Appendix 1: Interview Protocol

- **Q1** Are there places on campus you prefer to study at? Tell me about those places and why you prefer to study there if this is true for you.
 - > This will help to answer what users like about study spaces and start addressing why they study where they do. It avoids bias because it does not assume that they like studying in a particular place.
 - Follow-Up: Are there places on campus you prefer not to study at? Tell me about those places and why you prefer not to study there is this is true for you.
- **Q2** Out of library, classroom, and dorm study spaces (exp. Odegaard, Savery, Alder Commons) do you prefer one? If you do tell me about why you prefer one.
 - This will help to find out what type of study environment users like to use and what about one type of study space makes it better than another type, all from individual experience. It avoids bias because it does not assume that there is a preference in study space type.
- Q3 What would you consider an ideal study environment?
 - > This will help to find out what users wish was available in the study environment. It avoids bias because it does not give any descriptor on what an ideal environment is and does not assume that where users like to study is an ideal environment.
- Q4 What are your preferred methods to study if you have any? For example laptop, notebook, etc.
 - This question will get the user to describe specific methods they use when studying, which will provide information on what users are doing in a space, what materials are provided in a space, and how users are using what is provided to them. It avoids bias by not assuming any study methods are preferred or always used.
- **Q5** Do others play a role in your studying, such as what, where, when, or why you study? How do they play a role if they do?
 - This question is to get at interaction and how it affects utilization of study spaces, as well as if interaction plays a role in what people like or dislike about a space. It avoids bias because it is not assuming that others play a role, or that they play a role in a single aspect.
- **Q6** How would you compare popular study spaces on campus?
 - This will get the user to make clear distinctions between what they like and dislike about study spaces and how precisely they are different from one another. Most importantly it likely will lead to information on how other people view study spaces from the user's perspective. It avoids bias because it does not say what popular spaces are or how to compare them.
- **Q7** When you are in a study space, how much of your time is spent studying vs. doing other things? If any of your time is spent doing other things, what are some of those things?
 - This will help find out how effectively users are using a study space and what activities they are doing in a space other than studying. It avoids bias because it makes "other things" very broad, enough to encompass any activity.

Appendix 2: Interview Notes

Participant 1:

Interviewer: Are there places on campus you prefer to study at? Tell me about those places and why you prefer to study there if this is true for you.

P1: I like to study in Allen, since there are always outlets available. Also it is generally pretty quiet. Umm it is pretty easy to find a table there or some workspace. And people usually keep the noise level pretty low. Also there's a nice view. Umm other places umm I like to study in Ode if I'm with a group, it's like a good place to meet people and people don't mind if their talking. Chairs are also comfortable hahaha and it's close to By George so I can get food. I like to study in By George but it's hard to find a place with outlets so I like to go there if I have reading to do. It's really nice cause it's right where the food is so I can grab a snack, but yah I don't like to go there for the like too long because usually my laptop will die.

Interviewer: So if good a central part of how and when you study?

P1: I get hungry. If I'm not close to food I have to leave and go get food and that's a whole journey and takes up a fat chunk of time. So if my study space is close to food I can grab a snack quickly I can get more work done.

Interviewer: Are there places on campus you prefer not to study at? Tell me about those places and why you prefer not to study there if this is true for you.

P1: I don't like studying in Suz Café, the tables are really small and it's incredibly noisy, and there are next to no outlets. Also the tables are really dirty because people leave their food on them.

Interviewer: How often would you say you study there? Why?

P1: I go there two or three times a month, usually because someone tells me they have a table there or if I'm meeting someone socially and then we just end up studying there.

Interviewer: Out of library, classroom, and dorm study spaces (exp. Odegaard, Savery, Alder Commons), do you prefer one? If you do tell me about why you prefer one.

P1: Uhhhmmm I prefer libraries because it's convenient to go there after classes and I am already on campus. Also um when I'm studying its usually still pretty early in the day so a lot of classroom spaces are still available. The dorm spaces are pretty busy at that time and they are more social, id only go to a dorm space in the evening.

Interviewer: If you are studying in the evening are it at a dorm space then?

P1: Yah unless it's a group project I'll go to ode or if I plan on studying through the night I go to ode cause I get food.

Interviewer: What would you consider an ideal study environment?

P1: Lots of outlets. Close to food. Like close to food otherwise I have to leave to go get food and lose my study space. It would also have a lot of table space and availability so I'm not worried about finding a place to study. Also clean tables I hate when tables are dirty. It would also have comfy chairs with right amount of firm.

Interviewer: Are there any study spaces on campus that seem to match this environment?

P1: Allen but the chairs are uncomfortable. Oh and it also gets kinda cold in Allen. And Allen needs to be open later cause it closes early especially during finals.

Interviewer: What are your preferred methods to study? For example laptop, notebook, etc.

P1: I use a laptop and then ill usually have a notebook out to either do problem sets or take notes. Also my graphing calculator.

Interviewer: Are particular subjects you like to use these methods for or places you like to use them in? What are some of these?

P1: All my coursework is online, all my course websites and readings are online. Math applied math and math and econ but mostly math also math.

Interviewer: Do others play a role in your studying, such as what, where, when, or why you study? How do they play a role if they do?

P1: Yes I wait for people to tell me when they found a table and then I go sit there cause it's hard to find study space otherwise I just go to Allen cause its usually empty.

Interviewer: How would you compare popular study spaces on campus?

P1: Odegaard is mostly for group studying or late night studying. Umm like classroom study spaces are generally for like intense like solo studying umm or like something that needs whiteboard space and then um dorm um dorm study spaces are mostly for um late night studying closer to west campus living spaces.

Interviewer: When you are in a study space, how much of your time is spend studying vs. doing other things? What are some of those other things?

P1: If I'm not in a quite studying space I spend very little time studying and a lot of time in self-loathing and then I depress myself into going home and doing real work.

Interviewer: So does that mean most of your non studying time is spent reflecting?

P1: I sit there and think about my work instead of doing it and I feel bad about sending so much time not doing my work that I get productive after that.

Participant 2:

Interviewer: Are there places on campus you prefer to study at? Tell me about those places and why you prefer to study there if this is true for you.

P2: Ok um I really like studying at Suz Café and also at Suzzalo library. Um those are where else do I study. I study a lot in poplar too, those are the two main places, Suz and here.

Interviewer: What do you specifically like about Suz?

P2: Well they have coffee. Also I like studying in Suzzalo library because of how quiet it is and I like the gothic architecture it's a nice ambiance. And it's an open area for when I have lighter work to do its not too loud but it's not super quiet either.

Interview: Does noise level affect where you study?

P2: If I have readings to do then I have to do those in quiet areas, and like I said lighter work like watching a Panapto or doing chemistry then it can be louder but something like readings for psych it has to be super quiet or if I'm studying for something or writing.

Interviewer: Are there places on campus you prefer not to study at? Tell me about those places and why you prefer not to study there if this is true for you.

P2: Ode I hate ode. I don't know it just reminds me of a zoo. There's just a bunch of bodies in there and it's like really loud and sometimes it's just too loud for me to work there and there's too many people and too many things to get distracted by.

Interviewer: So would crowded space that was quiet be fine to studying in?

P2: Yah, it mostly just the noise.

Interviewer: Out of library, classroom, and dorm study spaces (exp. Odegaard, Savery, Alder Commons), do you prefer one? If you do tell me about why you prefer one.

P2: I prefer dorm spaces um mostly because as much as I don't mind being in a crowded place if it's quiet I do really like to have that privacy and in the dorms because there are less people it's nice to have that space when you can have it.

Interviewer: What about that privacy is nice for you?

P2: Something I feel like when I need to learn something I have a weird way of learning it I have to say things out loud, like some of things I do are weird and I can do the things I need to do without bothering anybody or embarrassing myself.

Interviewer: Particular times when do things you consider weird?

P2: I like to read my lecture notes out loud also if I'm doing readings for a class that are difficult it makes it difficult to understand somehow if I read it out loud.

Interviewer: What would you consider an ideal study environment?

P2: An ideal study environment? Umm probably just like ideally I do like to study by myself and also I like open space I like it when its fairly quiet. Um this is kinda minor but I like using whiteboards as well if I'm doing math or chemistry to work out problems. So basically if I was sitting in a popular study space by myself that would be ideal.

Interviewer: When you decide not to study Popular why is it?

P2: Um because so uh when I'm in Suz that's normally in between classes because I don't like to shift back and forth like why would I go back to my dorm if there's similar resources on campus and also if I go home I know I'm not gonna do anything until later.

Interviewer: Why aren't you very productive at home?

P2: It's not that I not productive at home it's just beginning the work, cause there's a lot of stuff I prioritize doing. It's more about having the incentive to begin.

Interviewer: What are your preferred methods to study? For example laptop, notebook, etc.

P2: Um I do a lot of things by hand I think that is most effective for me and reading things out loud. I also use acronyms a lot.

Interviewer: Are there particular subjects you find yourself studying with these methods?

P2: Probably the social sciences like psychology and anthropology because in like math or science alt of it is based off of you understanding the concept in order for you to complete what's being asked for you where as things like history a lot of it is based on memorizing. There's a big factor of memorization involved.

Interviewer: Do others play a role in your studying, such as what, where, when, or why you study? How do they play a role if they do?

P2: So when I'm on campus I know that seeing other people study and be motivated to do that it helps me to do that so if I'm on social media and everyone else is doing stuff I need to as well. Why I choose to study is just because I'm self-motivated. I do use other people as a resource when I don't understand something I will general ask people for help

Interviewer: So are there places where it works best to ask people for help?

P2: It's difficult in a space called popular cause it's hard to know who is taking what. But we have this thing on each floor so you can write what people are taking and what room number they are in so you can knock on peoples doors and find out what they are studying, so yah its difficult but there definitely are ways to learn from other people.

Interviewer: How would you compare popular study spaces on campus?

P2: I think a lot of it is based on proximity and resources. Um so proximity people are obviously gonna be as close as possible and then resources, I'm sure a bunch of people decide to use ode because of the amount of computers in that space and tables apace. I mean that can be more difficult when finals and midterms come around but there's usually a lot of space.

Interviewer: Sounds like there are some things you like about ode, why do you dislike it as a study space.

P2: I don't like it personally but I can see how other people would

Interviewer: When you are in a study space, how much of your time is spend studying vs. doing other things? What are some of those other things?

P2: I think it's like half and half. And it also depends on what I'm studying and what I have the next day If I have a midterm the next day most of my studying is gonna be studying. But if its like homework I get distracted a lot by social media I go on Facebook a lot and I also go on twitter a lot and snapchat what else do I get distracting by oh Youtube I'm on Youtube a lot oh and Spotify I don't know how I forgot that.

Interviewer: Do you consider music to be a distraction then?

P2: On some of the more focused work I have to do it's definitely a distraction. If I'm doing readings and I'm listening to music it'll have to be just instrumentals .But light work I like to keep it in the background just to keep me motivated so I don't get board as quickly.

Participant 3:

Interviewer: Are there places on campus you prefer to study at? Tell me about those places and why you prefer to study there if this is true for you.

P3: Mhm k. So I like Poplar um I like campus do. So if I'm doing busy work I tend to go to places like Suz cafes or Mary Gates. So kinda quiet areas where people go to do work but also go to hang out. But if I need to do hardcore work then I go to a dorm space. But sometimes I just need to go to place with people so I get motivated, other ways I just go to my room and watch Netflix or something.

Interviewer: So do you find studying in your room not a productive place.

P3: It's the opposite of productivity it's like negative productivity I like get work undone. No literally I like open and assignment and I look at it for a little why and just watch hours of friends. I'm a very suggestable person, that's the word. Like peer pressure but like for a good cause.

Interviewer: Are there places on campus you prefer not to study at? Tell me about those places and why you prefer not to study there if this is true for you.

P3: My room obviously. I don't like studying outside I know some people like studying outside when it's nice out but I can't associate hanging out outside with studying unless it's like a book that I could casually read outside. At the beginning of the year I tried to study at ode because it's like peers pressure. But yah there's too many people almost.

Interviewer: Out of library, classroom, and dorm study spaces (exp. Odegaard, Savery, Alder Commons), do you prefer one? If you do tell me about why you prefer one.

P3: I prefer dorm study spaces because actually no hold on I like the libraries except for ode. Dorm spaces are nice and I do get work done sometimes but because you usually study in those kinda spaces with friends I get distracted cause I like studying with them but in a library I can be with friends or be alone and then I see so many other people studying and it makes me want to do work. Also the setting of a library is a very studious place and I feel very studious.

Interviewer: It seems like setting of how is there is important?

P3: It's kinda weird but like I'm influenced by seeing other people do things. If I see someone working really hard it's like I should be working that hard. It's not like anyone else cares but it gives you kinda a sense of accountability, it's like a library I'm expected to do work here so it kinda makes it easier to do work.

Interviewer: What would you consider an ideal study environment?

P3: Ok my ideal study space would be somewhere with high ceilings, a lot of natural light, a good amount of people (background noise), and like a place to get food lol. I really like cafes, they check off most of those things.

Interviewer: What are your preferred methods to study? For example laptop, notebook, etc.

P3: I think I like laptops a lot by then that's just cause its easier to get to multiple resources from there cause like when I study I don't just want to use the textbook I go to slides, other videos, and my notes which I take on a laptop. When I'm memorizing something I usually use a notebook I like write it down. But mainly ill use a laptop.

Interviewer: So you said you like to use multiple recourses, is there one of these you prefer?

P3: I like slides a lot even Panapto, its super helpful not just if you miss class, even if I go to the class and am studying for a test ill watch cause it's like you're going to the lecture again. I learn really well if I feel likes someone's teaching me. So those are really helpful to hear the professor go over the topics again.

Interviewer: Subjects you find yourself studying with these methods more than others?

P3: Um well things like I think psych actually I study a lot using Panaptos because it helps to hear cause psych is a lot of memorization but the tests are more application so hearing the professor talk about the lesson but also give outside examples of how that topic can be applied to the real world is helpful cause then I can connect it to other things since it is more general. Also for CS I use Panaptos a lot cause in class you are learning stuff but watching it I get to learn it again and see the professor go through all the steps.

Interviewer: Do others play a role in your studying, such as what, where, when, or why you study? How do they play a role if they do?

P3: It doesn't really affect what I study but it affect when. I usually study when there are people around, like when I know there will be people studying at Suz. It sometimes sucks if it's too busy but usually I try and go when there's a majority of people there.

Interviewer: How would you compare popular study spaces on campus?

P3: Ode I think, it's like a good place to get work done if you really have to and I can see why a lot of people like ode because it's a library and there's a lot of people studying and there's floors with varying noise levels, but for me there's not a lot of windows unless you're sitting exactly by a window unless you're in one of those booths you know? I kinda like natural lighting so it doesn't feel stuffy. If your there for a long time it can get, it's almost like time not stops but can go really slowly so I kinda don't like that about it. Whereas like for some reason research commons is better just because it has more windows because it feels lighter I think it's the colors and it has booths that are pretty comfy. So reading room is gorgeous that's super nice, the strain glass windows. And then the café has huge windows. Light is really important to me I like natural light. Also the nice thing about Suz Cafe is if you need a drink or something its right there. Ode is good for that too but you have to go downstairs and also by George is open at weird times. Paccar has floor to ceiling windows which is so nice. I get depressed if I'm studying in a dark place.

Interviewer: When you are in a study space, how much of your time is spend studying vs. doing other things? What are some of those other things?

P3: I mean on a good day I'll actually spend the majority of the items studying like maybe 70 30 but the other time if I'm there with someone I'll talk to them for a while maybe or like go on Instagram or

twitter and if I'm really. I was in Suz and I was in there for maybe 6 hours writing an essay, I finished it which was good. But when you're there for 6 hours you know you are not doing that for all the 6 hours. So my breaks will be watch a 20 minute episode or something.

Interviewer: So do you find you need to do other things regardless of where you study?

P3: Yah I always will take a break or get distracted, it just is less time spend distracting if I'm like in a good study space.