

Nothing to Something

A demonstration of how advisors leverage student interest to make relevant, rigorous projects.

A student named Joe is sitting down with his advisor to discuss a new, yet-to-be-determined project. During the course of the conversation, the two find an interest and rough out a project idea. Depending on how projects are initiated (i.e.- teacher, class, school), this conversation will differ. Nonetheless, the dialogue represents the type of responses one can expect and provides practical techniques for helping students through the process.

Advisor: **Hi Joe. How are you doing?**

Student: Hi. I'm ok. Kinda tired.

Advisor: **Alright. Well I'm sure a good conversation about a new project idea will get you feeling a little more awake.**

Student: (Role Eyes)

Advisor: **So, you've had a chance to take a look at the learning targets you have in your personal learning plan for the year and have taken note of some ideas I provided last time we spoke, do you have an idea for a project?**

Student: Well, I thought about it, but I'm not sure what to do. I can't think of anything good and anything I do think of would be too hard.

Advisor: **Ok, well what were some of the ideas that you came up with that were too hard? Maybe I can help brainstorm more manageable ideas.**

Student: I don't know. Can't you just tell me about the things I need to know and be done with it.

Advisor: **Joe, as you know, our school is different. It's a different for the better. You have more control over how you learn about the things you need to cover for graduation. Now I'm sure you'd much rather have a say in what you do during school than simply listening to a teacher lecture all day.**

Student: I guess. It's just I'm not sure how I can do some of the learning targets I need.

Advisor: **Let's talk through some ideas and then we'll see what we can come up with. I know you like video games. You have a picture of your dog hanging at your workstation... what else are your interests?**

Student: I like to draw and play video games...(thinking) That's about it.

Advisor: **Ok, are there any new video games out there that you are interested in?**

Student: Yeah, there's a new Grand Theft Auto coming out that I want to buy.
(excited) Man that game is cool.

Advisor: I'm not sure a game like that is appropriate for a project. Are there any sport games you play?

Student: I play Madden '08 with my friends. We have this season going and I'm kickin' butt. I've got the Indianapolis Colts and have a tight offense with Manning at the helm.

Advisor: What's involved in playing the game? What do you mean by play a season?

Student: Well, basically its just like your playing football. You setup your team, then start the season. From there, you play games vs. the computer and vs. friends. When your on offense you select your plays and then you do them. There's this really cool high step you can do that will get you 3-4 extra yards after the catch almost guaranteed. Then when your on defense you pick different formations and then try to prevent the other team from making the catch or running the ball. I've got to work on my defense if I'm going to keep ahead of the pack.

Advisor: Video games are technology, so maybe there's some technology Learning Targets we can look at. Why don't you log into Project Foundry and let's see what other Learning Targets you need to address and perhaps we'll score a touchdown (Chuckle) with an idea related to Madden football.

Student: Ok. No offense, but you may want to keep your day job(smile). I'll log into Project Foundry.

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So I'm in.

Advisor: Before we look at specific targets, let's figure out what subjects could involve Video Games. We said Technology, but what else?

Student: I don't know. Maybe science. There's electricity and circuits and all that stuff. Probably something to do with Math too. I'm not sure though, but I think programming involves some kind of Math.

Advisor: Yeah good. It sounds like maybe you could do a project exploring how video games work.

Student: Yeah that'd be cool, but where do I begin.

Advisor: Let's open up a project proposal form and walk through the questions together.

Student: Ok its up. The first question is the project title and I guess I could name it just How Video Games Work. ?

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What would I write for the description?

Advisor: Let's hold off on that one and look at some of the other questions. You can revisit the project description once we have a more specific idea of what your going to do. How about the next question, what do you want to learn?

Student: I don't know...how video games work.

Advisor: Let's be more specific. You mentioned the programming involved, is there something you'd like to learn related to that?

Student: Yeah, I'd like to know how the computer doesn't cheat once I select a play. Also, why sometimes I can't switch cornerbacks on defense quickly.

Advisor: That sounds like your saying you want to learn how the logic works in a video game. The logic is probably tied to some math targets, so let's remember that once we get to that question. What's something else you want to learn? You mentioned the circuitry and electrical components?

Student: Hmm.

Advisor: (Pause) Tell you what. Let's continue on and jump ahead. As you research and explore the topic these questions may become easier. What are some of the possible products you can create as a result of this project?

Student: A research paper.

Advisor: What else?

Student: I could play a game as part of a presentation (chuckle)

Advisor: Well, that may be a possibility. You'll have to connect it to your findings, but I can definitely see the value in you walking through some of the logic inside the game. So that would mean you'd create a presentation right?

Student: Yeah and maybe I can show some of the programming code in the presentation.

Advisor: So those two ideas are good starting points. Moving on in the proposal, how about the tasks you'll need to complete. What's the first thing you'll need to do once the project is approved?

Student: (getting frustrated, losing patience) Awh man... I don't know, maybe this isn't a good idea for a project.

Advisor: I think so far this has potential. Let's keep going here.

Student: Can you do the tasks and give them to me?

Advisor: This is your project and you need to own it. Let's look at a few more questions and see what's next. Now, where do you think you can find more information on the topic? Do you know anyone who works for a video game company?

Student: I can look on the internet, but I don't know anyone who works for a video game company?

Advisor: What kind of internet sites are you going to search? Don't say Google.

Student: (puzzled look)

Advisor: How about looking at video game company websites and gaming trade magazines?

Student: What are trade magazines?

Advisor: There magazines that focus on a given industry. The articles discuss best practices, common challenges and related news within thee industry. Add find gaming trade magazines as a task for the project.

Student: What about a primary resource? I know that's something you guys are always asking in a proposal.

Advisor: A project resource does not have to exactly fit the project title. Do you have any family or friends that work with computers or programming?

Student: Yeah, my neighbor is some big shot of technology and I could probably talk to him\, but what would I ask?

Advisor: Mark this as another task. That being, develop a list of interview questions for your neighbor related to the technology aspect of the project. He may be able to provide you others that can provide other insights.

Student: Ok

Advisor: Save what we have here on the project proposal.

I want you to do some more initial research so that we can refine this project idea and get it to the proposal team for approval. I'd like you to complete a mind map for the project and hunt around the internet for some background information. When will you be able to do this?

Student: I can probably get this done sometime over t he next two weeks.

Advisor: Two weeks? That's way too long. You've got some time left today, tonight and tomorrow. Use that time to get started. Let's talk again this Thursday.

Student: (surprised)What?

Advisor: We've got two thing you need to do. You can handle that. Just so I know we're on the same page what the two things we talked about for Thursday's conversation.

Student: Look on the internet to find out background information and create a mind map.

Advisor: Specifically, you want to find sites and sources that will help you in your project, not only find background information. And then you'll want to do the mind map.

You've got some good ideas and I think this has a lot of potential. We'll talk again Thursday.