

The following content is provided under a Creative Commons license. Your support will help MIT OpenCourseWare continue to offer high quality educational resources for free. To make a donation or view additional materials from hundreds of MIT courses, visit MIT OpenCourseWare at ocw.mit.edu.

PROFESSOR: Anyway, today we have a guest speaker. His name is Abe Stein. He's the audio director for the Singapore MIT Initiative. And he's going to run through brainstorming exercises. We're not actually planning out the game that you're going to be doing for your first assignment in this class. This is a-- you're doing other--

ABE STEIN: Yeah, these will just be practice.

PROFESSOR: So basically, there will be a group activity involved in this, but the things that you're working on, those have to be the same groups that you will eventually be using for your first assignment. The idea is just to get used to the process of brainstorming and some of the general rules of thumb. And before I spoil the entire talk--

GUEST SPEAKER: That's OK. So my name is Abe Stein. A little bit of background on myself. I am the audio director here. I've been working in sound design officially for a number of years now, five some odd years. Unofficially, way longer than that doing TV and video game sound design. And then before that, I was a high school teacher.

And so I think to the extent that talking about creative collaboration, I have a fair amount of experience ranging even back to when I was teaching high school, for trying to encourage what we might call organized ideation.

I guess first off, I'll thank you guys for reading the text. It is funny. It does have these I guess now a little antiquated, 1950s references. And some of his scientific evidence for why brainstorming is good is not particularly well-supported. He's like, we got 95 ideas. And it's like, well how many ideas did you get doing it the other way? He doesn't tell you. But hey, 95, that's a big number.

So a little bit of background about Alex Osborn. He was an advertising executive. And so you can see where brainstorming and advertising is a creative industry, as a design industry. And so getting multiple people in interdisciplinary different skills working together on a creative project, it could be a challenge. And so you can see how brainstorming came out of the work

he was doing in advertising

So just to get started, I would say you've read-- and so you have a sense-- but forget what you think you know brainstorming is. Some of what you think it is will apply. Some of the most fundamental principles to brainstorming maybe you don't realize, or you didn't realize until you did the reading. And that's a little bit of what I want to talk about. I think the foundation for his brainstorming ideas is actually really solid. It's something that we should explore today.

Why brainstorming for video game design is an interesting question. But I touched on that a little bit with its relation to advertizing, right? I mean we're talking about a creative industry where you have people with various skill sets, whether they're artists or sound designers or game designers explicitly or producers. All of these people existing in a collaborative environment together. They're bringing different things to the table. How do you get them to work together and be collaboratively creative? And so this is a first step in that process. And so this is why brainstorming is particularly useful for game design.

And then the other thing that I think is important to understand-- and we'll talk about it a bit more-- is the social pressures that are created in professional creative environments, even non-professional actually. I mean it would exist in an educational environment too.

You guys are all at MIT. It's one of the most prestigious universities in the world, right? And so you're probably no stranger to the idea of social pressure in the process of ideation, right? You sit there and you say, if I say this idea, am I going to look like an idiot? And usually the outcome from that is, if I don't say anything, maybe I don't get the gain of presenting a good idea, but I don't get the hit of making a bad idea. So it's self-preservation. Why take the risk if it's not worth it.

And so I think MIT is an interesting place to talk about brainstorming and this kind of organized ideation because there is social and academic pressure here too, pressure to be right, pressure to not say something that would seem wrong. And that sort of pressure is completely antithetical to the idea of a brainstorming session. And so that's a basis for why not only it's good for video games, but why it's also good to talk about here at MIT.

So there are four basic principles of brainstorming. These were outlined by Alex Osborn. He was an ad agent, and he says it was 1938 when he first started using it. People started talking about it since then. And I like when he said that it spiraled out of control, that people ran away

with it. They were like, oh, this is a great idea. But then they were practicing it wrong. And so in applied imaginations, which is the text you guys read, it's him reflecting on this brainstorming idea and saying this is really how it should be exercised.

The first principle is single-handedly the most important principle, and that's no criticism. That's a blanket way of saying it, but really in a more broad sense, it's saying judgement needs to be excluded. In some sense, it's both positive and negative, but especially you don't want to criticize each other's work.

You also don't want to spend time during a brainstorming session talking about how good an idea is, right? If someone throws out an idea, and someone's like, oh, this is the best idea. We don't even need to keep going anymore. Then it's like, whoa, no. Wait, now we're not brainstorming anymore. And so really judgement is absolutely supposed to be excluded from the process.

I think that this is the primary principle that goes against that social pressure, right? Because the social pressure of judgment, the people who are saying what you have, an executive who's in charge of you, a boss who's saying whether or not the ideas are good or bad, or whether you have colleagues that are saying whether or not ideas are good or bad, that sort of social pressure that forces people to stay quiet and maybe hold onto good ideas or throw away good ideas. If everybody's on board with a lack of criticism, then you have more freedom to express yourself.

Just pulling back to the text a little bit, there was this great quote from this vice president I'll read to you guys again. He said, "It was hard to get through my head what you were trying to do with us. My 15 years of conference after conference in my company have conditioned me against shooting wild. Almost all of us officers rate each other on the basis of judgment. We are far more apt to look up to the other fellow if he makes no mistakes than if he suggests lots of ideas." That is something that may sound familiar to you. "So I've always kept myself from spouting any suggestions which could be sneered at. I wish our people would feel free to shoot ideas the way we have been doing in these brainstorm sessions.

And so really, this lack of criticism, this creating a safe environment for ideation, is the most fundamental principle in this brainstorming. And it really goes right at those social pressures which can stop creativity and really hamper creativity.

Any questions about that? That makes sense right, this principle of no criticism. Cool.

Principle #2, freewheeling, as Mr. Osborn likes to call it. The wilder idea the better. This is also hard to get used to. Again, it was like the guy said in that quote. You resist the urge to throw out something that's absolutely crazy and absolutely wild for fear of ridicule. Well, if we eliminate the fear of ridicule, and we understand that we're just trying to get every idea that we can, then freewheeling is absolutely encouraged. And you need to get passed that oh, this will never work. Or nobody would ever like this.

And I put up a katamari up here because that's the sort of idea that someone throws out at a meeting, and if there's criticism, someone will be like, that's the dumbest thing I ever heard. You can't just roll around picking up stuff for the king of the cosmos. That's insane. And it probably was a synthesis of a lot of different ideas that created that game, which we'll talk about later.

But really, having these wild, crazy ideas, you may think it's over the edge. And it might be over the edge. But it is way easier to make something feasible than it is to take something that's pretty normal and make it innovative and interesting. It's much easier to go in that backward direction. So really the wilder the idea you can come up with, the stronger.

Any questions about principle #2? Making sense? On board? Cool.

Quantity. This is really the goal of a brainstorming session. Come up with as many ideas as you can, right? It stands to reason that if you have lots of ideas, there's a greater likelihood that you'll have a useful one. That if, say, you have two, your choices are limited. You're going to pick the better of the two, I suppose, but it might not be the best idea you have. And so really, this adds onto that wild idea, throw everything out you can. You need to just get everything out and everything on the page in order to even be able to start judging it.

And that's the important thing too that needs to be clarified is that brainstorming is a first step in a creative process. It's not the whole process. It's not like, oh, we have this creative problem that we need to solve. We'll have a brainstorming session, then we'll have it. And actually, that's something that hampers brainstorming a lot.

You have a brainstorming session. You come up with these great ideas. And then everybody leaves, and you never return to it or you never reflect on which these ideas is going to be best, or you just end up picking one. And so the judgment needs to happen as well, but not now. In the brainstorm session, it's just get everything out that you can.

And really it just stands to reason. And I made fun of Alex Osborn when he was saying, well, in this instance in the government, they had 95 ideas. And we came up with eight new [UNINTELLIGIBLE]. How many did you come up with before? But it's true. The more you have, the better you're going to do. Cool.

And then this one is related to that, which is the idea of synthesis, or building on ideas. Which is that oftentimes the best idea, the best creative idea, is not going to be something that's just a unique idea that stands alone in this corpus of ideas that you've collected over the brainstorming. It's going to be an idea that is a synthesis of one idea and another. Or someone suggests an idea, and then that makes you think of something else that's related to it. And you build on that.

And you can see, in really positive, good brainstorming sessions, there's a momentum. And one of the things that can really hurt that momentum is when people are starting to riff on an idea, and then someone is like, oh, but in other news, we could do this. And so it's really encouraged that you synthesize ideas. If you have that other left field idea, don't throw it away. Jot it down so that you can bring it up later, but don't kill the momentum of the synthesis if that's happening.

It's really important that you start-- it's the collaborative part of this creative ideation. It's this combining of ideas that's going to create good ideas. And I think we can take that as a given, that if you collect a bunch of skilled, thoughtful, creative people together, combining their ideas is going to create something that's better than just any one idea that one creative professional is going to have. Or at least just a different solution that might be more ideal given the problem.

And so you can think of things like, Lego is pretty awesome. *Star Wars* is also pretty awesome. But Lego *Star Wars* [INAUDIBLE] is also awesome. Similarly, Marvel is dope. Capcom is also pretty dope. *Marvel Versus Capcom* is tremendously dope. So building on ideas can create obviously really interesting things. And it's a good idea to keep working on that in your brainstorming sessions, what can you put together?

So how is it organized? We talked about the basic principles. Any questions about those four principles? Did they all make sense? Did they all seem to be grounded in-- you're nodding yes. It's the greatest thing I've ever heard. OK, cool.

So the question then becomes, how do you organize your brainstorm. One of the points that Alex Osborn makes is that it needs to have a casual spirit or a casual atmosphere. He refers to it as a picnic, which is another one of those-- I haven't been on a picnic in a really long time. But it's like, we brought out lunches in, and then we talked afterwards. We call those lunch meetings now.

But he has a good point that if a large part of the brainstorming session is intended to combat social pressures that stop you from being creative and inhibit your creativity, then it would stand to reason that creating a casual spirit, a casual environment for this process is important.

And so most video game processes and most video game companies have a pretty casual spirit and environment because of the nature of the work in general. So sometimes this might not be that hard. But things to consider are, what is the makeup of your team? If your president of the company does a really bad job of putting himself or herself on the same level as all the people, you might want to exclude that person from the brainstorming session. Because then everybody is going to feel the pressure of the president. And oh, do we need to make an idea that makes that person happiest.

You have to think to think these things through in terms of what the environment is going to be for your brainstorming session and who's involved. So it is an important point and an important step.

Starting with a bad or a worthless idea encourages that freewheeling sense. A lot of times, people will contribute ideas that feel safe. Again, you want to come up with the most ideas that you can. So having someone with the courage, or even bringing to the beginning of it a crazy, worthless, bad, freewheeling idea can help encourage people to keep doing that. So either starting with some who has a crazy idea or even bringing it to the brainstorm at the very beginning can be a really good thing as well.

This is a key one. Don't interrupt anyone. It's really important in an brainstorming session to encourage that every voice is heard. Let me see if I can find that quote from that one guy. Yeah, here we go. It's great.

AUDIENCE: Think up or shut up.

ABE STEIN: Yeah, there's that one too, which is a good one. But it's talking about "the spirit of a brainstorm

session is important. Self-encouragement is needed almost as much as mutual encouragement. A perfectionism complex will throttle effort and abort ideas." He says, "One of the ablest members kept mum throughout one of our sessions. I button-holed him"-- never heard that expression-- "afterward and begged him to spout whatever ideas might come to his mind in our next meeting."

And this is where it gets good. This is the really able member of this ad team. He says, all right, I'll try. But here's what happened. "After our first meeting, I jotted down about 15 ideas with the thought that I would bring them to our next session. When I looked them over, I decided that they were worthless, so I just tore up the list."

And Alex goes on to say it took awhile to encourage this guy to understand that there's no such thing as a worthless idea, that it can either be expanded upon or revised. And that's that synthesis thing, that having a wild idea. And getting back to this idea of the interruption, nothing will stop a person from wanting to contribute more than not being to even have their voice be heard. They're trying to say something, and then they just get cut out by somebody else who is like, oh, this is better, especially for a shy person or a person who is otherwise feeling like my ideas are worthless. They won't be able to get it out because they've been cut short.

So some of this responsibility falls on what we might call the leader, which I'll talk about later, of the group. But it's a collective responsibility that everybody makes sure that as someone is expressing an idea, that it's [INAUDIBLE].

And to that, keep the description of your idea short. If people are sitting here, and you've now hijacked the 30-minute brainstorming session with your one idea that took five minutes to explain, that can also hamper it, right? Part of it is not only don't interrupt people, but also make sure that when you are contributing, you are allowing for other people to contribute as well, something that maybe is not considered as much.

For the organization, it does need a leader. I hate that term, but that's what he used in the book. I tend to use the term clerk, which is a Quaker idea, which I grab onto. A clerk being more of a facilitator than an actual leader. Leader suggests boss, which is not great for everyone's even brainstorming session. And then of course the secretary, or as he calls it, an associate leader, this is someone who writes stuff down. There's some of that good, old-fashioned hierarchy going on in this text.

But obviously, we'll talk a little bit more about what the roles of these people are, but having those roles defined early is important.

And then this is something to talk about a bit, explaining the process and the principle question at the start of the session. How many of you had heard of these four principles of brainstorming explicitly prior to reading this text? Anybody? Well. I know. You heard from me. But the process is something that needs to be clear. Otherwise, people won't remember to do it.

You'll see when we do the exercise, it's even hard sometimes to curb your criticism, especially when you're comfortable with people. And you may not mean it in a malicious way, or you may not mean it in a way to stop the brainstorming session. But you'd just be like, Oh, that's nuts. You're laughing, and everybody is having a good time. And then when you think back, you're like, wait. That was me passing judgment on an idea and possibly inhibiting the kind of ideation that we're trying to get across.

So explaining the process at the beginning regardless of the group is really important. And that is usually a responsibility that falls on the leader or the secretary, whoever is organizing the session. They even suggest in the text, have it posted. Have the four principles up so that everybody can remind themselves through the process what these four principles are. But explaining the process is really important.

And then this is so important. Having the principal question and the goal of the brainstorming session clear at the start. Obviously, it's encouraging freewheeling. It's encouraging free thought. It's encouraging all kinds of wide open creativity. And at the same time, if you do that in an unbounded sort of way, you might end up with things that really in the end, you don't have too many useful ideas. You have useful ideas for something else, not for the actually creative problem that you have.

So if you take it from an ad concept, you have a vodka company that's like, oh, we need an advertisement for our awesome vodka or whatever. And so you're like, all right. We're going to have a brainstorm session. And a bunch of people come up with ideas. Now you're selling dryers because it was wide open, right? It's like, oh, we've got these great ad ideas for dryers, but they're just really not going to work for vodka.

Bringing it back to the video game contract, you've got a contract with a producer to make a first person shooter, and in your brainstorming session, you've designed a cool new platform.

Neat, but that's not where the money is coming from, right? So bounding the brainstorm session is important too. And you'll see that in the exercises that we do today, how it's important to bound that.

Oh, and write down everything. Sorry, I forgot about that. This is an important point. This happens to all of us, but you have this great idea, and then you don't write it down. And then you go to bed, and then the next day, you're like, oh, I had this great idea and you can't remember it, right? So writing down everything is absolutely essential. You'd be amazed the number of times that a week later, you're like, oh, we could put these two ideas together as long as you can remember what those ideas were.

And so what you think, it's hard to not mentally pass judgment on things during the brainstorm session, and what you think might be great now, may be a week later not be as great. And what you didn't think will be. And so making sure to have everything written down is really important.

And they even suggest having two secretaries if you need it if you have a large group with lot of ideas and they're each writing every other one. That can be helpful to make sure that you get everything.

Next is the question of what sort of problems are suitable to a brainstorming session. The great example that Alex Osborn gives is setting up a brainstorm session on whether or not to get married is not a particularly suitable question. And that was an interesting concept. He's like, well, to decide to get married, you apparently list the pros and cons. That's not exactly the process I went through before I got married. I was like, well honey, I'm going to have to write this down.

But, fair or not, that was the suggestion that he came up. And he had a good point, right? The question of whether or not to get married is a judgment call. It is not a creative ideation process. And so that's not a particularly useful problem that's suitable to the brainstorming process. You want a problem that is going to be benefited by having a large, selection, a large corpus of ideas. And so those are the kind of problems that are more useful. And you'll see when we do our example exercise what some of those might be.

I also put here that having a clear definition of the aim is really essential. It's what we talked about before. You need to make sure that everybody understands and everybody's on the

same page. Otherwise, you'll end up with stuff that might be useful for something, but not useful for what you're particularly trying to do. And so making that clear for everybody is really important.

Keeping the problem as simple as possible is also really important. Trying to keep simple language for the problem. Keep it constrained in a way that is simple enough so that people can work on it as opposed to just feeling limited by it, if that makes any sense. If something is overly complicated and overly constrained, then it becomes, well, how do I fit everything into this? How do I match every single one of these things? If it's simpler, then it's a little bit easier to work on and try to be creative with. So keeping problems simple.

Which isn't to say that complex problems couldn't be dealt with, but just divide them into sub-problems. Divide them into little sections. So there might be something like, how could we deal with the UI? How could it look in this game? So rather than say, well how are we going to design our first person shooter, you've got a brainstorming session about what the UI could look like for the first person shooting game. You have maybe a brainstorming session for what the fiction for this first person shooter might be. You're dividing it into sub-problems rather than having it be this gigantic monolith of a thing.

And you can see how that would be a problem, right? Because if you just brainstorm on what's our first person shooter going to be, you're going to get ideas about the UI. You're going to get ideas about the fiction. You're going to get ideas about what sort of guns you should use or what they should sound like. And it'll just be lots of interesting ideas but all over the place.

And yeah, the problem should be clearly and simply articulated. I think that's what I said by the shooting example. Make sure that they're articulated in a simple way. Sometimes you can have a simple problem that's not articulated particularly clearly. So it's just something to consider.

Responsibilities of the leader, or whatever, the first being to understand and explain the problem and the aim of the brainstorm session. I mean a lot of times, people maybe will write a memo beforehand. As the facilitator of the thing, there's a person who perhaps wants to see the brainstorm be a success. But mostly, having a clear understanding of the problem. And explaining that to the group is an important job for the leader.

I use this term facilitating the session, encouraging ideation, discouraging criticism. You are the watch guard for the process, not necessarily-- you can sometimes be a contributor and a

watchdog for the process. But most important is that you are a watchdog for the process. You'll see as we do it, it's just so easy to slip into these conversational habits that are contrary to the brainstorming process. And so having someone who's making sure people don't criticize and encouraging people like oh, I haven't heard from this person. Do you have ideas? Even pulling people out is important. And that comes down to ensuring that no voices are lost during the discussion, right? I mean we had that ablest member who had 15 ideas that he wrote down, and he's like, they're worthless. Well, in some ways it's the part of the leader, either during the session or after the session to try to encourage those able members to contribute.

Yeah, some of the most crack pot ideas become the best ones, so you really want to make sure every voice is heard.

And then encouraging the synthesis, encouraging people to riff on other ideas, trying to find ways for people to build on each other. Even offering synthesis towards the directives. So maybe you have a couple ideas. And you're like, oh, 1 and 10 are similar. Is there any way we could combine this? And somebody is like, yeah, we could give him a helmet. Awesome. So it's simple. I don't know what two things you can combine to get a helmet. Can't get shot in the head. How about a helmet?

All right, so responsibilities for the secretary. Most obviously, record every and all ideas. Write it all down. You have to write it all down. This is so important.

This one is often overlooked, monitoring the schedule and the duration of the session. Something I learned a long, long, long, time ago is one of the worst things that can happen is meetings that run over or meetings that start late or meetings that don't adhere to a schedule. No better way to lose your employees or lose your staff than to bite into their time. And so making sure that it's constrained and that it meets the duration is really important. So, they seem simple, but timing's a thing.

And then of course, they look like participating in the brainstorming. Like I said, all voices should be heard, and that oftentimes will mean that the secretary is a creative professional as well. And so making sure that you participate [INAUDIBLE].

So we've got a few exercises now to get you acclimated to the idea of brainstorming. The first one is an actual individual brainstorm. So if you have paper, grab some paper at the top of the pile.

AUDIENCE: If anyone is lacking either writing equipment or paper?

ABE STEIN: You could use a note card too. Really just something to write on other than the table. Note cards are totally fine.

As you guys are getting ready, I'll continue to talk. This is actually something that I didn't mention in the process but is actually very useful to the brainstorming process. I think doing warm ups before you actually brainstorm is useful. You know how people show up just from lunch, especially if it's one of those picnic meetings. People sometimes are tired. People just might have other things on the brain.

So getting into the habit, getting warmed up to being creative is important. I tend to find it's a rare kind of person who you just give a blank piece of paper to, and you're like, oh, make something. Go, be creative. And they're like, vroom. They just whip something out.

You have to get warmed up. Visual artists sketch constantly, and that makes sense. And then they build on sketches. I just make dumb pieces of music that I'll maybe never use for anything, but maybe I will. Who knows? I make stupid sound effects in the shower. I consider that warming up for work actually.

So you have to get warmed up. And so this is just a really quick, five-minute warm up. And the idea is, write anything that comes to your mind for this specific problem, and I'll show you a picture. Brainstorm possible uses-- it's not really a brainstorm. It's more just that you individually come up with creative ideas, creative uses, for the following items. And I'll give you five minutes starting now.

All right. Hopefully it was good for a warm up. Quick question by a show of hand. Be honest. This is a safe environment. How many of you had an idea that you did not write down? How many of you self-censored yourself with an idea? Yeah, Tommy, you were like, oh, that's dumb.

See, it's hard to get out of the habit of doing that. It's hard to get out of this habit of self-judgement. And it's really important. That dumb idea that you think was worthless might be a good one. Does anyone who raised their hand want to share what their censored idea was just to exorcise the demons, so to speak? No, no one?

All right, who wants to share some ideas that they did write down?

AUDIENCE: See, I have a lot.

ABE STEIN: Yeah, well throw us a couple that are your favorites.

AUDIENCE: C, lock pick, MacGyver, connecting circuits.

ABE STEIN: There you go.

AUDIENCE: Caring hurts, a knife, clothes hanger, chopsticks, dowsers, stirrer, connect batteries, let air out of tires, emo tool, nose picker.

ABE STEIN: Sure.

AUDIENCE: Staple. And a paper weight. I have a lot of things.

ABE STEIN: Yeah, good, that's awesome. Try it out?

AUDIENCE: All right, I got, let's see, fingernail cleaner, an eyelash straightener, basically rail gun ammo, a balloon annihilator, and an official Tamagotchi TM resetter.

ABE STEIN: It resets a lot of things actually. Over to this side. Owen, go ahead.

AUDIENCE: I had [INAUDIBLE]. I had scratch messaging tool. I had used as a key ring, conducted electricity with it. Made it into jewelry. Fixed umbrellas and what have you with it, which I've done before. A money clip. Use it as a screw for cooking. Put it on top of the door, and so when people open it and it falls on the ground, you know that somebody has been in your room. Lance boils, poke eyes out. Hair accessory. [INAUDIBLE].

ABE STEIN: That was a good question. Did you have a whole paper?

[INTERPOSING VOICES]

AUDIENCE: I had hairstyling accessory, projectile, something you could melt down for metal and other stuff. Something you could bend and then put on chairs, and then when people sit down, it pokes them. Modern art. I thought you could get a bunch and fill a dorm room with it as a prank or something. Toothpick. Hold stuff open for emergency surgery.

ABE STEIN: Cool. Some other ideas?

AUDIENCE: I thought you could bend it into an interesting flat shape, and then put it in ink and use it as a stamp.

ABE STEIN: Very nice, very good. Cool, yeah, go ahead.

AUDIENCE: Game bits and tokens. Holder for dipping something into liquids. Tie clips and keeping small boards together.

ABE STEIN: Very good. Sure, yes?

AUDIENCE: A mini rock garden rake. Also a [INAUDIBLE].

ABE STEIN: That is very good. Go ahead.

AUDIENCE: Heat generator. If you work hard on it by bending it and unbending it, then it gets hots.

ABE STEIN: Very nice.

AUDIENCE: As long as it doesn't break.

ABE STEIN: Yes?

AUDIENCE: I think about a souvenir as a bulletin for a lost robot.

ABE STEIN: That's good. Say that again.

AUDIENCE: I was going to say that it's a robot that is made by humans, but it's lost in space. Then we have this thing that reminded us of [INAUDIBLE] a secret thing.

ABE STEIN: My favorite use for a paper clip is cleaning the lint out of my iPhone ear jack, which drives me absolutely crazy. So I'm running on reserve battery power, and my slide show has been suspended. In my office, there's a air powered connector thing.

So yeah, how did we feel about that exercise? It got you to loosen up a little bit? It got you thinking about some ideas? It got you feeling the creative juices flowing? We have three more exercises that we're going to do. So much brainstorming. This is the hardest work I've ever done at MIT.

No, so we have a few more exercises to get you guys comfortable, to get you guys relaxed with this brainstorming process. The next one is going to be a group exercise. I'm going to wait to describe it until I can get my slide show up.

Anybody else have any particularly choice paper clip ideas?

AUDIENCE: Oh, I just thought of one.

ABE STEIN: What?

AUDIENCE: A sine wave generator.

ABE STEIN: Oh, very good.

AUDIENCE: Wire frame doll.

AUDIENCE: [INAUDIBLE] shaker.

ABE STEIN: Oh yeah, totally.

[INTERPOSING VOICES]

ABE STEIN: Hold up a second guys.

AUDIENCE: If we stop looking at it as an [UNINTELLIGIBLE]. Take it apart like an Army man and use it as a spear.

ABE STEIN: Yeah, like *Man Vs. Wild* catching fish with it. Bear Grylls. Something

AUDIENCE: To chew on.

AUDIENCE: You could use it as a catapult if you bend the top part.

AUDIENCE: Rubber band launcher.

AUDIENCE: Letting air out of tires.

[INTERPOSING VOICES]

ABE STEIN: There we go.

[INTERPOSING VOICES]

AUDIENCE: Do you remember that guy who had an oversized red paper clip and ended up trading it for a house? Currency towards a house.

ABE STEIN: Cool, so hopefully that got you loosened up. I do want to just emphasize again, for those of

you who raised your hand, and even though of you who did not raise your hand because you were censoring the truth because you were afraid, try not to self-censor. Really, it's important to brainstorming.

AUDIENCE: It sounds like the military.

ABE STEIN: Yeah, stop self-censoring. I bet those crappy ideas that you didn't write down are actually really awesome.

So activity #2, we're going to work as one large group. This is our conch shell. It doesn't look like one, I know. But the principle still applies. This is just to get us in the habit, in the shape of speaking one at a time, not interrupting each other. And in some senses building on each other's ideas too, right? There's something in the physical passing of the ball after you've heard someone's idea that might encourage that sort of synthesis of ideas as you're going.

I will be your fearless leader. All that means is that I just make sure you're not interrupting each other. And we're going to brainstorm solutions to a design problem. This one I think is actually a lot of fun. So, I will show you the design problem. I will maybe throw out an idea, and then I will toss the conch shell to the first person who wants it.

And then it doesn't have to go back to me. Just anyone who wants it, throw up your hand. And we'll keep moving around. Please close the lids on your drinks. Put away your crystal stuff that you don't want shattered.

So we'll take approximately 15 minutes on this. We'll see how our momentum goes. So you've just finished updating *Tetris* for Xbox Live Arcade. Awesome. I don't know how you got the rights, but that's great. Microsoft is demanding a set of achievement for integrating the game into their online service, because unless you have achievements, it's not a real game.

So, we are going to brainstorm possible player achievements for your new version of *Tetris*. You know what achievements are, right? Those little things that pop up on your Xbox every time you do anything?

So that is our idea for *Tetris* achievements. And I'll start. How about for actually getting four lines, you get a *Tetris* achievement. Who wants to be next?

AUDIENCE: You get an achievement for losing as quickly as possibly, which they think will be like, really obvious.

AUDIENCE: Getting three lines with an S-piece.

AUDIENCE: Drawing some sort of unique little picture with the *Tetris* blocks, like something new perhaps.

AUDIENCE: Putting one of each block down.

AUDIENCE: Lasting for a certain amount of time without ever getting above a certain height.

ABE STEIN: Very cool.

AUDIENCE: Lasting a certain amount of time without ever locating a piece.

AUDIENCE: Modern *Tetris* games have a system where you can rotate indefinitely when your piece is down. So you rotate indefinitely for a minute or two or three.

AUDIENCE: Lasting a certain amount of time without ever clearing a line with a straight piece.

AUDIENCE: Putting your piece down underneath another piece into a little hole.

ABE STEIN: Sliding it in?

AUDIENCE: The T-spin.

AUDIENCE: Spelling USSR with your pieces. That was a bad throw.

AUDIENCE: Making a conglomeration of all pieces into a shape of a regular piece. So the whole board is one L-shape.

ABE STEIN: Very cool.

AUDIENCE: Basically only moving the pieces in beat to the music that's playing.

AUDIENCE: Spelling USA with your pieces, but doing it.

ABE STEIN: Capitalist centered.

AUDIENCE: High score and high score without pairing lines.

AUDIENCE: Managing to clear the entire board in a game that has already reached the top line, but not quite overflowed.

AUDIENCE: Putting a piece down without actually looking at the piece at all.

AUDIENCE: Most pieces per time, so [INAUDIBLE].

ABE STEIN: Sure.

AUDIENCE: One day of continuous *Tetris* play.

ABE STEIN: Marathon challenge.

AUDIENCE: Breaking the previous high score.

AUDIENCE: Only ever shifting the pieces either to the right or to the left the entire game.

ABE STEIN: Ah.

AUDIENCE: Doing the marathon challenge but only listening to one piece of music the entire time.

AUDIENCE: Clearing a level by dropping pieces before they fall five spaces.

ABE STEIN: Oh, all right, cool.

AUDIENCE: Rotating every single piece that you play.

ABE STEIN: Oh, very good.

AUDIENCE: Never going above a certain line for a certain amount of time.

ABE STEIN: Ooh, a sustaining effort.

AUDIENCE: All of the above, but on different difficulty levels.

AUDIENCE: Clearing three lines with a T, I guess.

ABE STEIN: There you go. Sure.

AUDIENCE: Starting up the game.

AUDIENCE: Clearing an entire screen.

AUDIENCE: Using the L-block. It doesn't matter how.

AUDIENCE: [? Turning ?] a box a different color. So clearing lines always with the same color.

AUDIENCE: Rotating a piece 720 degrees.

AUDIENCE: Only matching pieces such that the U-blocks that fall down are touching blocks of the same color.

ABE STEIN: Cool.

AUDIENCE: Clear two, four block segments with two consecutive lines.

AUDIENCE: Clearing a level using only tetrices.

AUDIENCE: Sorry, you can't talk anymore.

AUDIENCE: Challenging somebody on your friends list to beat the score.

AUDIENCE: [INAUDIBLE] someone on your friends list to lose faster.

AUDIENCE: Having no holes in the golf course at all times.

ABE STEIN: Oh cool.

AUDIENCE: Inviting one of your Xbox Live friends to play with you.

AUDIENCE: Five consecutive line clears.

AUDIENCE: Beating one of your friends on Xbox Live when you play with them.

AUDIENCE: Losing to a friend on Xbox Live.

AUDIENCE: Playing with a friend for one hour continuously. Plus one day.

AUDIENCE: Beating a score set by the original creator of *Tetris*.

AUDIENCE: Clearing a line somewhere above the first line when the first line only has one block filled in.

AUDIENCE: I think it's possible. It definitely is. You get the flat ones.

ABE STEIN: Someone has to have ideas. There's an idea.

AUDIENCE: Lose more than 10 levels to a friend. [INAUDIBLE].

AUDIENCE: Play the original creator of *Tetris* on Xbox Live.

AUDIENCE: Losing 100 times.

ABE STEIN: Yeah, there you go.

AUDIENCE: Playing on increasingly ridiculous difficulties with achievements for each. Or speeds, increasingly difficult speeds.

AUDIENCE: Completing the *Tetris* challenge, which is presumably some kind of game where you have to throw a box in the right sequence in order to clear all the lines.

AUDIENCE: Clearing 1,000 lines.

AUDIENCE: Playing invisible mode.

AUDIENCE: Playing for a certain amount of time while holding down the Down key continuously.

ABE STEIN: Only rotating in one direction, always. I don't know if someone said that already.

AUDIENCE: Getting 10 achievements in *Tetris*.

AUDIENCE: Getting every achievement in *Tetris*.

ABE STEIN: Oh no, how can you get it?

AUDIENCE: It's a paradox. It's impossible.

AUDIENCE: Always have lost on the far left and on the far right column. Oh yeah, sure.

ABE STEIN: Cool, I think that had some decent momentum, but I think our mission was accomplished. We were really only giving one idea at a time because it was only the person who had the ball that was talking. That, probably with a little bit more speed and momentum, but it was nice. We had a little building on ideas. We're starting to get this brainstorm.

There was still some shyness, which is-- people have different personalities, but stop being shy. You're allowed to have different personalities, but stop it. No, so that's activity #2. Any questions about that process? How did we feel about it? Any thoughts on it before we go on to the next activity? All right.

Next activity. Actually, this is our last activity. Sorry, I said there were four, but there are only three. [INAUDIBLE] I screwed up.

OK, so this one is a more formal brainstorm. And actually, I screwed up that last one. We didn't have a secretary, so all of those great *Tetris* ideas are now lost because I can't remember any of them.

AUDIENCE: [INAUDIBLE]

ABE STEIN: Oh yes. Did we not have that? Let me just get these [UNINTELLIGIBLE]. So what we're going to do is we're going to separate into two design teams. So it will just totally be by location. We'll just get half of you over here and half of you over there.

I want the two to designate one leader. That's going to be the person who's responsible-- clerk-- for facilitating it. Did I say clerk there? A leader and a secretary. It's supposed to a clerk leader and a secretary. So one person to write everything down, and one person to obviously facilitate.

And we're going to do 20 or so minute brainstorm for a game pitch. What do I mean by game pitch? Think of the, you're in an elevator with Miyamoto or you're in an elevator with [? Philip Haas ?], and you have this game idea that you need to pitch. But you're only going to the 10th floor or so. And so really, you have 30 seconds, a minute, two minutes, to get the core information about this game out.

So that can be something like a title, maybe a tagline for it, any main features you might have for it. Of course, it would be way too easy, or way actually crazy for me to be like, any game at all, because there are lots of different types of games obviously. So it's going to be a game based on the following constraint.

So what I'd like to do first before I give you the constraint is let's divide ourselves in half. We can draw this imaginary line diagonally dividing the two of you back there, and we'll just get one half here, one half there.

[INTERPOSING VOICES]

ABE STEIN: And once I give you the constraints, we'll actually find a separate room for the other team.

AUDIENCE: You're stuck on that wire. That's an achievement there. [INTERPOSING VOICES]

ABE STEIN: If someone has a piece of paper, they can jot down their ideas. Just write on a piece of paper. So these are your teams. You guys will go in that room. You guys stay out here. As soon as I

give you the constraint, designate a clerk/leader, a fearless leader, and a secretary, someone to write everything down.

Because our groups are relatively small, right, we can have the leader and the secretary involved in the brainstorming process. Please don't be afraid of contributing. But if you are designated as the leader, keep in mind your primary responsibility is facilitating the brainstorm. You want to make sure it runs smoothly. You want to make sure people are not criticizing ideas. You want to make sure that it's going OK.

Any questions on this before I give you your constraints? Everything makes sense? All good? OK.

Here are the constraints for the game. It must have zombies. It must have a love story. It must be massively multiplayer. So those are the constraints for the game. That's what the publisher is going to give you money for. So you need to develop a pitch for this game idea. Title, tagline, what have you.

All right, so you guys, we'll take you into this room over here. You guys stay here. Designate a leader and a secretary, and then start brainstorming. Oh, I love this. It's like, I don't want to be the leader. I don't want to be the secretary.

AUDIENCE: I said I'll do it.

AUDIENCE: But you wanted to be the secretary.

AUDIENCE: One of you is secretary. One of you is leader. Be a leader then. [UNINTELLIGIBLE] and you lost.

AUDIENCE: It brings up the age-old question. If they're both vampires or they're both zombies, does it count as necrophilia?

AUDIENCE: Fun, let's see.

AUDIENCE: *Pride and Prejudice and Zombies* manages to have--

AUDIENCE: It encompasses all of those except the massive and multiplayer part. Licensed title right there.

AUDIENCE: Make it Nazi zombies. Two Nazi zombies. No, a forbidden love. A Nazi zombie is in love with an Allied zombie.

AUDIENCE: Jewish.

AUDIENCE: Yes.

AUDIENCE: Yes, and then so there are two factions. Well, they are all people online. One group-- there are two factions. There's the Allied group and the Axis group.

AUDIENCE: What if there are two factions. There are the zombies and the humans, and they're drawn into war because there's a love story between a zombie and a human, and and the leaders get pissed over this. And so we're at war because of *Romeo and Juliet*-esque zombie human--

AUDIENCE: So what you're saying is we're having intelligent zombies.

AUDIENCE: Yeah, intelligent zombies.

AUDIENCE: So clearly they're Nazi zombies.

AUDIENCE: Semi-intelligent zombies.

AUDIENCE: The zombies should decide to become Nazis.

AUDIENCE: We need a tagline.

AUDIENCE: Title.

AUDIENCE: We have to somehow bring Hitler into this though. Because if Nazis, there must be a zombie Hitler.

AUDIENCE: What is your name?

AUDIENCE: Jason.

AUDIENCE: I'm Brian. On Jason's idea of is it necrophilia, I think we could do a love story. The title could be *Necrophilia*?

AUDIENCE: Is it necrophilia?

[INTERPOSING VOICES]

AUDIENCE: I like it as a title.

AUDIENCE: They say it is a love story, but is it a sex story.

AUDIENCE: How about this? Or maybe even zombies strippers that fall in love with them.

AUDIENCE: Have you seen *Zombie Strippers*?

AUDIENCE: No, I haven't.

AUDIENCE: It's a terrible, wonderful, terrible movie.

AUDIENCE: Well, I'll watch it then.

AUDIENCE: You should, not, should. Actually, how about we have the zombies as the good guys. That way, the Allies are trying to make a weapon that will destroy half the world, and the zombies are like, no, that would be bad. Let's make everyone else zombies so they can be with us.

AUDIENCE: What if you're just a zombie, and everyone is trying to kill you. So you want to make everyone zombies so that the world will be peaceful and happy.

AUDIENCE: And you want everyone to love you.

AUDIENCE: I like that a lot.

AUDIENCE: And then it'd be a love story.

AUDIENCE: Even better, love zombies. Who says they have to be in bed? They can be infected by emotions. That's the tagline right there, "Infected by Emotions."

AUDIENCE: Nudist zombies.

AUDIENCE: What if 95% of the world is zombie, and so then the weird creatures that are scary are the humans. And they're sentient and they do weird things, but the zombies all are happy and love each other.

AUDIENCE: Maybe the humans have the love disease.

AUDIENCE: They're trying to hump zombies?

AUDIENCE: Like they're infecting zombies with love.

AUDIENCE: So then each person would either start as a zombie or a human. They'd have to complete a bunch of little tasks so they can come [INAUDIBLE]. They challenge each other, so it'd be like,

zombie against zombie, and one of the is infected and one isn't.

AUDIENCE: So humans can infect zombies with love that makes them not zombies?

AUDIENCE: No, they are just love zombies.

AUDIENCE: What is the dynamic between-- so there are the two factions, obviously humans. And every player is given a match. And in this massive multiplayer world, one of their main objectives is to find their match who's in the opposing faction very deep among hostile hoards of either humans or zombies. Find them and live happily ever after together.

AUDIENCE: And become either zombies or humans together.

AUDIENCE: Correct.

AUDIENCE: But love zombies.

AUDIENCE: Find a cure or just get bitten.

AUDIENCE: And become love zombies.

AUDIENCE: Love zombies.

AUDIENCE: And so that's the question. Is there truly a difference between in love and being undead?

AUDIENCE: That's a great tagline.

AUDIENCE: [ZOMBIE VOICE] Love.

AUDIENCE: Maybe some [UNINTELLIGIBLE].

AUDIENCE: What can make you more blind? Having your eyes go dead by a zombie or being in love?

PROFESSOR: So then we can draw it into the actual Nazi zombie game, maybe the Nazis zombie is from the other point of view. So they're just trying to have love, and the humans are trying to kill them.

AUDIENCE: What? Wait, are we having Nazis?

AUDIENCE: We can.

AUDIENCE: Most of the ideas can include Nazis, and some can't, and we can decide later.

AUDIENCE: Phil, should we get into the point of judgement towards the end of thing so we can finalize a pitch?

PHIL: No, just be brainstorming.

AUDIENCE: Just brainstorming? That's awesome. Yeah, this is fun.

AUDIENCE: How about the player is a human fighting against the zombies, and you have some kind of companion-- may or not be a cube-- but accompanies you on your journey to defeat the zombies.

AUDIENCE: So a companion. I like companion cube better. That has a heart. It's like a love story between you and your cube.

AUDIENCE: But can the cube become a zombie?

AUDIENCE: Yes. I mean it could be a person left for dead.

AUDIENCE: Four people against all the zombies [INAUDIBLE].

AUDIENCE: Then we need spitters and stuff.

AUDIENCE: Or witches. Maybe you're trying to get-- the love story is you and the witch, considering the scene.

AUDIENCE: What if all players play zombies, and most missions are stuff like you have to infect a city, and you run around biting people through the entire city that you conquer and try to zombify. But your ultimate goal is that your girlfriend from back when you were human, or your boyfriend from back when you were human is at someplace. And you want to infect all cities until you can get there, and then infect her so that you guys can live happily ever after.

AUDIENCE: Ahh. How sweet.

AUDIENCE: Also, building on the idea of being zombies--

AUDIENCE: We're not done yet.

AUDIENCE: You are zombies with Cupid's love arrows trying to infect the entire city with love, at which productivity is all gone in the city.

AUDIENCE: A zombie with love arrows infecting people. It could be set in the 1950s where everyone is

trying to be productive and not love each other.

AUDIENCE: What if you build along the lines of having to infect the city, but one zombie can't infect the entire city, right? So you have to ally with other zombies. But there are different factions of zombies, like two zombie mob families that are trying to infect. They have two different varieties of this love-- [INAUDIBLE].

AUDIENCE: Can it be a drug trade? So they have to infect people with a certain drug, so it's a drug war as well? And there should be swords because swords are cool.

AUDIENCE: Zombie Mafia?

AUDIENCE: What if when you have a zombie virus, instead of going in to eat people, you are overcome with an urge to passionately make out with them. And then if you make out with somebody, then they turn into a love zombie too. And so there's no decomposition going on so much as there are hordes of people running through streets trying to passionately make out with each other.

AUDIENCE: Decaying and decrepit love zombies suddenly become very attractive.

AUDIENCE: And they start taking care of their appearance and stuff.

AUDIENCE: After the zombie make out, what's next?

AUDIENCE: Well, we make it [UNINTELLIGIBLE].

AUDIENCE: What if we just make it like a *World of Warcraft* type MMO, but every player plays a human. You have a zombie companion.

AUDIENCE: Pet zombie?

AUDIENCE: You have to raise your zombie from a little zombie kit.

[INTERPOSING VOICES]

AUDIENCE: *Shaun of the Dead*?

AUDIENCE: No, but they had a pet as a pet zombie.

AUDIENCE: I think it's called *Fido*. It's a movie called *Fido*.

AUDIENCE: No, it's not that one.

AUDIENCE: I've not seen it, but I've seen a trailer.

AUDIENCE: So what if you have to fight with Pokemon zombies. Get their power-up [INAUDIBLE].

AUDIENCE: I like that.

AUDIENCE: Different kinds of zombies like *Left for Dead*. There are the big fat ones that vomit.

AUDIENCE: Spitters, I hate the spitters.

AUDIENCE: The smokers. The smokers are the worst.

AUDIENCE: Instead of power-ups, you have love potions.

AUDIENCE: When we said smokers are the worst, that sounds like a dating site.

AUDIENCE: Wait, I like the *Pokemon* idea. So you're human, but you just have to capture all the different types of zombies. And then you fight other people that are zombies. And it's a match, zombie versus zombie.

AUDIENCE: What if the love story is not for the player but is in the story of the game in that the reason that you're waging war at the moment is because you're trying to steal a cure to zombism because your fearless leader, 20 ranks up, your president's girlfriend has been zombified or his wife has been zombified. And so the whole game, you're the only means in a quest to try to find this cure. But you don't realize that you're not trying to find a cure for your use or your girlfriend's use or for people you love. It's for your leader's.

AUDIENCE: And what if she is actually the leader of the zombies. Oh crap.

AUDIENCE: What if the zombies are aliens?

AUDIENCE: Zombie Aliens?

AUDIENCE: The flood.

AUDIENCE: What if the zombies are ninjas?

AUDIENCE: Combine the zombie *Pokemon* idea with the *Sims*, where you have a zombie that's under your control, and you're trying to teach your zombie to love. And maybe you're a different avatar.

You're a human avatar. And you go through quests where you take your zombie places and teach your zombie things.

AUDIENCE: Like not to bite people.

AUDIENCE: Yeah exactly. I don't know. Train your zombie.

AUDIENCE: So the whole thing with the ninja zombies, why not have pirates as well, pirate zombies.

AUDIENCE: Pirate versus ninja zombies.

AUDIENCE: Zombie edition. Special edition.

AUDIENCE: In space wrapped in bacon.

AUDIENCE: Chtulu, but time traveling zombies.

AUDIENCE: It would be a great game to make, just pirate zombies versus ninja zombies in space wrapped in bacon. And just make that game.

AUDIENCE: So, is it necrophilia? Probably. Pirate edition.

AUDIENCE: So maybe we should divide it into little sub-brainstorms for a name, tagline, all that. As a name, do we have any more brainstorming?

AUDIENCE: I think we should figure out a mechanic that works. So far we have a lot of ideas about what the game world is. We have no idea how you play with game.

AUDIENCE: So maybe more brainstorming on that then?

AUDIENCE: It's massive multiplayer.

AUDIENCE: Ones working such as typical WoW-style RPGs, typical massive multiplayer IPS. *Pokemon* style RPG.

AUDIENCE: *Pokemon* FPS.

AUDIENCE: Or, as we were saying before, we could get *The Sims* online.

AUDIENCE: *The Sims* online was so good back in the day.

AUDIENCE: Did you play the *Pokemon*?

AUDIENCE: Yeah, we could play the *Pokemon*, but it's a first person shooter. But you still have an RPG, first person shooter as *Pokemon*.

AUDIENCE: It could entirely text-based.

AUDIENCE: You have to fight-- you have battles with words like *Monkey Island*.

AUDIENCE: I like that, text-based zombie love.

AUDIENCE: Text-based zombie love.

AUDIENCE: And then he sticks his really, really long tongue down your throat.

AUDIENCE: Zombie make out disease.

AUDIENCE: I thought of a title.

AUDIENCE: If it's massively multiplayer, what if you randomly get paired with five other players who are playing this game, and you all have some task you have to complete. And you are given these particular zombie *Pokemon* that you can use this particular task. So you'd be working with those five, six people.

AUDIENCE: Wait, will you have zombie Pokeballs?

AUDIENCE: What?

AUDIENCE: We have a title.

AUDIENCE: So Necrofeelia with F-E-E-L.

AUDIENCE: The first zombie sex game.

AUDIENCE: Exactly.

AUDIENCE: And this can be [UNINTELLIGIBLE], you have to be tentacles somewhere.

AUDIENCE: What if you are a zombie. And all the players are zombies. And the NPCs are the humans, and you try to go on quests to make yourself more attractive and learn human customs. And you get points for seducing humans.

AUDIENCE: You have to make sure your brains meter doesn't get too low.

AUDIENCE: So you have to eat them.

AUDIENCE: Use them and then eat them.

AUDIENCE: And then if you eat them with certain qualities--

AUDIENCE: That actually sounds like a fun vampire game. You're a vampire. You have to seduce a human female to bring back to drink.

AUDIENCE: It's like *Prototype*.

AUDIENCE: Or that you have to seduce a human because you want to seduce a human. But at the same time, you have to eat humans. So you have to hide the fact that you're eating from the human you're trying to seduce.

AUDIENCE: Oh, I see. So you have a human girlfriend, and then you eat other humans.

AUDIENCE: While she's not looking.

AUDIENCE: Have you been eating other girlfriends without me? Where's my stepdad? Uh, about that.

AUDIENCE: Oh, that's who that guy is. I thought he was the delivery guy.

AUDIENCE: Let's see. *Zombies meets American Psycho*. You've never seen *American Psycho*? He goes around killing random people, but he has a girlfriend on the side. But he's crazy. It's fun.

AUDIENCE: So it's like *Psycho*.

AUDIENCE: But better.

AUDIENCE: So *Necrofeelia*.

AUDIENCE: Get infected with emotion.

AUDIENCE: *Necrofeelia*, infected with love.

AUDIENCE: Brains, love, it's the perfect game.

AUDIENCE: All right guys, I'm going to have you stop. We're going to bring the other group in.

AUDIENCE: Love after Life?

AUDIENCE: I like it.

AUDIENCE: That's really good.

AUDIENCE: All right guys.

AUDIENCE: Our publisher is going to give us so much money.

AUDIENCE: It may seem odd to have you do this brainstorm, and then what I actually want to talk about is rather than give [UNINTELLIGIBLE] because I'm sure they're all really good.

AUDIENCE: Ahh.

ABE STEIN: I know, so sad. But what really matters is the process, because the point of brainstorming is to withhold judgment. Judging which of your ideas is best shouldn't have even been happening at this stage. And so one kind of question-- we'll come back to what went well-- but what sort of stumbling blocks did you guys run into in this process as you were doing it? Did it all go perfectly? I highly doubt it.

AUDIENCE: I would say we were trying to design this whole game, so sometimes we would say features. And then we [INAUDIBLE].

ABE STEIN: Yeah, in some senses, it may have been constrained in one area. Sure, zombies and a love story. But then it was asking for a whole lot, and so it could have been, can we just brainstorm a title. Or could we just brainstorm this or brainstorm that. What about you?

AUDIENCE: We very briefly got sidetracked on *Pokemon*. For a second, it was *Pokemon* only, *Pokemon* first person shooter.

ABE STEIN: Any other thoughts? I mean you can talk about the whole group. You can talk about your own difficulty you had personally, whether you had any challenges with--

AUDIENCE: So I feel like if somebody says a really good idea, then everybody is stuck on that idea. and you have to get through that whole idea before any other ideas can come out.

ABE STEIN: Yeah, that's true.

AUDIENCE: We had a stumbling block. What other MMOs are there out there? So [INAUDIBLE] a few other ones. That was a dead spot in the brainstorming.

ABE STEIN: Sure.

AUDIENCE: I was the scribe. It was hard to jump in and talk about your own ideas because I was so busy writing everyone else's.

ABE STEIN: It was really hard with brainstorming. You guys actually-- both groups-- but I stopped in with you guys. You guys had this interesting momentum going, and I was watching you try to write it all down. It was way hard because the ideas were coming in as you were finishing the last idea.

So if a group has really good momentum, I actually really like the idea of having two people where each person is writing every other one. Of course the difficulty is then you pull two people out of contributing. So the organization of the actual group is important.

AUDIENCE: Do you ever recommend using a tape recorder?

ABE STEIN: Yeah. Yeah, absolutely. I mean it certainly makes sense. One of the things that Osborn says which I think is--

AUDIENCE: You can't put a tape recorder down. I remember that.

ABE STEIN: Yeah, but he also says that one of the most important things for the secretary scribe is to number things so that you know how many you have. Is that just to support your work? Look, we came up with 110 ideas. Amazing. How many doesn't seem to matter as much as the qualities of the ideas. So I thought it was weird that he said it.

But yeah, tape recording, video recording. Any way of documenting the process is I think the most important part. And actually, he does make a good point of saying that one of the problems with brainstorming as it evolved from when he first introduced it at this one place and then people started running with it without thinking about the principles is they would brainstorm, and then that was sort of it.

And you really have to look back at what you had come up with. It's really important to reflect on what you've done as a second step. And so that's important too.

How about the judgement thing? I didn't notice a whole lot of criticism. It was really good. Nobody was like, that's a terrible idea. But did you find it hard to not pass judgment on ideas as they were coming out? Even your idea?

AUDIENCE: Yeah, I mean I definitely let more than one, "I like that" slips.

ABE STEIN: That's OK. What you want to avoid is like the, oh my god, we've got to do this one. That will derail everything because then it's just a loud voice that proclaims that we're done because we got the idea. But nothing encourages a person who is shy more than feeling like their idea actually was good or meritorious. And so that sort of stuff is fine. You want to avoid the stop the process.

AUDIENCE: I think I did say at some point, ah, we've got our title, which is probably not good.

ABE STEIN: Yeah, it's just a hard thing to train yourself to do.

AUDIENCE: Is it Necrophilia? A great title.

ABE STEIN: Are there self-censors still out there? Were there a lot of people who thought of ideas but then just didn't contribute? Good, you didn't. It's great if everybody felt free. Cool, that's really good. So I would say that's one thing that went well. What other things went well for you guys?

AUDIENCE: The tagline.

ABE STEIN: Specifically, just coming up with taglines?

AUDIENCE: Infected by the-- Is it love after life.

ABE STEIN: That's cool. Did you guys feel like you had momentum? It seemed to me watching that there was momentum building.

AUDIENCE: I think we did a really good job of taking a lot of different ideas that we had and synthesizing into different things. Saying, oh, that idea would work well if we did this. Oh, and then we could use that name, and that would fit there.

ABE STEIN: Yeah. Who were the two leaders for the two groups, the clerks? Did you guys feel like you had to do much facilitating.

AUDIENCE: Not really, the hard part was really at the beginning, where it was, how do we want to approach this thing? And so I guess we decided to start with the title. It was either the titles or the main features. And we were just like, let's come up with a whole bunch of titles and go from there.

ABE STEIN: Sure.

AUDIENCE: I forgot I was the leader. I didn't lead anything.

ABE STEIN: If you don't have a whole lot of facilitating to do, it generally means that the group is running OK. I do think you have a good point. A lot of the facilitator's work comes at the beginning of the process, or even before the process began, making sure the constraints are clear. And then you guys know what you are going to be working on.

OK, so bringing this back-- this is a game design class, right?-- I touched on it earlier. How do you guys see this as being a useful mechanic or a useful tool You know what? It's funny I called it a mechanic. Did any of you catch that paragraph in Alex Osborn where the guy was saying, "When my team feels like they're playing, it's a way more productive brainstorm than when not." And I thought that was really interesting because there are elements of gaminess to this, which I think is interesting.

So how do you guys this could improve the general game design process?

AUDIENCE: I feel like after you have a game and you're testing it, and there's a major flaw that is taking too long or something like that. And everyone sits down in a brainstorm and says, this is exactly what our problem is. How can we fix it?

ABE STEIN: Yeah, overcoming road blocks.

AUDIENCE: We never would have come up with half the cool ideas that we came up during the process. Just me thinking alone never would have come up with *Pokemon* zombies.

ABE STEIN: Sure, anyone else?

AUDIENCE: Well, this is good just in general just to think up a game. Because maybe it's like, oh, every single game has been decided. People make games of all types. How am I going to make a unique game. This brainstorm is like, hmm, those two things. I've never seen that before. That could be interesting.

ABE STEIN: Yeah, and that's a really important good point actually. The synthesis thing is actually I think something that is really important because we tend to see a lot of recycled mechanics. And what becomes the interesting thing in a game oftentimes is not that it's a completely new rule, right? It's the way that rule interacts with the other rules in the system.

And in some instances, it's also how that rule is read and interpreted by the player, or perhaps tends to be better in terms of other players. So yeah, I think the synthesis is actually an interesting part of this where people can bring a lot of different ideas from a lot of different experiences with games to fuse ideas.

AUDIENCE: When it comes to coming up with ideas for games, the nice thing about brainstorming is that it gets past the good idea that everyone happens to make, which is the problem that we sometimes have in the classes. The people will find one idea that they like, and they will never think past it because they were happy to find one that everybody agreed with.

ABE STEIN: Yeah, and so you guys are divided into design teams, and one of the things I would encourage-- I don't know how it's set up schedule-wise, but try to divide the brainstorming process from the judgment, like I said. It's true. Even if you do the brainstorm, it can help you get over. But a lot of times, whatever had momentum during that brainstorm or whatever got the most yuks during that brainstorm is going to be the popular, strong idea.

And then when you come back to it with a little space, you might be like, oh, that it is a really good idea. But there was this other thing that got mentioned half an hour earlier that's really interesting. Maybe we can incorporate that somehow.

And so making the judgment happen in a separate phase can be really important. Because it's true, creativity is a little bit more organic. It's not necessarily a strictly logical process, right? So applying logic later can be a good thing, I think, to the creative process.

Cool, any questions about brainstorming at all? You are incredibly enlightened by Alex Osborn?

AUDIENCE: [INAUDIBLE] using things like Google Wave or Google Docs where things are automatically recorded because everyone is basically typing in their ideas as it's happening.

ABE STEIN: Yeah, and I think it's interesting. I don't have a whole lot of experience with-- well, I should rephrase. I don't have a lot of experience with remote brainstorming, but I one of the games I worked on this summer was this game called [UNINTELLIGIBLE] where you were asked a lot of personal questions. And so we had to think of personal questions. So we were like, well, if you have ideas, write them down in Google Docs.

And at one point, myself and two of the other designers were all on the Google Doc at the same time. And you could actually see that that sort of brainstorming would happen. Someone

would type something in. And then someone would type next to it, ha ha, that's so funny, and then write an idea that's related to that.

And you're seeing it happen in this digital space. So I think we've gotten so accustomed to having these digital personalities or these digital personas in IMing and text messaging and all that other stuff that I think we've gotten pretty adept at typing fast enough to get ideas out that I think it could totally work. There's something to be said for the momentum that gets generated in person. But yeah--

AUDIENCE: You could try both ways.

ABE STEIN: Yeah, I mean it's so funny. I was going to say, no that's a terrible idea. You have to be around each other. And I was like, actually, it works. I think it all depends a little bit on the personalities of the people that were involved.

Certainly for a prolonged brainstorm-- one of the thing Alex Osborn says is time box it. If you don't time box it, it's going to be a problem. I think for in person, that's true. It's so easy to get onto a Google document now whenever you have an idea that actually having a long form brainstorm where anytime someone has an idea over a week or something like that, write it down. That's also useful too because then you separated the process into collecting and-- But you still should do that, building on ideas.

AUDIENCE: It's probably easier just to do this [INAUDIBLE] when you're simultaneously online or in the same room.

ABE STEIN: Yeah, and to see the ideas come out as they come out. Because it's a little uncommon to just read something and be like, oh yeah, what about this when it first shows up. Or when it first comes into existence as you're trying to think of things that can spur ideas.

AUDIENCE: The other danger about doing it like, OK, this document is open for the next 24 hours, everyone throw your ideas in, is that then people start spending too long on any one idea. They start thinking about what they're going to write down before they write it down. No, that's not the point.

ABE STEIN: Yeah, think of the paper clip experience, and those of you that raised your hand for saying that you were self-censoring. On your own-- I wasn't going to make you all hand in those paper clip ideas you were self-censoring. So the same sort of thing applies. You might censor yourself or

spend a long time on ideas.

Any other thoughts, questions? Cool, well I hope this was helpful. I hope it'll be helpful for your game design stuff. Email me if you do have any questions about this stuff. I can try to help out. Other than that, good luck on your game design on this class and for the rest of the semester. Cool.

[APPLAUSE]

ABE STEIN: I do like that of the keynote things it says, "End of show."

PROFESSOR: Let's see now. We're going to play some card games. But before that, just a little bit of admin. On Monday, you'll notice that we have two readings, one of which you've already done. As for the other reading, [UNINTELLIGIBLE], it's a little bit dry. Tough it out caffeinate yourselves before reading it. Tough it out. It is worth it. It's a translation.

Let's see now. There's at least one person who hasn't filled a form that you need to fill out. So just come up here and fill that out. Is Courtney in class today?

AUDIENCE: [INAUDIBLE]

PROFESSOR: Yeah, I'm not sure if we have enough time to get through all of them. But most of them are pretty short. A lot of them today are going to be set up, which is why [UNINTELLIGIBLE] is first because that takes a while to set up. That being said, if you do get a chance to look at the rules and study the cards, even [INAUDIBLE] a bunch of smart things [INAUDIBLE] easier to set up. And you really want to pay attention to that.

But the name of the game today is pretty much variety. We have all fairly different games that use cards in a very different way. And if you don't get a chance necessarily to play all of them, at least get a chance to look at other people playing them. And if you wanted to check them out over the middle of the week, we'll keep them around the office. But there'll be time to come back here next week and [INAUDIBLE]. But that's basically it. It we can clear the tables because that's for the cards.