instructions. Kids just assume they’ll figure it out.” ~ PVG
• “There is no Rainbow Batman.” ~ Cathy Hamaker
  “And that is an oversight!” ~ Kaleb
• “You’re always playing a game the best that you can. So, knowing how many points you have or need doesn’t really change anything. You’ll still play the best that you can.” ~ Cathy Hamaker
• “In an exhibit, we only get one shot at kids. If they don’t get it the first time, they’re not coming back. It’s not like a game on mom’s phone that they’ll come back to.” ~ Cathy Hamaker
• “You guys are doing awesome stuff. This is exactly the kind of thing we’ve been thinking about. I think some small tweaks can make it even better.” ~ Cathy Hamaker
• “In elementary school, I got an ‘S’ in Art.” ~ Cole
  “It’s like ‘Satisfactory’, but not that good.” ~ PVG
  “Well, we were supposed to listen to this song and draw what it made us feel. And, I drew a bunch of swords.” ~ Cole

Sprint 7: “Make It So.”
• “It’s an unknown unknown vs. a known unknown. Don’t quote me on that. That was what Rumsfeld said when he sent people to kill people in the Iraq War.” ~ PVG
• “We need a persnickety meter. You must be this persnickety in order to play our game. A Persnickometer?” ~ PVG
★ "I was working on that the other day, and I thought it was magically going to get fixed. But, it didn’t. So, I guess we need to work on that." ~ PVG
★ "Don’t worry; this too, shall pass. The question is, will you?” ~ PVG
★ One thing I’ve learned about running a team - avoid communication at all costs!” ~ PVG
★ "I’m so confused!” ~ Carisa
   "Good. That’s what Pop Culture references are supposed to do - make you feel like an outsider.” ~ Kait
★ “I had half of a stale donut earlier.” ~ PVG
   “Was it hard or rock solid?” ~ Carisa
   “It was just generally unpleasant.” ~ PVG
★ “Consis...Consist...Consistency does look good, but words are hard.” ~ Kaleb
★ “That’s very cool.” ~ Cole
   “It only looks cool because everything around it sucks.” ~ Kaleb
★ “I was reading a dissertation the other day, and they used ‘tri-weekly’. Semi-Annually - I thought it meant every year in a truck.” ~ PVG
★ “I can do the ‘clicky-clicky’ - that’s the technical term for it.” ~ Kaleb
★ “We’re not in a position where we want to do a half-assed job on anything.” ~ PVG
★ “It’s better to burn out than fade away.” ~ PVG
★ “I’d like to make pants - jeans - that are called Trendsetter Jeans. I can just see the commercials! ‘Be a trend-setter! Wear trendsetter jeans!’ People would love that.” ~ PVG
★ “I think we need to add a bit of snazz.” ~ PVG
★ “Since the last time...I did the things. I feel like I have something else to say. But I’m not sure that it’s important.” ~ Kaleb
★ “How’s it hanging? With multiple clients!” ~ PVG
★ “How many Legos do you have to stack in order to be so heavy that they crush the bottom one? 3.5 kilometers worth!” ~ PVG
★★ "Being racist against Black people is so 19th Century. The cool thing now is to be racist against Chinese people - and Asians in general.” ~ PVG
★★ Debut of “Clean Code” shirt
★★ “I want to wear a suit to the CS Banquet tonight. Is that crazy?” ~ Cole
   "No, as long as it’s not your birthday suit.” ~ PVG
   “Are you sure?” ~ Cole
★★ “Canada is the loft apartment above a really great party.” ~ Justin
   "They have better social services, but they also have French people. Racism against the French is always allowed.” ~ PVG
★★ “I need to send a message to my wife to have her buy me a denim shirt and sportcoat!” ~ PVG
   “Wait! I’m actually impressed that you don’t already own them.” ~ Kaleb
   “If you’ll wear them, I’ll go buy them today during my lunch.” ~ Carisa
★★ “An actor paid to look like a Bro is the worst kind of Bro.” ~ PVG
★★ “A good strategy for Candyland is two own better games; it’s a meta strategy. I actually feel bad. I bought one for my nephew once - before I knew how bad it was.” ~ PVG
★★ “Don’t write them off, write them down.” ~ Carisa
   "Writing is knowledge-making.” ~ PVG
★★ “What I need are...a bunch of things that I can throw at you that won’t hurt. Because I can’t always give you a stupid look. So, I need to be able to throw things at you.” ~ Kaleb
★★ “I shared a bad computer joke with Cole yesterday. And, you’re welcome, because I didn’t put it on the public page.” ~ Carisa
   “Was it kept private or protected?” ~ PVG
★★ “There’s a lot of bullet holes in the ceiling...from all of the shots fired.” ~ Nick
★★ “Who’s playing Neon Cat? You have exactly thirteen seconds to turn that off!” Kaleb.
★★ “Hey, Carisa, pay attention! Cole is using Paint!” ~ Zach
   “Oh! Cole, will you teach me how to master paint?” ~ Carisa
Part Six

Launch Party

★ “Three hours seems like a long time, and a hundred people seems like a lot. But, then again, I don't have any friends or family, and I don't like to be anywhere for three hours.” ~ PVG

★ “Crudite? I like to call them ‘Crude-ites!’” ~ PVG
  “That reminds me of this lady at church who said she was serving ‘whores-de-vors’ at a church function. You guys have never seen me lose it like I did that day when I laughed in her face and said, ‘We’re serving WHORES!’” ~ Carisa
  “Well, we don’t stone them anymore; we serve them.” ~ Kaleb

★ “I don’t know if this is going to throw more chaff into your wheat…” ~ PVG

★ “Wait! According to the University Catering information, we can have alcohol at the launch party!” ~ Carisa
  “I think it’d be better if we just brought our own flasks.” ~ PVG

★ “Well, we got like $70 in labor charges. So, that upped our total.” ~ Carisa
  “Well, since I'm not a doula, I think we'll just have to pay for the labor assistance.” ((Carisa laughs.)) “Really!? Nothing for the labor joke?” ~ PVG

★ Foyer of the new Brown Planetarium
★ Open house format with a planetarium show premier

Final Retrospective

★ “What’s the almond milk for?” ~ Kaleb
  “It’s for the granola - in case you want to eat it as cereal.” ~ Carisa
  “Oh! This breakfast has features!” ~ PVG
“There was an International Group - actually, they weren't International; they were all Chinese” ~ PVG

“Yesterday, my son had a piece of carrot stuck in leosynchronous orbit. His name is Leo, and he had a piece of carrot stuck to his shirt! Can you believe he didn't think that was funny?” ~ PVG

“The credits screen is a little ‘up at the top ish.’” ~ PVG

“Our game is awesome! We are awesome!” ~ Kaleb

“Yes, we made something awesome. And, by extension, we are awesome. But, you can’t judge the artist by their art. Their value as a person is not dependent on the value of their art” ~ PVG

“Can I get that in writing?” ~ Kait

“If you take a phone, and you add a computer, it becomes a computer. If you add a computer to anything, it becomes a computer. The same is not true of oatmeal. You can't add oatmeal to anything and make it oatmeal.” ~ PVG

“We're funny as hell!” ~ Kaleb

“We are as funny as the sixth circle with the depressed and depraved.” ~ PVG

“We banqueted like nobody’s business! Food is part of our genre ecology. And, the fact that we share food is very interesting and important.” ~ PVG

“Can we bring the swords?” ~ Kaleb

“We should try to hit them with data.” ~ Cole

“Whatever you say, we’re just going to write it on a sword and bring that.” ~ Kaleb

“People think that games are easy to play, so they must be easy to build. But, being able to express to someone the idea of the progression of ideas is complicated.” ~ PVG

“What we did is not just make the game. We became something that did not exist before.” ~ PVG

“To be from America doesn't mean to be white. To be from Indiana means to be white.” ~ PVG

“Learning that you are awesome is a thing that happens. Taking your awesome and doing something with it is what Ball State should prepare you for.” ~ PVG
★ “I've seen people do 3 credit hours worth of work overnight before... Let me tell you about some masters theses...” ~ PVG
★ “To do things for free is a hobby - which is fine, but, you don't get paid for it.” ~ PVG
★ “I want to use this project to prove to the higher-ups that in the future, we should actually charge for our games. Because this game is so awesome that we could charge for it if we had planned to from the start.” ~ PVG
★ “I don't want to eat my seed corn; I don't want to shoot myself in the foot.” ~ PVG
★ “If you see a sour watermelon Peep, just run the other way. It tastes like artificial covered in fake!” ~ PVG
★ “Why would you WAMP it when you could LAMP it!” ~ PVG
★ “We got some field trips and some good Vietnamese food out of the deal.” ~ PVG
★ “…and Carisa in general facilitated communication between people who couldn’t communicate on their own.” ~ Kait
★ “Some things don’t affect other things - like networking - is that what makes them harder?” ~ PVG
★ “Team Bonding is NOT the same as Team Bondage.” ~ Kaleb
★ “Making games for children needs to be an intentional process.” ~ PVG
★ “We did everything we wanted to do, and everything we did is awesome. Now, give us your money.” ~ PVG
★ “How do you know when things are done? You're done when you have the courage to say you're done.” ~ PVG