Transcription Title:	May Focus Group 2
Transcription File Name:	WS320014,WMA
Transcription Date:	November 10 2019
Transcriber:	Chase Hood (CH)
Reviewer:	
Reviewed Date:	
Interviewers: "I", Participants: "P"	
Key Words:	

I1: So my very first question is, when you hear the words "social responsibility", what comes to your mind. For instances, what are the words you tend to associate with social responsibility.

P1: Well I think of community; I'm an engineer so I'm going to build things that the community is going to use so one of the first words that comes to my mind is "safety", making sure that things are safe.

I1: Ok.

P2: When I think of "social" I think also that group of people. When you say "responsibility" I feel that just means conduct yourself in a way that's appropriate within a group of people.

I1: Interesting. Can you elaborate more about what you mean by "appropriate"?

P2: "Appropriate"… I don't know. If you go to, like, a club or a party or something you gotta be certain that other people don't get into fights. It's possibly if see someone's too drunk you try to help them out, something like that. Does that make more sense?

I1: Uh huh. Ok, so, well, if that applies to us now, you are a student and future engineering in the school of engineering then would that…

P2: Because right now I'm in my second year, all my classes are really big, I don't really know anybody like on a first-name basis or anything so I don't really feel too much responsibility towards them.

I1: Ok. Well actually I apologize I should have asked you to have a pseudonym so I could address you rather than turning my head and nodding you to give you signal like I'm actually talking to you so what pseudonym you would like to pick for you when I'm, you know, talking to you?

P1: What kind of name?

I1 & 2: Pseudonym.

I1: Like a fake name, because…

I2: [inaudible 2:10] that way it's, because we're recording you, so if you'd like to be anonymous and that way you can make up whatever name you want.

P1: I don't need to be anonymous, you can just call me [name redacted].

I1: Ok, great, that will be easy. Thank you.

P2: Same thing, call me [name redacted].

I1: Well, I apologize my [inaudible 2:28] of the first name is not that good so [name redacted]?

P2: Mmhmm.

I1: Ok. The first word that comes to you is "safety". Is that kind of tie into your major? Because I guess I should ask…

P1: Yeah, that's tying into my major. We talk about this kind of thing, like social responsibility, ethics and stuff a lot in our curriculum and so yeah when you said that that was the first thing that came to mind was the safety of…

I1: Do you mind me asking what major you are?

P1: Mechanical engineering.

I1: And which year are you in now?

P1: [redacted, participant's academic year]

I1: And [name redacted] you are in your [redacted, participant's academic year], have you… it's not yet to declare a major yet, right? Or you already did?

P2: Well yeah I'm going mechanical also.

I1: Ok, thank you. So, this is actually nice it leads to the next one. So you give example related to when you're in a pub, but, what are other examples when you, you know, explaining that's your definition about social responsibility. Can you give me a couple examples? Maybe more kinda in the context when are actually –

P2: Like school?

I1 – school, or in engineering?

P1: Like, academic honesty comes up. I mean that's one thing, you're not cheating and doing your own work and not having other people do it for you so you can get through the program.

P2: Like in the group project I think that comes in. You do part of the work instead of just let them do it and cheat and get a grade off their work.

I1: Ok. And I, between you two, I also hear the word "community". Who do consider your community members?

P1: Anybody other than me? I'm included too I guess. Anybody around really. I mean all people are entitled to safety.

I1: Ok. So I'm assuming you're talking about pretty much even outside the college of engineering?

P1: Yeah, outside of the college. All over the world. Everybody on the planet.

I1: Ok! [redacted, P2], what are your thoughts on that one in terms of the community? Do you have more confined or do you actually thinking that's probably the same?

P2: I guess it depends where I'm at. Like if I'm at home my community is like my roommates. If I'm in class my community is my classmates. It just depends where I'm at.

I1: Ok. So am I hearing actually the more you are able to interact with somebody the more likely they are to become part of your community members.

P2: Yeah. Definitely, well for me.

I1: Ok. [inaudible 5:38] am I understanding correctly?

P1: I guess it depends on the context that you're using community in. Yeah, your local community can be your family, your circle of friend. I mean community as a whole is a more global community. It depends on the context.

I1: So then my next questions is, what are the things initially draw you to the engineering major because we all kind of go through that period where we say "oh, should I do this, should I do that?" So what actually attracted you first initially.

P1: When I got out of the military, this was not the first thing I did. I learned to be a mechanic in the military and that's what I stuck with. I was a mechanic for 16 years. I worked on diesel, construction equipment, stuff like that. And I got tired being where I was in my job and not being able to move up so mechanical engineering followed. To get a mechanical engineering degree because of my background in mechanics I started pursuing this degree probably 11 or 12 years after I ETS from the military.

P2: For me it was very different. In high school I had a class called AVID and from there it prepares you for college and there's a lot of questions that go into it and I ended up picking electrical engineering as my, what I wanted to major in. So it wasn't always the plan to go to college I just needed some way to get there that's why I joined the military to help me get that GI bill. In the military my recruiter asked me "well what do you want to work at?". I was like "I want to be an engineer" and he was like "we have an engineering department, there's a job here". And they had a job called gas turbines. It's a GSM gas turbine systems mechanic, that's where I worked for five years. Then my [inaudible 7:49] got out and then I continued my engineering

path but I switched it up from electrical to mechanical because that's what I did in the military and that's how I ended studying mechanical engineering.

I1: So once you were in did you see a difference or you say oh actually everything kind of connects for me from my military experience to what I actually envisioned mechanical engineer or other you know your initial…

P1: Once I got into the program I was like "oh man what did I get into?" It was a lot tougher than I thought it was going to be. It was a lot more mathematical than I thought it was going to be, and I'm not somebody who's good at math but I made it this far so.

I2: You're past the math.

P1: It was a lot more difficult than… and going in to getting an engineering degree there was some apprehension. I was… I had some fear. Was this the right thing to do for my family? Am I going to make it? Do I have what it takes to be an engineer? There's kind of a stigma that goes with the word "engineer". If somebody says "engineer" [inaudible 9:01] they think "really smart, really intelligent, really good" [inaudible 9:06].

I1: Interesting. I will come back, I actually have follow-up questions. [redacted. P2] what about you?

P2: What was the question?

I1: Well the question is because you had military experience and you think that will become your foundation right? Help you to transition, to pick the major, engineering, if that's the direction or not. Once you were in, was everything kind of like what envisioned?

P2: So in the Navy my everyday today job was more being a mechanic, I just kind of fixed stuff and that's way different than what I'm doing in class. Now for my [inaudible 9:44] exams with it being in Newton's laws and the [inaudible 9:49] cycles and stuff. And that's what we study here. So some things we did touch in the Navy but for the most part, no, it's different being here in college than the engineering that we did in the Navy.

I1: So how was that transition for you both? I heard some that the similarity. But, I mean, how that transition, how you navigating the transition I guess is the question.

P1: It was tough. It changed the way that I was thinking, the way that I spent my time. When I first started in the engineering curriculum I did not spend a lot of time in my studies and what not and my grades showed it and so it took a while for me to adapt to this curriculum. It's just a lot of work. I mean it's like 24/7 type work because if you take a break you're falling behind kind of thing. When you have a family, I have a family, I have three children and I'm married so they need my time too but this curriculum it's hard to split it up so it's very difficult in that sense to try to spread that time out and to get the amount of studying you need and even today I still don't get the amount of studying that I need but I get enough in that I can pass the program.

I1: You mentioned that you actually try to adapt so is there a specific strategy because you also mention that you thought different and other the first, I guess, first semester or year is a lot more heavy on the math so what are the strategies to help you to do that.

P1: Spend more time with school. So where I first started there was a drive to get out of here and get back to the house, get home. You know, spend the time with my family and whatnot. But try to keep up with my work at the same time. But I found for me that didn't work. If I'm going to stay, if I want to keep up with the curriculum I have to stay here essentially and use a private room, privacy. I can't have people around me and stuff while I'm studying to I gotta stay here and [inaudible 12:23]. That's one of the things that I had to adapt. It wasn't hard coming to that realization but it was hard to implement it so…

I1: I mean this, you know, some student talking about maybe you have, you know, student peers works together like kind of help you go through the, you know, very intensive curriculum and am I kind of hearing the opposite you kind of prefer…

P1: Yeah. I have clinical anxiety so maybe that has something to do with it and like things in my environment can agitate me pretty easily. So I do prefer to just be alone, to be quite. You know if there are any noises, even small noises I can't block it out and it fills my entire head.

I1: Well you basically conquered the [inaudible 13:20] by yourself so that's very good. I probably need help with that aspect as well. So I always in the study group kind of tap away. So, ok, [redacted, P2] what your transition experience like?

P2: So I feel like right now I'm kind of in the early stages like he said where you're supposed to go to school and leave, that's how I feel right now. My grades are all so [inaudible 13:44] that they're kind of suffering a bit so I don't have a family, I'm single and I live with my roommates that I know from high school and they're also in college so that helps me tremendously like, I go home. And with my transition they help me because they stay here in college longer than I have and they help me get situated to college and I feel like that's the biggest reason I'm still in college because of my roommates helping me out and, that's what my transition was, they helped me out, made it easier.

I1: Ok, let me ask you a questions, if you don't feel comfortable totally just me. Because I know we have like Veterans like [redacted], they all belong to the Veteran student organization. Have you ever thought about "maybe I can, since they are kind of like my peers I can have maybe like a study group maybe have that kind of relationship would help me to transition because they are more able to relate with what I have experienced?" Has that even occurred to you? You just do not know, or…

P1: I know that there's a Veteran center at the student union. I've been there, I've spent some time in the Veteran center but I don't really like meeting new people in that way kind of getting together and studying and whatnot [loud cellphone noise 15:16] They appealed to me for some reason but I don't really know, I never tried to pinpoint that. But yeah, I'm aware that the opportunity was there but I never tried to pursue it. I just wasn't into it. Meeting new people, making new friends.

I1: Well that's a problem with me too. I know we have a Chinese Faculty Association. I would like very distantly go. So I'm just curious, that's why I asked.

P2: I imagined there was a Veteran's group I just didn't really look in… I wanted to look into it but I just didn't find it really necessary because I had like my little group of friends already from back home. At first I was thinking of going to a different college where I didn't know anybody and I feel at that point that I would for sure would have tried to look for a Veteran student organization.

I1: So I heard you actually, you talked about one of the paths you took you know you will be in college is actually the GI bill so is that kind of play the role in terms of you deciding what kind of major you wanna go after you got out of the military? Because there's kinda policies around that you have to complete your degree in four years, or that's my knowledge, and the typical time it takes to complete an engineering or other majors slightly different. So I guess that as far as I'm hearing did not become a barrier for you to even say ok I'm going to go for the engineering even though it typically takes more than four years to get the degree.

P1: The GI bill for me going back to school was definitely a key factor. Like, it was only with that I could afford to come back to school. When I started this engineering curriculum back in 2015 I think I had already used a bunch of the GI bill. I started going to school as soon as I got out of the military. I wanted to be a biology major. Then the GI Bill wasn't enough money at the time. It was post [inaudible 17:39] GI Bill.

P2: It's Post 9/11.

I2: Yeah.

P1: Yeah, so, the earlier GI Bill. It provided a stipend and it just wasn't enough to continue going to school and to support myself and, the amount at the time, I had to continue to work. And the field that I worked in did not have [inaudible 18:15] positions; they were very hard to come across. And I was making pretty easy money so I was going to quit that job to take on a part time job that made less than half of what I was making which just didn't make sense to me so the only thing that did make sense was to put my education on hold and to keep working.

P2: So to go back to your question the GI Bill did not influence what major I picked at all but know I wanted to go back to college and the GI bill allowed me to do that.

I1: So I'm hearing is the GI bill actually is a way to help you get back to education but not necessarily in terms of which major I'm choosing.

I1: Right, yeah, it did not have any bearing on which path I take at all. I don't recall ever reading anything or seeing anything in the GI bill documentation that would've led me in any direction.

I1: Ok, this one I actually kind of lead already, I kind of jumped my gun asking that question already which is asking what's a difference because you thought, you know, the engineering you being loved in military and then now you're in engineering school what's the difference? So, but this one I still ask because there's a point it is like Stacey just mentioned the first year according to literature is very critical. So let's kind of move from the first year when you think your

experience up to this point. Anything change you very much like "oh, this is definitely a light bulb for me I did not really realize this is what I thought in the beginning and now I see something very different".

P1: I'm not sure I understand the question.

I1: Ok, so, it's about what your initially thoughts about engineering changed over time while you first got in.

P1: So, have my thoughts about engineering changed over the course of my three plus years here?

I1: Yes.

P1: Yes, my thoughts have changed. As I take more and more engineering classes I keep hoping I'll get to one I actually enjoy.

[laughter]

I2: That makes me sad!

P1: You know, when I first started I was like I gotta get these basic classes out of the way and then we can move on to the good stuff right? I'm so deep in the curriculum now that there's no way that I'm going to drop off and remove anywhere else I'm going to see it through we're going to get down with it. But I take my classes now and I wonder am I going to enjoy being an engineer? That's serious, this is the thoughts I have when I'm taking classes on these late nights where I'm so frustrated with my work that I just want to throw my computer through the window. I'm just like "is this the path that I really need? Am I going to enjoy this once I'm done with all of this tortuous school? Is this going to be worth it?" I think it's hard to fathom.

I2: If it makes you feel better, most Fortune 500 companies that are run by engineers so you don't have to do engineering. We're just teaching you, I tell students, a way to think and how to problem solve. I have lots of friends that don't do anything related to engineering. I mean, I have friends that run like, what are those called? They're like financial advisors. I mean, it's fine, you can get all kinds of jobs. My sister worked for Boeing for five years and now she works for Civil Engineering but she's a project manager which has nothing to do with engineering. So, it's good to stick it out. The degree is worth it even if you don't do engineering.

P1: For me, it's gone from hard to harder. It's not gotten any easier. It's always just a steady incline –

I2: When do you graduate?

P1: - of harder and harder and harder.

I2: There's usually a hump. In civil there's a hump. There's like one semester where I'm like "ok, if you can just do this" then after that the classes will be more applied and, so, you're over the hump.

P1: I'm not experiencing the hump.

I2: You're not, well, maybe you're not there yet is all I'm saying.

I1: So what exactly can make you think that way? I mean what are the things you are related to the course, related to the curriculum make you thinking that's…

P1: So a lot, it is a lot on that, like, both my classes, I mean, I think like "oh I'm going to thermodynamics now" ok –

I2: No one likes that class.

P1: - this might be cool, this might be a cool class. No, it's just more math, it's just another math class. I mean like, every engineering class is just another math class. That's all it is, it's all math math math math math and, you know, ok electronics, this should be cool, I'm going to learn something about electronics. You don't really learn anything about electronics. You learn about circuits and how to solve circuits and stuff; it's just more math. So everything has a name and it's disguised as math.

I1: Am I hearing you actually think, your thoughts about engineering is a lot of times about hands on? Is that what I'm hearing?

P1: Right. Well I came with my hands off thinking it was like, yeah, I thought that my experience as a mechanic, my hands on experience, would carry over to this field and what I'm discovering is that it's not.

I1: Hmm, ok.

P1: So maybe it's like a misconception on my part before I started with the curriculum.

I2: You're doing it.

P1: This is happening.

I1: Well maybe you'll find it more handy when you're doing things but do you see the connection between what you call the more abstract to the hands on thing when you actually, say, finish your degree and go into a mechanical engineering position, would that even translate from this moment?

P1: I actually have an internship at [redacted, internship company] and from what they tell me I'm going to spend about 50% of my time doing hands on work and 50% of the time doing more engineering stuff like all of the simulations and [inaudible 24:23] and stuff, so, I think that's going to work out really well and, while I do like the idea of getting back into [inaudible 24:30] stuff the more critical engineering tasks, I don't know how I feel about that.

I2. Ok, when you say critical, what do you mean by critical?

I2: Well, doing the math stuff like breaking everything down and make sure that it is going to be safe to make sure that what you designed is going to do what it is intended to do.

P1: Am I hearing you want to see you actually make a difference in what you do because right now if you just do math you don't really see what the differences can lead to?

P1: Right, I feel like that's one of the things here like we learn a lot of theory and stuff. We learn a lot of theory we learn a lot of the mathematics behind it but nobody's ever actually ever seen it. Like, nobody see anything or any part of it and nobody understands it so when I'm in my senior design group right now and I feel like my group doesn't really have a clue how things work mechanically. If we're just designing a little gauge, a little vacuum gauge and nobody understand how things are going to work inside the gauge but they've been through all these years of school but nobody understands how the pressure is going to affect the diaphragm and the gauge and whatnot. And like, I didn't do that well over my last few years in school but I'm doing really well in understanding what's going on and leading the charge on this gauge I'm like the leader, bringing all the ideas to the table, showing them how to do this and yeah, I feel like the curriculum and how to do this has let them down but maybe when they get into the field maybe they'll start to develop intuition on all these types of things because I've already had experience before this in mechanics and whatnot so I do have a lot of professional intuition on how things do work mechanically.

I1: Mmm, ok. [redacted, P2] what are your thoughts?

P2: I'm just like my [inaudible 26:41], everything we talked about or go back to the question that you asked?

I1: So basically is your idea about engineering in the beginning and now are there difference, were you like "oh this is kind of away from what I'm actually thinking about engineering"? And this part of this remain the same or different.

P2; Well, so, back in high school when I was in the AVID class that I was talking about we looked into a lot of the majors and I knew fairly well what the mechanical engineering was going to be about. So in the military it was a lot more hands on and here it is more math. I was pretty good at school. I feel like if I wasn't good at school at first here, if I would have gotten a couple F's I would have been connected in the morning and stuff I might have not continued after the first year and I could see why other people stop after their first year because at first things are really easy to fail because the military it's a job you go in every day it's mandatory you can't just not show up but that just doesn't happen. You come here to college and you don't even have to show up to class. You have all this liberty.

P1: Yeah, you have all this freedom and you lose a lot of the structure.

P2: Yeah and you don't even know what to do with yourself. It's a shock to like "wow I don't want to go to class I'm not going to go, I'm going to enjoy my freedom" and then your classes start going down. And that's what saved me, how my roommates that have been in and that I was already kind of good at math. I think that's what saved me my first year. I'm going through my second year, I know what to expect a little bit better so not I'm doing better already and I feel

like I'll just get better from there. But, umm, engineering? I knew what to expect because of that preparation I had in high school. So no, it didn't really change too much for me.

I2: So are your roommates also engineering majors?

P2: They're… one is a computer engineer, one is computer science.

I2: That helps to surround yourself with people who know what you're going through. My freshman roommates, one was a famous country music singer's daughter and she was in special education and the other one was in business or something and was get them going all of the time and they were like "I'm going to do my homework buy guys!". It's better to surround yourself with people who are on the same path as you.

P2: In the military I'm used to going out every weekend like going to bars and stuff. And here my roommates are like "you got homework [inaudible 29:12]".

I2: You can still go out but, you know, space it out a little bit more.

P1: I agree with him though, the difficulty first coming into this curriculum is definitely a deterrent and all the freedom that you get after being under structure is definitely… it can change your mind after you get here and you're not doing your stuff and then you start to figure out you're failing and you need to do something else.

I1: I mean, you know, like you said there's a lot of, how you say, descriptors or perceptions about engineering in terms of a career and others there's attached what we'd call a privilege associated with you being engineering so I mean, you know, like, is that part of the thing you envision when you have an engineering job give you the security, right, give 7you a relatively well-off life is that also played in terms of what you think about with what I'm going to do with my GI Bill to get what type of education? Was that a factor kind of initially shape your thinking or not?

P1: Would the stigma be an issue?

I1: If I'm an engineer I'd probably make good money than being a schoolteacher.

P1: Yeah. Well, those types of things definitely, some of that attracted me to engineering, to be a mechanical engineer. Making that transition to being somebody on the other side like repairing stuff to somebody who actually makes the equipment and whatnot. They seem to get treated better. There's more money in it it seems like., There's definitely more upward momentum in being an engineer than being where I was as a mechanic. I mean already this [redacted] internship. They're like, they're going to pay for my housing when I get there. They're paying me a wage that's comparable to what I was making as a mechanic and I'm just an intern so already it's proving to be a better place to be than where I was. Being this engineering professional rather than a professional mechanic.

P2. Same. The careers associated with engineering I've seen, like, really really good did influence me to pick that major. Job safety of being an engineer, there are always going to be jobs for an engineer, that's not going to disappear after a while. [inaudible 31:56] being an

engineer so yeah all of those factors did influence me. Right now I feel comfortable that I'm going to get a job with this engineering degree. I really don't even know what I'm going to get afterwards, I haven't really thought about it I just know that I'm going to get something. Which I know is partially bad, I should start thinking about what I'm going to do. I should definitely think about what I'm going to do. But it's just that with being an engineer I'm almost certain I'm going to get a job.

I1: Well, if I can be in engineering and help people and get paid well why wouldn't I, right? So now, because you alluded to the curriculum, right, you wish the curriculum could make, you know, rather than all the way up, could kind of give you a tip so, and you mentioned ethics so let's talk about actual what are the courses you thinking the course you haven't taken, do you think the social responsibility actually being a component in the course curriculum?

P1: What do I think about it or…

I1: What are the courses?

P1: That have incorporated the ethics aspect?

I1: Yes. Or social responsibility.

P1: Nuclear engineering, the initial nuclear engineering class did. Any 495, they have a couple days worth of ethics, social responsibility and stuff.

I2: Who teaches that class?

P1: Dr. Rocklin?

I2: I don't know that person.

P1: He's been here a couple, two, three years? Maybe not even three years.

I1: I would not know that faculty.

I2: Most untenured faculty know each other but since I just got tenure so I don't know the new ones anymore which is happy but sad.

P1: I think maybe manufacturing, that initial manufacturing class, it's a new curriculum I think we touch on some ethics, ethical responsibility in that class as well.

I2: It doesn't have to be an engineering course either.

P2: Manufacturing processes?

P1: Yeah, it's the IMC course, so a 200-level course, I think it's 250.

I2: Who did you have for that, do you remember?

P1: Dr. Peter Zhang.

I2: I know him. He's cool. Did you have him too? Is that his course?

P2: I think so, yeah.

P1: And most recently in 574 there's, we actually had to write an essay on ethical responsibility.

I1: And do you know who teaches that?

P1: Dr. Lesman. [inaudible 34:30]

I1: And [redacted, P2] you're in your second year so of the courses you think…

P2: The big one I took, Sociology, and that made me see a lot of things different.

I1: Is that a required one or you decide you going to take it.

P2: It's for my K-State 8. Took that as one of my electives and that was a really good course for me I feel. Other than that most of my other classes are in big lecture halls. Calculus and physics, not really those.

I2: Do you remember your sociology professor?

P2: Sanderson.

I2: Sanderson. I want to know who I can go talk to.

P1: Oh, ME 101, too, I took that with…

I2: Ranklin?

P1: Professor Spaulding but yeah, I think Dr. Ranklin is the one who gave the lecture in ME 574.

I2: Oh, on social responsibility?

P1: Yeah.

P2: Actually I agree with that one too, with intro too. That was a good one.

I1: So what's that like for you? "Oh my gosh we're talking about this?" I'm not that interested or were you like "oh actually this is very relatable to what I been experience".

P1: It always peaks my interests. I don't know why it does. They always use case studies, so like, things that have happened. We talk about a thing that happened… we talked about a thing that happened in Kansas City a couple times that happened at the water park. The four year old girl that got decapitated but, yeah, there's lots of… I don't know, the stories are interesting and you know you like to hear what happened so we don't repeat them. It's good knowledge to have for the future for when I actually do get into an engineering position so I don't repeat the mistakes of the past and stuff because a lot of them were actually neglect, so, it's just oversight or

disagreement, that can happen too. I've enjoyed the training that I've been through for ethical responsibility.

I1: [redacted, P2] do you notice a difference between the, because you made a comment that that's a great class in sociology and you also have some components in the courses here in engineering school addressed to that so what are, are they kind of strike you differently or…?

P2: So sociology was definitely different. In all my engineering classes you sit there and write down what's on the board. Even if it's about ethics you still just sit there and they tell you what ethics is. In sociology it was conversation, it was discussion, everyone talked to each other. Sometimes we went the whole class without even handwriting anything, it just was talking. The professor would lead the conversation a bit but it was definitely different from my engineering classes.

I2: That sounds fun. We don't ever do that stuff.

I1: Did they define differently or maybe focus slightly differently in terms of social responsibility within the context of engineering versus the one more literally broadly in the sociology class.

P2: Well it's because in my engineering class we haven't really hit ethics it's more like learning the math, formulas, stuff like that that. And I guess like for that you can't really have conversation. For sociology you provoke us with some question and we all have different opinion and in that case it was ok to have different opinions because there wasn't just one right answer the way that it usually is in engineering.

I1: Even in the ethics class there's only one kind of way to define what that mean? Is that what I'm hearing?

P1: No, not in ethics.

P2: What I'm saying is that I haven't been taking ethics.

I1: Oh you haven't, ok.

P2: So in the ones I have taken there's only right answer because it's formulas, it's math, you get an answer. There's no discussion. And in sociology there was.

I1: So do you have more to fill in about what I heard about the ethics class?

P1: I don't think so.

I1: While I guess I kind of you mentioned that… can you give me literal examples like you said one that they typically use is case study so, out of probably, you know, I don't know how many sessions they actually talk but, out of all of that what really strikes you the most and really makes you think "ok this is definitely part of the social responsibility I in engineering absolutely need".

I1: How ambiguous it can be? There's definitely some of that there like you can think that you're doing the right thing and you may be in some respects but in other respects you're not doing the right thing. They pose the types of questions and these little ethics seminars that they have, these classes, and one of them was if, say you're sponsoring this ride and a mentally challenged child gets in the car and he thinks he's driving the car when actually the parent is with him, the parent's driving the car and the parent looks at you and says to "oh just tell him he's really diving the car" but he's not driving the car and should you lie to the mentally impaired child and tell him that he's driving the car? And we got into a debate about it and there was a lot of good points made like, ok, what if the kid gets into an accident of or the car gets into an accident and hurts somebody or kills somebody and now he feels responsible if you told him that he drove it and he's mentally challenged so this could really affect him as a person and then this other thing like are you going to lie to the child? And if you don't lie to the child are you going to make angry? And do you want to make the parent look like they don't care about the wellbeing of their child? There's all kinds of things you could get caught up in an ethical question. Ethics is interesting.

I1: So what I'm hearing is not… I guess can you help me to understand this better. So in the ethic classes it's not necessarily confined to engineering per se? It's actually ethic, like, just maybe as basic regardless what kind of profession you're in, those are the kinds of things you need to pay attention to?

P1: Yeah. Whenever we talk about ethics in the engineering curriculum they always cite the… there's two different sets of rules and I can't remember what they're called but there is the engineering code.

I2: Yeah we have a creed.

P1: Yeah, creed or something like that and you take these everyday type of scenarios and you try to apply the sections of this creed or code to how you determine whether or not your decision would be ethical or unethical.

P2: And I think even when you get to a problem that [inaudible 42:04] the right thing you could call this committee and decide for you.

I2: They'll give good feedback.

P2: And they like follow the creed to the letter and they'll let you know according to the creed this is the right thing to do. But they didn't talk about it in intro to mechanical, the 101 class, they didn't talk about that in that class.

P1: I think one of the important takeaways is to realize that you can be ethical and unethical at the same time.

I1: Ok, so am I hearing I think ethics is equal to social responsibility or am I confused on that?

P1: I see it as synonymous.

I1: Because you said because you were defining the social responsibility was towards the community however you define a community, right? But I kind of think ethics is define by the profession somewhat. Am I hearing wrong in terms of that?

P1: I think what I'm trying to say is that both aim to serve the community, it doesn't matter what your profession is or whatnot or even if you're at work or if you're at home you can conduct yourself in regards to ethics can have an impact and we're always looking for the most positive outcome.

I1: [redacted, P2] do you have anything to add? Or do you have different thoughts?

P2: I'm thinking of scenarios and where the ethics and social responsibility could be different. I think there could be specific scenarios where it is.

I1: Like?

P1: I can't think of any right now. Um, so, I'm thinking of them. But I was thinking about this thing you put out with the mentally challenged kid driving and maybe the ethic thing to do is to tell the child "no, you're not driving" in case he does get into an accident or whatever he knows it was not his fault but when it comes to social responsibility I feel like that's more like keeping everything calm so you'd just lie to the child to keep that calm to keep the child happy. So I thought maybe it is different.

I1: Am I hearing actually that ethics takes the professional knowledge to deliver while the social responsibility more kind of broad?

P2: I feel that's a good way to put it.

I1: Like as a human being we have certain values but as society then that's probably more broad as a social responsibility but then the ethics is I have to haver certain knowledge to deliver that kind of thing.

P1: I'm having trouble drawing a distinction between the two.

I1: Well that's my understanding so I need you to help me.

P2: I will say I feel like they're really similar it's just that there might be one case where they're slightly different but for the most part, yeah, they're the same.

I1: So next question is kind of like, you know because some kind of my background when I taught in Florida we have Civil Leadership as a required course. So a lot of my students in accounting was like "I'm not taking that course until the last semester" but I know a have to graduate get that credit. So do you see social responsibility as something not like "yeah, it's great we have it but if we don't have it I can get it somewhere else" in terms of the curriculum wise?

P1: I think it's super important, what we learn and see and I'm an older student, a nontraditional student and I'm almost 40 years old I've been out in the world I've seen a lot more stuff than the typical student that's coming out of high school or whatever, working in the military. I think it's

important to question these things to actually analyze and look at them and see it from different perspectives so that you don't have these blinders on or anything and that you can't only see things from one way and you can see things from multiple different ways so you can arrive at the best decision or conclusion.

P2: Do you have the book definition of social responsibility.

I1: Yeah, so in the United States basically says what to consider the needs of society above one's self in one's work so that kinda the broad definition of social responsibility and so my question kinda was "well, I probably can get that from my life experiences, do I need that in my curriculum?" Maybe. So, what are your thoughts?

P2: I feel it should be implemented in every curriculum, not just engineering because you're not necessarily going to get that from life. Maybe you do, but at the same time maybe you don't so you might as well just add that to your curriculum so I do agree it should be in the curriculum.

P1: And if you do somehow come about it through just daily life there's probably just a big curve to that, it's going to take a long time but if you actually have us sit down and discuss it and talk about in the curriculum periodically like we already do this type of things becomes more present more prevalent in the mind whereas before you probably really didn't even think much about it. The seed is planted in other words.

I1: Do you see the connection between what you know because a lot of time we think that your experience and your training with the military actually a lot of it is serving the country right? Serving the community is that actually quite a bit of connection allows to make between you military experience and your engineering study or education?

P1: Can you repeat the question?

P2: Yeah, same.

I1: Yeah sorry, I'm kind of talking my mind. So basically I'm saying is you know your military experience has a lot to do with serve the country, serving the community.

I2: Serving others before yourself.

I1: Yeah, serving others before yourself. And then we were talking about the social responsibility as you just mentioned are important for the curriculum and the college of engineering so do you see the two allows you to make that connection or you it was just something need for the engineering not necessary to have that direct connection?

P1: I do think it's… I don't know if tied my military experience at all that I feel the need for the ethics and whatnot but I just really think that it's a good idea to look at it, to talk about these things. It really expands your way of thinking rather than… I mean… yeah, as engineers in our curriculum, as engineers we do have a responsibility to the public to do things safely and to not hide negative results of a study because you need to push something through to get something done. You need to stop or move your time table back and work things out instead of trying to push things forward. You're responsible to the person you get hurt.

I1: Ok, so [redacted, P2] what is your response?

P2: Yeah social responsibility is pretty broad so my response is that I felt in the military that I help others, make sure everyone's safe is the same as if I am going to be an engineer I must help others, keep everyone safe. So yeah, I feel like it does tie in and, put it that way.

I1: Ok, thank you. So, next one is actually talking about your experience as a Veteran student majoring in engineering. So what are the challenging aspects of being a Veteran student in engineering?

P1: For me I think age is a big barrier. There's the old saying "you can't teach an old dog new tricks" which I think it has some merit but I'm not a dog or anything. There is definitely I do feel like it's a lot harder for me to learn now. I used to just absorb things like I was sponge, I could just soak up knowledge. When I first went to AIT in the military, my specialized training school, I soaked everything up quicker. You read something once and then you take it and I did really well with my education back then. Now here in the present it's a lot different. I have to work a lot harder to retain knowledge. I have to work a lot harder to retain concepts where if I look back ten years ago I didn't have to work so hard for it and there's a lot of kids coming out of high school are really sharp, you know, they've been doing this for the last 12 years of their life and it's like I've had this huge gap between when I last went to an actual academic institution to where I'm at now so I'm not as sharp as them, they're really fast to answer questions and stuff but I'm not, I just do not have that anymore. And I think that's a factor of age, my mind is not as plastic as theirs is.

I1: In that case I would be hopeless.

P2: For me I think a bit difficult too is the gap between from when I went to high school to going back to college. Like I took calculus 1 in high school and I had a five-year gap. I was in the military only five years and came back trying to do calculus 2 and there was no way. I just couldn't remember everything from calc 1 and it was hard to get back into it. So yeah I had to study more, I had to go back and relearn a lot of stuff that all of the students already because I forgot some of that stuff. So I understood everything once… I was there day and night trying to learn what they're learning so I had to work like twice as hard and try to remember everything.

P1: They seemed to all have a really good handle on what's going on with, like in their early classes [inaudible 53:28] because they had just come out of high school, they had taken calculus in high school and whatnot. I didn't get past algebra 1 in high school so when I got here and started trying to study all of these concepts that were very unfamiliar to me but were really familiar to the younger students.

I1: They just had it yesterday, so.

P2: So definitely that gap is a big difficulty for us.

P1: It does, it gets in your head, like "I'm not really cut out for this", you'll have to compete with these younger students.

I2: If it makes you feel better, they're all thinking that too. There's probably like five in every major who just get it but those people don't count but everyone else…

P2: Everyone who looks at those five they're like…

I2: Yeah, we know those people, but the normal ones they're in their everyone thinks that all the time thinking "I can't do this" or "I'm not as smart as you. Just some people hide it better.

I1: Yeah. Fake it until you make it.

P2: One more thing that I want to add. We said what made it hard to transition again it was that military superstructural where in here you're just free. I think that was a big one just to say that again.

P1: Yeah having the structure…

P2: I think it was worth saying that one again because I feel like it was…

I2: I agree that's a common thing I hear.

P1: So I already asked that about the four year completion time.

P2: Actually I thought I was going to make my career in four years. I thought I was going to finish my curriculum in four years when we first started.

I2: You still think that?

P2: Nah…

I2: Two years in the reality is here.

P2: [inaudible 55:21]

I2: That's ok.

P1: It's taken me four years and I had 14 transferable credits when I started so, that's like an extra semester.

I2: Yeah it is a semester.

P1: So in all I have four and a half semesters.

I2: Four and a half is normal. Four and a half plus some summer school plus some transfer credit, you know? No one does it in a straight four years.

P1: Yeah I've done summer school for the last four years, or three years.

I2: That's normal.

I1: Now since you talked about the challenges let's talk about what interventions you would recommend to address those challenges you shared with us.

I2: Yeah so if you know everything that you've gone through I guess, looking back, you could like help us something that would have helped you like what would you recommend as what K-State could do in the college of engineering or… I want to have power things to tell the dean.

P1: I mean that's tricky because we want to tell him all the good things about the program and how great it is and how much people enjoy it and this and that because you want to attract people to your program but at the same time you want to retain them too. So I think there's some importance to being upfront about how difficult the program is. I mean, you do want to pull these people in but I think that it needs to be stressed a little bit more like how difficult it is and you know when you come in to the building I see them all come in and watching this big TV down there and they're showing them all these cool stuff through there like laboratory environments and stuff.

I2: Everyone's smiling, no one is crying.

P1: And that's not really what the curriculum is, you know? There is some of that, we'll say 10% maybe, but the other 90% is just…

I1: Paper.

P1: Pen and paper. You're writing stuff down, writing equations, studying a lot. It's a lot more work than other curriculums.

I1: Were you excited about your project? Your senior project? Because it's more…

P1: I feel like it could have gone better. I don't feel like my group contributed.

I1: But at least you get some hands on.

P1: But, as I stated before, they don't really know what's going on so it was hard for them to contribute. I would say that just being more upfront about the difficulty of the curriculum. I don't remember anybody telling me it's going to be extremely difficult.

I2: It's going to kind of suck.

P1: I'll say… my wife is actually a transition coordinator for the military. She does wounded soldier, wounded ill and injured soldiers who are transitioned out of the military. They've come back from deployment or something, they've been injured so badly they can no longer serve in the military. She helps them write resumes, figure out what they're going to do with their lives like a lot of them feel like they're owed something, like society, the US government owes them. It's a common misconception that they're never going to have to work again. These types of things, so, they have to kind of go through my wife and what she does is to let them know that their military compensation is not going to get them through life and that they need to find another path and they choose a career path, they choose to go to school, but they come with this mentality that they're owed something and I know that a lot of Veterans will not just do that.

They feel like they're entitled to something and they've decided that they want to be an engineer because they want to make money and whatnot so they come to be an engineer and they go do that but when they get there the mentality that they already have is a detriment to them because when they figure out how hard the curriculum actually is they're like "hmm, maybe this wasn't such a good idea after all. I don't want to work like this I'm already injured" or " I've already served my time in the military I'm going to go do something else that's easier". I think that is something that's real in the Veteran community.

P2: So you mentioned that the retention, first year, was usually really low?

I2: Yep.

P2: And I feel like, I'm not saying they cave, but, it [inaudible 1:00:06] they're going to think they want to do mechanical engineering and they kind of realize it's not for them. So you're going to lose some people, I agree with that. So now what would keep them, so from my experience what kept me here, is I had my group of people, my roommates, that helped me a lot. So I feel like, I know there's a Veteran association, maybe do more with that. What I want to go to like a meeting with just them seems kind of weird a boring, a bunch of people I don't know. Like if you just do like, something maybe not school related to maybe get people together, I can't think of something off of the top of my head but then after they get to know each other and make them a more solid group, maybe like a Frat kind of in a way. But just so you have a group of Veteran people and they help each other out.

I2: We have a couple of ideas like that so, since you put your ideas out there I'll tell you what they are and if you think they're like really dumb that's fine or like it's a good idea because I was like you, not a Veteran, but I had a group of friends who I took every class with so they were like my people. I've never talked to them again since college but I ate like every meal with them and did every homework assignment with them and that helped me a lot to have a community. So, one of the things we talked about is maybe like the Summer before kind of a mix of what y'all are saying like kind of a transition program and so it would be like a summer four-week class. It would probably be zero credit hours so it would be free. Part of it would just be these are all – this is everyone who's coming in you might be across all different areas of engineering but you'll probably be in the same Cal 1 class together and so just meeting people, talking about how upfront it is this will be challenging so that they're not misled to what they go into and also covering some basic skills like setting a schedule, using your planner, you're not going to have to go to class everyday you need to go to class every day. So we've talked about that which would be very structured but it might help to connect you but I'm not sure people would go. They might be like "I don't want to hear you lady".

P2: Yeah so leaving the military we do have those classes. They're like a whole week of transitioning period and they tell you a whole bunch of stuff and they give you so much information so in the end it wasn't that useful because they just gave me so much so now if I had it again and you guys doing it from the college, even from the college perspective it's not military person telling me, it's you guys telling me and it's specifically college stuff I think that would help more. So I think that is a good idea. I don't know about four weeks during the summer though.

I2: Nah I'd make it. And it might just be during the first semester like a zero credit-hour so like in Civil Engineering we have a zero credit-hour class that all undergrads have to do. I think it's a terrible idea but they have to do it every semester and like long story short there's four seminars that you have to go to and you just have to get four for the semester so it would be something like that. You don't have to go but we're going to do it on a Tuesday night and there will be pizza and we're just going to get together and get to know each other kind of thing. The other idea that we had building on the social responsibility but also on just the general retention of engineering would be like a project team. So you know like in mechanical engineering you have the Baha car, right? I think, SAE car, y'all have a car. But it could be like a college-wide project team. And that way you get to, because there's lots of things that you can do with all different majors just to get, because a lot of times we find that students when they're working on a project they get to apply their course material it's actually really useful for them. We've seen it actually helps to retain a lot of women when they're involved in project teams so we also thought about making some kind of very small, very simple that wouldn't be super time-consuming but more something fun outside their class to make kind of more a community outside the center on campus because I know a lot of Veterans don't want to go to the center and I get it and it's nice to also, like I said my freshman roommates, special education major, Tuesday nights gotta go out and get hammered, like, that wasn't my lifestyle and so getting to know other engineers that know what you're kind of sucking it up for. But we're trying to kind of come up with all different ideas of what would be valued because if we put the effort in, I mean, it would be me as a faculty member so if that one is [inaudible 1:04:36] not useful for anyone's time.

P2: When I was first here I had to go to admissions to turn in that little piece of paper to get my GI Bill money. I feel like right there, first year, first semester this is mandatory one-hour class…

I2: Yeah, that's kind of what I was thinking. It's free, you don't have to pay for it but you have to go. That's what we do to civil students. You don't have to pay for it but you have to go.

P2: At least one class like this one class like this one class for me show up for that session and you're good. And then make it optional going to it, then you can keep going. But [inaudible 1:05:10] then you gotta go one time.

P1: So, one more thing is that if you're a Veteran you're already coming to school later in life then typically would and if you're later in life chances are you have a family and I'm not sure what percentage of Veterans have families, have children or not that need to spend time with their families. The curriculum, or the Dean I guess, maybe not the curriculum but the general way of thinking for instructors and whatnot is that -

P2: Is that you're single and have a lot of free time.

I2: Meh.

P1: - you're single and you have a lot free time, like, -

I2: Meh.

P2: They forget about your responsibilities.

P1: I probably can't count how many times I've had to put, like, make a choice between my family or school and I'm not talking about just simple stuff like this could very well lead to a divorce or, you know, a separation of my family so like I've had to make some really hard decisions and take some pretty hard grade hits because there's no leeway or consideration for that. To my professors, to every professor I've ever had I'm just a student that lives in the dorms and I have nothing better to do with my life than sit down and work a billion homework problems.

I2: "Well also my class is the most important so I don't care that you have other classes" that's like a common perception like "you have all weekend, you don't have other homework or family".

P1: I understand that everyone's situation is different and that there are some students do live in the dorms that do have other thigs going on and whatnot but I think that there should be some room allotted and I know that there's some concern about fairness but I'd just extend it to everybody, like, I know we have to have like hard deadlines and stuff but there's gotta be some way to compromise there.

I2: I think that it just depends.

P1: But a lot of times because of disability stuff…

I2: That depends on the faculty member and I don't think we do a very good job of that here. I mean like I have three engineering degrees I wasn't taught as an education at all I was taught as a researcher [inaudible 1:07:36] in charge. But like to answer your first question probably only a quarter of our Veteran students have families, most of them are five to eight years and then they come to school. Some of them are married but don't have kids yet but in general that's the conversation that I try to have at the beginning of every semester but that's my class and like I get it if you have a kid and they're sick but not all of our faculty members are well-prepared for that so that's something that K-State needs to address as a whole because it's not just Veterans that have families we have lots of students that are just coming back to school or got married really young, we have a lot of that, it just depends on… I would hope that most faculty members would have that conversation day 1 in terms of the expectation and I understand, how I'm willing to be flexible as long as you let me know what's going on that's fine but I know that's not always the case.

P1: It's always the same response that we have to be fair to everybody.

I2: Now I don't know, I've never told a student that, literally never. I had a student he just said "you know my wife has a full-time job and my kid has a fever I can't come to school" that's fine we can figure it out. We should switch majors [inaudible 1:08:44]. Yeah, that's frustrating to hear.

P1: I think that's a big problem and I just wondered maybe if that had to do with some of the retention issues.

I2: Actually you know most of our Vets that have families do the best. Because I think you like have a family and you're really working hard for the better for your children and thing and that's

kind of a lot of the motivation and so this is true outside all of engineering if you have that motivating factor like my motivating factor was pardon my French we're recording but like fuck you I'm smart enough to do this because I was told that you know like "you're a girl, you didn't do that great in math. This isn't for you". That was my attitude the whole way through that was my motivating factor and so people have different motivations and if you can't… one of the things we know in the first year is that if you can give people different options for that motivating factor, that's what makes them stay around because it's really not easy except for those five people, we don't like those five people, but for most people.

P1: I just wondered… I think about how many times I've been at those crossroads and I wonder how many people in my position have chosen the other path?

I2: A lot, I mean, a lot. It happens… most women that leave engineering have better grades than the men that stay because they just don't feel it, they're just like "nope, ok, fine, bye". Sorry we just went off side bar a little bit there.

P1: No, that's fine. While we're still talking about that, you, like, so we talked about in terms of age, in terms of how faculty or even the whole curriculum can take considerations you know they have the ideal students in their mind, everything's kind of [inaudible 1:10:21] but actually that's not really the case even the ideal student is not the majority probably. So what are other supports, those are kind of more kind of academic support what are the kind of more social, cultural support, peer support, you think maybe we can do better or it's not currently offering?

P2: Well because I don't know how the Veteran association is, I haven't been to it I don't know, so I don't know how to improve it, I haven't been.

I2: But I think it's like how you said we should do a better job when you turn in your forms say "hey, you know, you really need to go check this out at least once".

P2: Mmhmm. So how is the [inaudible 1:11:08]?

I2: We don't do anything right now.

P2: Oh… well then

I2: That's the point of the project is to come up with things that would be useful.

I1: He's like "I'm not missing too much of that".

I2: No you're not. We have an active student organization on campus, and active SVA, but I don't know how many engineers are active in it, it's just a general association, it's kind of like a fraternity in the sense they have a conference they can go to and they have a president and meetings and speakers come it seems pretty cool.

P2: Because, there's like a Hispanic little group for engineering. I haven't been to that one either but I have friends [inaudible 1:11:45] and they say they're really good –

I2: They are. I always buy tamales from them. They're not as good as my grandma's, Liddy, but they're good for Kansas.

P2: - yeah so, I feel like if the VA can get ideas from them.

I2: Yeah, I mean that's a good idea, come see what other groups are going.

I1: So, this will be the last question we have for you. So it's still back to the social responsibility idea so because right now what we're hearing is very much kinda sociology, if you're taking class outside of the college you have some and then in the ethic class there's so if we want that to be beefed in a better way, for lack of a better way to say that, in the curriculum, in this college, what would you recommend or what are the things you would be recommending us to do?

P1: I'll tell you that I wouldn't want to take an extra class on it.

I1: I totally get it.

P1: A whole other class.

I2: I had to take ethics and it was terrible.

P1: I don't know if it's actually a required class or not. I don't know if I took ethics, like an actual ethics class.

I2: No we don't an ethics engineering class.

P1: Like ethical reasoning or responsibility I don't know what course I took that covers that, it might be the ME 75/74 class. But, I wouldn't mind seeing more of it in my classes, like, maybe some of the later engineering classes should be mandatory to incorporate maybe one or two lectures of the social responsibility and you know like an ethics assignment. Personally if I was in this class I wouldn't have a problem with it. It would be a nice break from the…

I1: The formulas.

P1: Yeah, the formulas. Study and all that. But it actually be something that would be easy that would probe me to think a little bit about something else, something the outside of the equations. So yeah I think that would be a good idea. I would personally respond well to that.

I1: And I kind of think that's a way for me to see how my peers, you know, who you are probably going to come out in the conversation but then when we talk about formula that's not really about you, that's about the formula. So what are your thoughts?

P2: Can you repeat the question to me again? What was the question?

I1: The question is what would you suggest if we are thinking beef up the social responsibility in the curriculum in engineer?

I2: Like do you think we should add a class, incorporate in class, require a seminar, have a speaker? Or I don't know.

P2: So, when you're saying that you want the engineering curriculum to be more socially response like what do you mean by that? Like the curriculum to do what?

I1: That's a good question.

I2: I like how you worded that I mean our thoughts was do you think we should incorporate it more in the curriculum and if so kind of how, how would you do that, you know, like should it be, how we said, like, in the classes, have a couple more lectures on it because he doesn't want to take a whole other class on ethics. Do you want to take a whole class on ethics?

P2: So I mean, you want the engineering curriculum to teach me about ethics. I think it does that pretty well already.

I2: Ehh… we don't really force it though, that's the thing but maybe we should I guess is our point or our question.

P2: So is it like about like my work and like as an engineer, my ethics, do the right or the wrong thing, is that what we're talking about or are you talking about helping other students or…

I2: Yes. It can be whatever you want it to be. If you think we should… if there's anything that we could incorporate more or should incorporate more…

P2: As far as the ethics part I feel like the curriculum's ok with what it has especially that intro I feel my profession was [inaudible 1:15:48] but he did a good job, he brought in guest speakers there was even a lady who her whole job was ethics and she's the one who told us about the creed and the committee and the K-State 8 has…

I2: That's a course where you can get your reasoning and responsibility, yeah.

P2: So I think the curriculum's ok with it.

P1: I feel like that's a broad kind of requirement though.

I2: Yes. Take whatever you want, there's a lot of classes that satisfy it.

P1: Like I'm pretty sure it was my 574 class that satisfied that.

I2: It depends on your major. Like in civil students specifically have to find one that they might do that in ME, count it.

P1: But they mock gun on that like we only talked about it for two lectures or so.

I2: I don't feel like that should count.

P1: Right, it's not really, like that's what I'm saying it's pretty loose.

I2: It is very much.

P1: Yeah so when we talk about K-State 8 like that I don't really know that that qualifies.

I1: So, do you have anything else you'd like to share with us in addition to the questions already being asked?

P1: [inaudible 1:17:08]

I1: That's an indication that it's coming to the closing.

P1: No, I don't think so. I mean I already gave my opinion on why I think some Veterans maybe leave the curriculum in the first year. Yeah I think it has a lot to do with their mindset. I don't know in the military like, everything's… I don't want to say "delusions" but, you know… Like ambitions are over ambitious about what they could achieve or what the amount of work is that they want to put in to something to get what they see their future looking like and when the work turns out to be too much it's time to move on to somewhere else. I don't… what was the statistics for our institution for the engineering curriculum was it 54… 53% of the students graduate as engineering students?

I2: Y'all are pretty good actually our first-year retention rate is up to like 78%.

P1: What's the completion rate?

I2: Yeah I don't know, that's not… we really brag about the first-year thing

P1: I think it's like 54% or something.

I2: I think it's higher than that.

P1: I don't think it is. I'm pretty sure I'm accurate on that.

I2: I think it's higher than that.

I1: At every institution we only look at when you get in, we never look at when you get out.

P1: We have one of the highest completion rates in the country but it's only like 53 or 54% Whereas a lot of other institutions are in the high 40's for an engineering curriculum and I think that's still really good but how many… what's the percentage of Veteran students dropping out the first year?

I2: Half.

P1: Half?

I2: Half of them drop out in the first year. And most that first semester.

P1: So that fits with completion….

I2: It's much, like, so going back to that, our first-year retention rate is like 78% so if you look at that first year and we're at 78% overall but 50% of our Vets are leaving that first year. There is a bit small numbers there I mean we only have 65 Vets in the college right now that we know of.

P1: So 100% of that 50% are Veterans?

P2: I feel like the big difference is that for the regular students and all they want is to go to college and they know for the get go that this is what they want. A lot of military people they go to the military and they get the GI Bill afterwards and they're like –

I2: Might as well go to college.

P2: - might as well go and they're not prepared and that's why they leave.

P1: Right.

I2: Yeah the difference too is like, the ones that are leaving they're not like switching majors. We had one switch majors last time. They just disappear, they just drop out of college whereas a lot of our undergrads will just go to a different major because college… they've already decided that this is the path that I'm…

P1: He makes a good point which is that a lot of people I don't know what the vast majority why they join the military I knew for me it was kind of like a last resort, like I didn't do well in high school, I did not plan to go to college, I did not do anything I was working this dead end job so my brother joined the military and I was like "yeah, you know, that will get me back on my feet and give me some direction" and it did, but my point is that I never planned to come into a curriculum like this so I'm not as prepared as somebody else who was thinking about coming in to be an engineer like they knew they wanted to be an engineer from like ninth grade or something and they end up taking all of the courses required in high school and whatnot to prepare them for this then there's someone like me who had to take five years out of high school who did not necessarily do that but coming out of the military I wanted to do something more so I attempted to go to school once and came back later but it's all about improving my quality of life and my family's quality of life and I think that that's… I would think that a lot of people join the military for the same reason that I did. I didn't have all of these connecting classes to engineering when they get here so it's really tough.

I1: So do you mind me asking basically I'm curious is this because you said there's multiple times during the process where you were thinking quitting, what exactly make you change your mind and actually stay?

P1: It's my support from my wife and, you know, probably not everybody has that –

I2: True.

P1: - support and there's been lots of trying times, lots of anger, lots of fighting between splitting my time between school and family so it's been really difficult but then my wife's also really supportive even though it's really hard and sometimes it's hard to take that perspective that she takes.

I1: Well I almost quit my doctorate degree without my family, so, I can maybe relate to that. Ok, alright, [redacted, P2] do you want to say something, you have something you want to say that was not asked? I feel like I'm eating my words all the time.

P2: No, I feel like you've been getting my opinion pretty well with the questions you've already asked.

I1: Ok, alright, well thank you so much.

I2: Yeah, thank you for coming. If nothing else this was kind of good because you're almost done and you're a sophomore in mechanical engineering so you know someone else that you could ask questions to if you get stuck. You're about to graduate.

P2: They're in the same thing… the same major as me. They can help me out, yeah.

I2: They're easy to take, whose class to take, who not to take, who to avoid. That's the gems of life.

I1: Study guide.

P1: I could give you some advice right now. Don't take anything with Dr. Pacey. I like Dr. Pacey but he's really hard.

I2: Get your money's worth!

P2: What does he teach?

P1: What's the… I want to say, it's not controls, it's the electrical course. We had to take it…

P2: Is it computer applications in mechanical engineering?

P1: No it's going to be a 400…

End of recording.