

Datasheet S1. Phase 2 Interview Transcripts

Iteration A

Participant 2

KD: So what can you tell me about the habitats in Oregon's deep sea?

P2: very little, the main thing was the mud is the start of the whole process leading into the fisheries at the far end and there are vents and the little tubeworms or something down there, that's about it.

KD: Okay, so did you learn anything new about the deep sea today?

P2: I knew nothing about the deep sea and I learned it in what, 3 minutes, 4 minutes.

KD: Do you think Oregon's deep sea has an impact on human life?

P2: Sounds like it, sounds like it. Medical and of course, it's the start of, it sounds like the food chain for all of those animals, the fish.

KD: were there any parts of the exhibit you liked in particular?

P2: For me, the visual part is probably easier than reading everything and for me, that light up there makes it very difficult to read that chart over there.

KD: were there any parts you disliked?

P2: Just that light.

KD: What could have improved your experience with the exhibit?

P2: Turn that light off

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P2: Well it was interesting, I've never known about the deep sea at all. So it's kind of fun just to learn a little bit about it. I had no idea it's what 9,000feet deep. Yeah it was interesting, nothing I want to do.

Participant 3

KD: what can you tell me about the habitats?

P3: It's very diverse.

KD: Did you learn anything about the deep sea today?

P3: Yeah

KD: Can you tell me some of those things

P3: I didn't know there were methane seeps, that was really interesting

KD: Do you think Oregon's deep sea has an impact on human life?

P3: Yeah, definitely

KD: Why do you think that?

P3: There's a lot of fishery fish that we take from there.

KD: Were there any parts of the exhibit you liked in particular?

P3: Yeah, I thought the video was really effective. Brought a lot of people in, thought that was really interesting.

KD: Were there any parts of the exhibit you disliked in particular?

P3: The picture of the deep sea and me was a little blurry, a little pixelated. Otherwise I thought it was really good.

KD: What could have improved your experience with the exhibit today?

P3: It would be cool if there was some sort of interactive piece maybe, or a QR code to learn more, to redirect to the website.

KD: Is there anything else you'd like to tell me about your experience with the exhibit today?

P3: No, thank you.

Participant 4

KD: What can you tell me about the habitats in Oregon's deep sea?

P4: Uh, well they're deep. Uh it's pretty interesting because normally people don't think about life in the deep sea, sunlight doesn't go down there, it's very dark, very deep uh nobody goes there so it's not easy to see and it's pretty recently discovered kind of thing.

KD: Did you learn anything about the deep sea today?

P4: Uh kind of just like refreshed, it's like I've read things about the deep sea before.

KD: Do you think Oregon's deep sea has an impact on human life.

P4: Yes

KD: Why do you think that is?

P4: Like ecosystem services, so the deep sea, a lot of things happen like nutrient cycling and things like that. Like all this sediment goes to the deep sea and fits into chemical cycling and there's all this geologic cycles so it's a pretty important part.

KD: Were there parts you liked

P4: I liked the visuals because it's pretty valuable to see that when you don't normally see things like that, over just reading about it sort of thing.

KD: any parts you disliked

P4: No

KD: Is there anything that could improve your experience with the exhibit today?

P4: Uh yeah, if I could get in a submersible, go to the deep sea. Yeah, get some funding for that/

KD: Is there anything else you'd like to tell me about your experience with the exhibit today?

P4: Uh no. It's pretty informative, I like how it's locally oriented like to Oregon's deep sea. I know things about the deep sea in other places, but keeping it local is good.

Participant 5

KD: What can you tell me about habitats in Oregon's deep sea?

P5: There are a lot of animals, plants that do live in the deep sea.

KD: Did you learn anything about the deep sea that you didn't know before?

P5: Possibly, but I was familiar with a lot of the animals and creatures that live down there.

KD: Do You think Oregon's deep sea has an impact on human life?

P5: Currently? Yes, medicinal and perhaps there are other areas.

KD: Were there parts of the exhibit you liked.

P5: Yeah, this was interesting, I like this in here. I did learn some things I wasn't aware of

KD: Any parts that you disliked.

P5: No, I don't think so. Though it would be interesting, when they talk about methane and hydrothermal. When I think of methane I think of that as something that is harmful to the environment, so I find it interesting, you know it would be interesting to know what happens to all of the methane that is generated here. You know, it appears to be a benefit, so we could apply those benefits. So anyway, they could have elaborated on things like that a little more.

KD: What could have improved your experience with the exhibit today? Sounds like you got at that a little bit, anything else you'd like to tell me.

P5: No

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P5: No. I saw several years ago at the aquarium they had a deep sea exhibit, it actually made me buy a book on it. But it also featured some of the organisms you have down there. So that was interesting. I don't know whether you've done that over there, I don't think so.

Participant 6

KD: What can you tell me about habitats in Oregon's deep sea?

P6: Uh well they're dark. They're deep. Need a lot of exploration, we've just touched it.

KD: Did you learn anything new about the deep sea today?

P6: Uh yes, I didn't realize how deep it was at this location off of Oregon.

KD: Do you think Oregon's deep sea has an impact on human life?

P6: Yes, of course.

KD: Can you tell me why you think that is?

P6: Well the entire ocean does and we still don't know what the impacts are from the deep sea. What we have learned shows that it impacts the ocean and our life.

KD: Were there any parts of this exhibit you liked?

P6: Well I liked it all.

KD: Any specific elements?

P6: Hm, no I just like the ocean and all of it.

KD: Were there any parts you disliked.

P6: No

KD: What could have improved your experience with the exhibit?

P6: I'd like to see bigger and more.

KD: Anything else you'd like to tell me about your experience?

P6: I love it here, love bringing the grandkids here, I love it.

Participant 7

KD: what can you tell me about the habitats in Oregon's deep sea?

P7: They are varied, they include really interesting stuff with hydrothermal vents and so on, mud and all sorts of fascinating things

KD: Did you learn anything about the deep sea that you didn't know before?

P7: Maybe more detail about some things that I hadn't really thought about in a while.

KD: Anything in particular?

P7: I guess I didn't realize there were very many methane seeps. Having a degree in oceanography and in the 70s discovering hydrothermal vents for the first time, I guess I hadn't really kept up with what we found on the Oregon coast.

KD: Do you think Oregon's deep sea has an impact on human life?

P7: Certainly

KD: Why is that

P7: Well, because there's nutrients that are being recycled, well used in the mud flats that provide nutrients for organisms that we eat ultimately. Along with things like upwelling and stuff on the Oregon Coast that provides nutrients to the upper regions of the ocean, fisheries, and things like that.

KD: In regards to this particular exhibit, were there any parts you liked?

P7: Oh I liked it all.

KD: Anything you disliked

P7: No

KD: What could have improved your experience with the exhibit

P7: Um, I'm not sure. I would think, audio maybe would be the thing I might suggest.

KD: Is there anything else you'd like to tell me with your experience today?

P7: Oh, it's great, I'm enjoying it a lot.

Participant 8

KD: what can you tell me about the habitats in Oregon's deep sea?

P8: well they're important for everybody. All things that have to do with nature are important, fish and food, supports humans. Is that good enough?

KD: Did you learn anything about the deep sea today?

P8: A lot, yes.

KD: Can you tell me anything in particular

P8: well I didn't know all these things just existed, how deep it is, the mountains and all that, the creatures, all the other vital elements and things we get from the deep sea. Going to be a lot of future developments, I'm sure, from this information.

KD: Do you think Oregon's deep sea has an impact on human life?

P8: oh yes definitely

KD: Why do you think that is

P8: Because we have all the fish and everything

KD: Were there any parts of the exhibit you liked?

P8: Pretty much all of it.

KD: Any parts you disliked?

P8: No

KD: Anything that could have improved your experience with the exhibit today?

P8: No, it was all new to me.

KD: Is there anything else you'd like to tell me about your experience today?

P8: No, not really. I enjoyed reading about it and learning about it. Good enough?

Participant 9

KD: What can you tell me about the habitats in Oregon's deep sea from your interaction today?

P9: That there's mud, not sand, that there are vents that there are.. stuff lives down there, I don't know what else. That we can get resources, minerals and stuff and methane gas.

KD: Did you learn anything about the deep sea today that you didn't know before?

P9: I don't think so, I had vague knowledge at least of most of it.

KD: Okay, so a bit of a refresher then. Okay. Do you think Oregon's deep sea has an impact on human life?

P9: Absolutely

KD: Can you tell me why?

P9: Because everything starts one place and everything you do affects on up the food chain.

KD: Were there any parts of the exhibit you liked in particular?

P9: I liked both of the boards, I didn't really watch too much of the video.

KD: Was there anything you disliked?

P9: No.

KD: What could have improved your experience with the exhibit today? Was there anything that would have kept you around longer or drawn you in.

P9: Actually I think it's just fine. Fine the way it is.

KD: Okay. Is there anything else you'd like to tell me about your experience with the exhibit today?

P9: Aside from the fact that I find it real interesting, no.

Participant 9.5

KD: What can you tell me about the habitats in Oregon's deep sea?

P9.5: Only 3% has been explored and it's really dark down there.

KD: Did you learn anything about the deep sea today?

P9.5: Yes, I didn't know that Oregon's deep sea was so deep.

KD: Do you think Or's deep sea has an impact on human life?

P9.5: Of course it does.

KD: Why do you think that is?

P9.5: Well it provides the basic nutrients for the food chain, I would imagine.

KD: Were there any parts of the exhibit you liked in particular?

P9.5: I think it was informative to say that the oil that might be extracted is 20 days, it kind of brings to mind how our oil dependency is a big problem.

KD: Were there any parts you disliked?

P9.5: No

KD: Anything that could have improved your experience with the exhibit today?

P9.5: No, I think it was great.

KD: Anything else you would like to tell me about your experience with the exhibit?

P9.5: No, I think it was great.

Participant 10

KD: What can you tell me about the habitats in Oregon's deep sea?

P10: Well I only really know what I just saw. It's muddy. There's actually more life there than I would have expected, I knew there was life there, but I didn't know that it was that much. I know that, I guess I don't know how much there is, but geothermal vents, and that a lot of sea life gets their energy from those. I might know a couple of other things, but that's probably close to it.

KD: Did you learn anything about the deep sea today?

P10: Well yeah, I learned that there's more life than I thought there was.

KD: Do you think Oregon's deep sea has an impact on human life?

P10: Oh I'm certain it does.

KD: Why do you think that is?

P10: Just in a broad sense, there's nothing on the planet that doesn't have an impact on human life. I would imagine it probably impacts our life in ways that we collectively don't know and I am personally sure I don't know. But I am sure that nutrients come up from there and are recycled through there and we probably, the energy from the vents probably makes its way to the surface in some fashion. Those are just guesses, but.

KD: Were there any parts of the exhibit you liked in particular?

P10: Uhm I didn't spend a ton of time there, but again it sounds a little repetitive, but I liked learning that there's a whole lot more visible, not just microscopic life there.

KD: Were there any parts of the exhibit you disliked?

P10: No

KD: What could have improved your experience with the exhibit today?

P10: I'm not sure actually. If I had time to think about it, I might come up with something.

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P10: I think that covers it.

Participant 11

KD: What can you tell me about the habitats in Oregon's deep sea?

P11: I saw two pictures, one that had the sponges and one that had the cucumbers.

KD: Did you learn anything about the deep sea today?

P11: It is mostly mud.

KD: Do you think Oregon's deep sea has an impact on human life?

P11: Yeah

KD: Why do you think that is?

P11: Because what happens in the oceans affects us. We use the oceans for food and all kinds of things.

KD: Were there any parts of the exhibit you liked in particular?

P11: The screen caught my attention more than the pictures did.

KD: Were there any parts of the exhibit you disliked?

P11: Maybe the writing was, well I'm getting older, it's small.

KD: What could have improved your experience with the exhibit today?

P11: If it was more secluded instead of in the walkway

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P11: No

Participant 11.5

KD: What can you tell me about the habitats in Oregon's deep sea?

P11.5: The habitats? That they found oil and they are.. that's all I remember.

KD: Did you learn anything about the deep sea today?

P11.5: Um that the amount of oil in the ocean is enough to cover the US and 20 gallons maybe? Talked about the coral and animal life and..that's all I remember.

KD: Do you think Oregon's deep sea has an impact on human life?

P11.5: Yeah

KD: Why do you think that is?

P10: The resources, either with sea animals or the oil.

KD: Were there any parts of the exhibit you liked in particular?

P11.5: I guess seeing how everything works together to get the oil and the resources to humans.

KD: Were there any parts of the exhibit you disliked?

P11.5: No.

KD: What could have improved your experience with the exhibit today?

P11.5: Nothing.

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P11.5: Great, educational information.

Participant 12:

KD: What can you tell me about the habitats in Oregon's deep sea?

P12: There's a lot of them, there's many strange and important animals. There are coldwater corals and sponges. I didn't know we had that much coral here. There's a high variety of life, most of it living.

KD: Did you learn anything about the deep sea today?

P12: Yeah, I did. About the minerals that they're trying to harvest. And the electricity they're trying to do over there (referencing a different exhibit). They support the fishing industry.

KD: Do you think Oregon's deep sea has an impact on human life?

P12: Yes

KD: Why do you think that is?

P12: For fisheries, fishing, harvesting for food, minerals, resources. And there's something about medicine here.

KD: Were there any parts of the exhibit you liked in particular?

P12: I think the video screen, I think the video was nice, with the captions. I didn't have to listen to it, I could just read it.

KD: Were there any parts of the exhibit you disliked?

P12: No

KD: What could have improved your experience with the exhibit today?

P12: Not that I know of

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P12: It's very interesting.

Participant 13

KD: What can you tell me about the habitats in Oregon's deep sea?

P13: Oh what can I tell you about them? That it's extremely deep and there are coral beds down there, coldwater coral beds. That's pretty much all I remember.

KD: Did you learn anything about the deep sea today?

P13: I had no idea how deep the deep sea off the coast of Oregon was, by any stretch that it was as deep as it is. I learned that.

KD: Do you think Oregon's deep sea has an impact on human life?

P13: Uh I would imagine so, particularly when I was at the coast aquarium next door, learning about the California current and how there's sort of that inversion that happens along the coast, I'm sure it has a lot to do with how deep this part of the ocean is here.

KD: Were there any parts of the exhibit you liked in particular?

P13: Mostly just the panel, I wasn't really looking at the video. It was sort of just the didactic facts on it, that's what I was mostly interested in.

KD: Were there any parts of the exhibit you disliked?

P13: No

KD: What could have improved your experience with the exhibit today?

P13: Nothing that I know of

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P13: No.

Participant 14

KD: What can you tell me about the habitats in Oregon's deep sea?

P14: The habitats? Um there's a lot of thermals, there's an earthquake zone, I believe there's also hydrothermal pockets out there. Not a whole lot of life down there at the very bottom. That's kind of it.

KD: Did you learn anything about the deep sea today?

P14: Pretty much how deep it actually was, I didn't realize it was that deep. 8,700 feet. That's pretty far down there.

KD: Do you think Oregon's deep sea has an impact on human life?

P14: Uh at some point, all different areas have some sort of impact, whether it's on land or in the ocean. So it could, yeah.

KD: Were there any parts of the exhibit you liked in particular?

P14: Uh, probably just the majority of the information that was given, really.

KD: Were there any parts of the exhibit you disliked?

P14: No, it was all pretty informative.

KD: What could have improved your experience with the exhibit today?

P14: The video is pretty good, you can only see or tell so much with still photos. But you can get down there and see exactly how the movements of the thermals are and where the bubbles are. So yeah.

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P14: Nope

Participant 15

KD: What can you tell me about the habitats in Oregon's deep sea?

P15: Well I was impressed by those vents of methane. I noticed that the Japanese started mining, that's kind of worrisome I think. And well I was noticing starfish too. I knew there was life down there, but I didn't know what all. And that question about no sunlight down there, I wasn't sure about that, but I don't think there's any down there in the deep sea, is there?

KD: No

KD: Did you learn anything about the deep sea today?

P15: Yeah, just in the short time I was here, I learned that they're mining it. Well I know there's minerals in the earth everywhere. But I didn't realize we were that deep here off of Oregon. But it's very interesting.

KD: Do you think Oregon's deep sea has an impact on human life?

P15: Oh yeah

KD: Why do you think that is?

P15: Well the ocean is the biggest part of the earth and it impacts our life a lot. Way more than we realize I think. In the deep sea, well the temperature of the water, helps the life that depends on that temperature. I know it's very, very cold and we're doing all we can to warm the air, so the ocean's gotta fight that I know. That's the only thing that keeps us alive is the ocean.

KD: Were there any parts of the exhibit you liked in particular?

P15: Well, I liked all of it.

KD: What drew you in to look at the exhibit?

P15: That (points to hydrophone next to exhibit). And then I started watching and reading and thought it was really interesting.

KD: Were there any parts of the exhibit you disliked?

P15: No

KD: What could have improved your experience with the exhibit today?

P15: Well if I had more time to watch it, I'd like to look at the whole thing. And you know I noticed they asked if I wanted to follow up on anything in the questionnaire. If I can, if you have any literature that you can learn from that you want to send out, I wouldn't mind having some of that.

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P15: I don't think so. I appreciate you working with it today.

Participant 16

KD: What can you tell me about the habitats in Oregon's deep sea?

P16: Well, they're very dark. They emit energy or gases that have the potential to provide a source of energy. There are fish down there that are harvested that I wasn't aware of.

KD: Did you learn anything about the deep sea today?

P16: Just about everything I just recited there.

KD: Do you think Oregon's deep sea has an impact on human life?

P16: Sure

KD: Why do you think that is?

P16: Well I think, at the very least, we're getting food from the deep sea and I think that's the first one that comes to mind.

KD: Were there any parts of the exhibit you liked in particular?

P16: I thought the whole thing was interesting. I'm a diver so I know a little bit about the bottom of the ocean, but not much about the deep sea. So it was interesting.

KD: Were there any parts of the exhibit you disliked?

P16: I can't say that

KD: What could have improved your experience with the exhibit today?

P16: Well I was a little confused with the charts and the video. I found myself going back and forth. So it was a little bit confusing at that level.

KD: Is there anything else you'd like to tell me about your experience with the exhibit?

P16: No, I enjoyed it, thanks.

Iteration B

Participant 17

KD: What can you tell me about habitats in Oregon's deep sea?

P17: Well I know it has methane seeps and other gases that are coming up out of it. Tiny tiny microscopic creatures. It doesn't have any big plants or any big fish down there. It's all pretty murky and small. That's about all I know about it.

KD: Did you learn anything about the deep sea that you didn't know before?

P17: Yeah, I don't think I knew it had methane or anything like that coming out of it, so.

KD: Do you think Oregon's deep sea has an impact on human life?

P17: Most likely, I mean we all live on the same planet so probably. I would assume it does.

KD: Were there parts of the exhibit you liked.

P17: Uhm, well I don't think I liked anything more than the other. It was informational, that was cool.

KD: Any parts that you disliked.

P17: Uhm, no I don't think so.

KD: What could have improved your experience with the exhibit today? Sounds like you got at that a little bit, anything else you'd like to tell me.

P17: I don't think so, I don't know. No idea.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P17: Uhm, it's pretty cool. Is that down there too? *Pointing to video* Okay, because I didn't realize there was stuff that big down there. Because the video that I watched before and I didn't see that part, may have been deeper even, I don't know because he was either in the deepest part of the ocean or the next deepest part, but there was nothing down there, but dirt and little tiny floaties. So this has got more life than I knew about it, so mustn't be quite as deep.

Participant 18

KD: What can you tell me about habitats in Oregon's deep sea?

P18: We still don't know but a small percentage of what we need to know about what's down there. Fair and simple.

KD: Did you learn anything about the deep sea that you didn't know before?

P18: Yeah, I did some. Some of it I already knew, but some of it was reinforcing what I already believed to be true.

KD: Can you share some examples of that?

P18: Well it's not a topic that I study, but the fact that there are resources down there. There are rare earth elements, that's one of the things that people don't understand exist and there will be many pushes in many ways by many entities to take advantage of those when they find out where they're at. So you've got to be aware of what, where, when, and why and have mechanisms in place, not just the technology to harvest them, but to be able to control, if you will, how that happens.

KD: Do you think Oregon's deep sea has an impact on human life?

P18: Yeah, every square inch of this planet has benefits for humans. It's just a question of whether or not we're smart enough to take advantage of them.

KD: Can you think of any of the benefits that might come from the deep sea in addition to the rare earth elements?

P18: Uh, I think it will have to develop a little bit more knowledge of our own ecology if you will because you never know when we're going to find out by studying newer processes that may be taking place that we're completely unaware of, how we may be able to take those and apply them to different things that we know above the deep sea.

KD: Were there parts of the exhibit you liked.

P18: Yeah, most of it. Again, I didn't have a full opportunity to enjoy the whole thing, but I thought it was pretty straight forward and pretty informative about what was there. It's easy for people to be able to infer from it, what they see and what not, there's immense value there.

KD: Any parts that you disliked.

P18: I don't know, I considered it comparatively intuitive. But that's the whole, each person's perception is different, each person learns in different ways.

KD: What could have improved your experience with the exhibit today?

P18: Uh yeah, I'm going to finish with humor. If I had more time and wasn't chasing little grand kids around.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P18: No

Participant 19

KD: What can you tell me about habitats in Oregon's deep sea?

P19: Shoot, pretty diverse, but also relatively undiscovered. There's a lot down there we don't know about.

KD: Did you learn anything about the deep sea that you didn't know before?

P19: I learned about the oh shoot, some kind of worm. Tubeworm. I thought it was really interesting that they live so long, I imagine they're not really big creatures. That's a long time for a smaller creature to live.

KD: Do You think Oregon's deep sea has an impact on human life?

P19: Yeah

KD: Why?

P19: There are important valuable resources down there, lots of scientific discoveries waiting.

KD: Were there parts of the exhibit you liked.

P19: Nothing quite sticks out right now

KD: Any parts that you disliked.

P19: Yeah, the little questionnaire doors were a little weak. But actually it's pretty good.

KD: What could have improved your experience with the exhibit today?

P19: I'd like to know more about the tubeworms actually.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P19: Nope.

Participant 20

KD: What can you tell me about habitats in Oregon's deep sea?

P20: What I remember reading was just that there wasn't much, because there's not a lot of sunlight, so there's a lot of mud down there. But there's some creatures down there.

KD: Did you learn anything about the deep sea that you didn't know before?

P20: Just a little bit, I just peaked through it a little bit. But I did learn that there could be in the future some resources that might be extracted from there, possibly

KD: Do You think Oregon's deep sea has an impact on human life?

P20: For sure, I think it does.

KD: Why's that?

P20: Because there could be resources down there that we could try to extract from there. And also I think I read something that there's also something they can use for cancer research as well.

KD: Were there parts of the exhibit you liked.

P20: The video was really good. I thought the video was really helpful. The little flashcards, I unfortunately just like was more interested in pulling them up and looking at them, I didn't actually read that much. The video caught my attention a little more

KD: Any parts that you disliked.

P20: Nope, I think it looks pretty good

KD: What could have improved your experience with the exhibit today?

P20: Maybe something audible because I feel like I'm an audible learner. I feel like if I have to read a lot, I kind of like drift away from it, but if I can listen to it sometimes it sticks a little more.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P20: No, I think that's pretty much it.

Participant 21

KD: What can you tell me about habitats in Oregon's deep sea?

P21: Uh well they're about as deep as Mount Bachelor and there's cold water coral and sponges, lots of other animal life, but not plant life and that the mud is really important to the habitat there.

KD: Did you learn anything about the deep sea that you didn't know before?

P21: Yeah, I didn't realize how deep it was particularly in the Oregon deep sea. I hadn't thought about it as regional as that I guess. I had no idea that it got that deep so quickly, well not quickly but so close to the coast.

KD: Do You think Oregon's deep sea has an impact on human life?

P21: Absolutely.

KD: Why?

P21: One, commercial fishing is a big part of that. I have a friend who used to be a commercial fishermen and so, but also just there's so much we don't know about the ocean and the resources there and how life survives in those areas and it can tell us a lot about what's going on above the surface. Even things like temperature change and all of that fun stuff that's scaring the crap out of all of us.

KD: Were there parts of the exhibit you liked.

P21: Yeah, I found the boards really informative, I didn't watch much of the video, but it seemed interesting. But I'm one of the people that reads all of the signs

KD: Any parts that you disliked.

P21: No, it was a great exhibit.

KD: What could have improved your experience with the exhibit today?

P21: When it gets mounted to the walls, I'm sure that will improve people wanting to engage with it. I did notice the easels and I was like, oh that's weird.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P21: No I thought it was great.

Participant 22

KD: What can you tell me about habitats in Oregon's deep sea?

P22: So I know there's mud in the deep sea. I also believe there's coral and canyons and stuff like that in the deep sea.

KD: Did you learn anything about the deep sea that you didn't know before?

P22: That plants don't live down there because there's not enough sunlight. So I thought they did, but they don't.

KD: Do You think Oregon's deep sea has an impact on human life?

P22: Yes

KD: Why?

P22: Because I think everything on the planet has an impact on human life.

KD: Is there anything specific?

P22: No, I just think it all has to work together

KD: Were there parts of the exhibit you liked.

P22: I mean it was pretty instant, like you could read the question and get the answer at your pace. The video, if it was just like a video that answered the question right away it would have either been too quick or too slow, so I got the answers right away with lifting the box.

KD: Any parts that you disliked.

P22: No, it's nice.

KD: What could have improved your experience with the exhibit today?

P22: Nothing I can think of

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P22: No, I liked all of the exhibits here, so I thought that was a good exhibit as well.

Participant 22.5

- Did not do full interview, did not allow me to record. She said she has strong feelings about how the oceans should be used and the presentation seemed to be putting a positive spin on exploration and exploitation of humans. The exhibit did not seem balanced between exploitation and the detrimental impacts it has.

Participant 23

KD: What can you tell me about habitats in Oregon's deep sea?

P23: Well I think they're very diverse and they're a lot of them and watching the video it really helped me learn more about what there is in the deep sea because before this I had little to no knowledge

KD: Did you learn anything about the deep sea that you didn't know before?

P23: Yeah, I mean I didn't really think there were corals. I knew there were hydrothermal vents and like methane vents, but not really much life or anything like that.

KD: Do You think Oregon's deep sea has an impact on human life?

P23: Yeah, I think it does. I don't think it's very sustainable all the time, but I think we can benefit.

KD: Can you think of any specific examples?

P23: Well I saw in the video that there was some oil that was being collected and there's a lot of minerals like gold, copper, etcetera.

KD: Were there parts of the exhibit you liked.

P23: Well I mean there's a lot of good information that should probably be spread.

KD: Any parts that you disliked.

P23: I did start watching the video in the middle, but other than that there's not much I think I disliked

KD: What could have improved your experience with the exhibit today?

P23: Uh I don't think so.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P23: Nope.

Participant 24

KD: What can you tell me about habitats in Oregon's deep sea?

P24: They're deep, beyond 650 feet.

KD: Did you learn anything about the deep sea that you didn't know before?

P24: Yes I did. How the deep sea benefits me.

KD: Do You think Oregon's deep sea has an impact on human life?

P24: The fisheries, medicine, methane seeps.

KD: Were there parts of the exhibit you liked.

P24: I liked all of it

KD: Any parts that you disliked.

P24: No, nothing I disliked

KD: What could have improved your experience with the exhibit today?

P24: I don't have any suggestions at this time.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P24: I really liked the survey on the ipad, that was cool.

Participant 25

KD: What can you tell me about habitats in Oregon's deep sea?

P25: They're muddy, they're dark, and there's a lot of life. Coral and octopi and I'm blanking. There are fish. There's a lot of life down there.

KD: Did you learn anything about the deep sea that you didn't know before?

P25: Yes I did. That there are corals that are living to 1000 years old. Also the fact that there are minerals that could be mined for industry, because Japan is doing that themselves.

KD: Do You think Oregon's deep sea has an impact on human life?

P25: It does because they get fish from there.

KD: Were there parts of the exhibit you liked.

P25: I like the way it's presented. I also like the hands on questionnaire. I think that's very fun to play with.

KD: Any parts that you disliked.

P25: No. Except for the light that's glaring down on the exhibit so it's hard to read.

KD: What could have improved your experience with the exhibit today?

P25: The light being moved

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P25: Nope.

Participant 26:

KD: What can you tell me about habitats in Oregon's deep sea?

P26: So there's hydrothermal vents, there's canyons and seamounts, and there's also coral reefs and so there's lots of life down there, like the crabs. There's also sea pigs. There's also lots of bacteria, so the anaerobic metabolism I think it was talking about with the methane seeps and all that and hydrothermal vents. And there's lots of mud.

KD: Did you learn anything about the deep sea that you didn't know before?

P26: Well I sort of knew about the hydrothermal vents, so I thought it was cool to learn more about the methane seeps and how the bacteria uses like the anaerobic metabolism and all that and how we get minerals and stuff from the deep sea.

KD: Do You think Oregon's deep sea has an impact on human life?

P26: Yes

KD: Why?

P26: Because there's an upwelling system, so I know that, like everything that happens down there, there's lots of nutrients so it all gets brought up that continues like the food web and food chain and all that.

KD: Were there parts of the exhibit you liked.

P26: I really like the questionnaire. It was like did I know this before? And if you didn't you got to learn about it. The video was pretty cool.

KD: Any parts that you disliked.

P26: No I thought it was, I liked it all.

KD: What could have improved your experience with the exhibit today?

P26: Uhm, I want to say no. Yeah, I thought it was, it was a pretty good set up. You weren't thrown with a lot of reading, it was like little short paragraphs to read. Which made it easier to the eye, more appealing.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P26: I think it's really cool what you're doing and would also be really cool to learn more about. So maybe expand on it I guess.

Participant 27

KD: What can you tell me about habitats in Oregon's deep sea?

P27: Oh it's flat and it's muddy.

KD: Did you learn anything about the deep sea that you didn't know before?

P27: Yes I did, I learned a lot about it. They provide methane seeps which are important for microbiomes and that's how they feed off of it. Also fisheries they could be a good thing for fisheries and for the US to get oil for 20 days.

KD: Do you think Oregon's deep sea has an impact on human life?

P27: Yeah

KD: why?

P27: To provide more research and questions about how the history of deep sea and the future and how they can affect humans, how we can benefit off of them and they can benefit off of us.

KD: Were there parts of the exhibit you liked.

P27: I liked the video, I learned a lot from the video. It's very interactive in a way that you can see what's happening down there. Something I thought that was interesting off of the video was a lot of the life down there, it's flat so it's weird a lot of the fishes down there instead of hiding in corals they're kind of just distributed across the ground.

KD: Any parts that you disliked.

P27: No

KD: What could have improved your experience with the exhibit today?

P27: No

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P27: No

Participant 28

KD: What can you tell me about habitats in Oregon's deep sea?

P28: Oh, mud, maybe some thermal vents, some canyons potentially.

KD: Did you learn anything about the deep sea that you didn't know before?

P28: I did, about the potential uses for it. Likely what controls might need to be put in place

KD: Do You think Oregon's deep sea has an impact on human life?

P28: Oh yes

KD: Why

P28: Well what we may be able to use it for definitely will have an impact. Right now it's great for research to learn more about it. Maybe it's at the beginning or inception of deep sea research.

KD: Were there parts of the exhibit you liked.

P28: I actually, I do like the, oh I'm looking now, seamounts and canyons. I always like the visuals, they add a lot to it. And then if you want for information, the poster boards are always good.

KD: Any parts that you disliked.

P28: No not really

KD: What could have improved your experience with the exhibit today?

P28: on this particular one? Maybe as research progresses some additional information on the actual research that's going on would be kind of interesting.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P28: No, I thought it was great. I liked a lot of it. I live here, but I'm still learning things.

Participant 29

KD: What can you tell me about habitats in Oregon's deep sea?

P29: Honestly, I skimmed over those and didn't retain a whole lot, other than there were seamounts and canyons that nutrients is brought to the surface is what I remember.

KD: Did you learn anything about the deep sea that you didn't know before?

P29: No, I had a general knowledge of it. I did learn that most of our, maybe it wasn't the deep sea, that most of our offshore is mud, which I didn't know before.

KD: Do You think Oregon's deep sea has an impact on human life?

P29: Absolutely

KD: Why?

P29: Well the, it provides for, the ocean is a big filter for the environment. It cleans out impurities, it cleans out carbon dioxide, or absorbs carbon dioxide, it controls the weather, our temperature, our environment on land. As well as food source, we need to preserve what's there so it's there for generations to come.

KD: Were there parts of the exhibit you liked in particular.

P29: It was informational, I learned something I didn't know. Specifically, I didn't realize it was mostly mud off the coast of Oregon.

KD: Any parts that you disliked.

P29: Uh no, I wouldn't say I disliked it.

KD: What could have improved your experience with the exhibit today?

P29: Maybe more pictures.

KD: Anything else about your experience with the exhibit you'd like to tell me today?

P29: No, I think that's it.

Iteration C

Participant 30:

KD: what can you tell me about the habitats in Oregon's deep sea?

P30: It looks pretty vibrant, there's a lot more down there than I expected. I'm a scuba diver, so I spend a lot of time in the not-quite-so deep sea and I didn't realize it was quite that populated down there.

KD: Okay, so did you learn anything new about the deep sea today?

P30: yeah, what I just said.

KD: Do you think Oregon's deep sea has an impact on human life?

P30: oh absolutely.

KD: Why do you think that is?

P30: Well it's part of the whole ecosystem, it's all intertwined. It's part of the system. A huge impact, I'm sure.

KD: were there any parts of the exhibit you liked in particular?

P30: I liked it, I liked the live. I liked most of it. I liked the explanation, I liked the mini tour through the deep sea. I liked most of it, yeah. It's a neat exhibit.

KD: were there any parts you disliked?

P30: Just the commercial development of it

KD: What could have improved your experience with the exhibit?

P30: I think it was great the way it is.

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P30: I learned something, it was neat.

Participant 31:

KD: So what can you tell me about the habitats in Oregon's deep sea?

P31: Well, uh there's no light down there. There's a lot more nutrients and stuff down there than we think. It's got a lot of gas and stuff down there, hydrovents, and things like that. I don't know.

KD: Okay, so did you learn anything new about the deep sea today?

P31: Yeah, there's more life down there than I thought, I thought it was more dead.

KD: Do you think Oregon's deep sea has an impact on human life?

P31: Uh not really.

KD: Why do you think that?

P31: I think it's a world down there by itself and I don't think it impacts us too much.

KD: were there any parts of the exhibit you liked in particular?

P31: Uh, the video kind of showed me pictures of stuff and it's easier to retain it when you see it and see actual animals and stuff going on down there.

KD: were there any parts you disliked?

P31: Not really, no.

KD: What could have improved your experience with the exhibit?

P31: Didn't understand some of this over here, like in the services. What it's talking about, like 65% of the... I didn't understand what they were talking about there. Could have been explained more.

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P31: Not really.

Participant 32:

KD: So what can you tell me about the habitats in Oregon's deep sea?

P32: That it, well uh, the different things there, like the vents, the mud, the something else, like the fissures? Like different things that exist there.

KD: Okay, so did you learn anything new about the deep sea today?

P32: Let's see, not that I don't think I didn't already know.

KD: Do you think Oregon's deep sea has an impact on human life?

P32: Uh yeah

KD: Why do you think that?

P32: Just cause of the source of food there, seafood.

KD: were there any parts of the exhibit you liked in particular?

P32: Not more than any other exhibit.

KD: were there any parts you disliked?

P32: Not more than any other exhibit.

KD: What could have improved your experience with the exhibit?

P32: Uh probably if I were to take the time to watch the whole video. How long is it?

KD: about 3 and a half minutes

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P32: no

Participant 33 (gave answers by speaking to her daughter)

KD: So what can you tell me about the habitats in Oregon's deep sea?

P33: Do you remember what habitats are? Like places where animals can live. So do you remember what was over there? There was canyons, cold water corals. *Daughter answers* You don't know very much about them yet? *Daughter answers* So like what do they have to have? So like deer couldn't live in the water right? So they have to have the right kind of food and the right kind of housing, so like fish can't live out of water right? *Daughter answers*. Eels can't live out of water, sharks can't live out of water. So their habitat has to have water and the proper food and the proper homes, right?

KD: Okay, so did you learn anything new about the deep sea today?

P33: *daughter answers*. What did we just talk about? Plants can't live under there because there's no sunlight.

KD: Do you think Oregon's deep sea has an impact on human life?

P33: Do you think the ocean impacts us at all? *Daughter answers*. So if we didn't have the ocean, do you think we would still be able to live the same? Why not? *Daughter answers*. There wouldn't be water, or do we eat anything out of the water? *Daughter answers* We wouldn't be able to eat salmon or crab or all of the stuff that comes out of the ocean. *Daughter answers*. Yeah, it wouldn't give us the experience and excitement of being able to come to the coast.

KD: were there any parts of the exhibit you liked in particular?

P33: *daughter answers* What would you do different? *Daughter answers*. Octopuses or maybe pictures, different pictures so that younger kids can understand it a little more because I kind of had to read most of it to you and explain. So simpler words maybe.

Participant 34

KD: So what can you tell me about the habitats in Oregon's deep sea?

P34: They are very diverse, I mean I can tell you a lot. There extremely different than other areas of the ocean.

KD: any examples of what's down there?

P34: I was fascinated by the fact that there are methane, what are they called? Vents? And cold water coral? I didn't know there was cold water corals and the mounds, what are they called? Sea mounds?

KD: Okay, so did you learn anything new about the deep sea today?

P34: All the things I just told you

KD: Do you think Oregon's deep sea has an impact on human life?

P34: Yeah absolutely, because it sounds like from what I heard about the methane vents, that helps with like global warming and uhhh I can't remember. There was so much to learn!

KD: were there any parts of the exhibit you liked in particular?

P34: I thought the photos was really good, I thought the wording was really concise and I learned a lot really quickly. I thought the slide show was really good

KD: were there any parts you disliked?

P34: no

KD: What could have improved your experience with the exhibit?

P34: more photos

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P34: I don't usually take that much time to read the whole thing so it really grabbed me immediately, it was really good.

Participant 35

KD: So what can you tell me about the habitats in Oregon's deep sea?

P35: It's really dark, muddy, there's apparently life down there.

KD: Okay, so did you learn anything new about the deep sea today?

P35: Well all of those things. I've always wondered what's down there. It's always been like a blank spot in awareness and what not. So it was neat to have the visuals rather than just hearing the information

KD: Do you think Oregon's deep sea has an impact on human life?

P35: I believe it does. How exactly that is, I couldn't really tell you, but I just feel like since living out here, it's been recognizing how everything is connected. When we have like the red tide and stuff, is that, does that come from the deep sea?

KD: Yeah, so there are issues with low oxygen in the ocean being brought to the surface and that causes a lot of problems.

P35: Yeah so just seeing how that effects the living things along the coast and the birds and everything that feeds off of that and us too, the cycles.

KD: were there any parts of the exhibit you liked in particular?

P35: Yeah, like I said, I liked the visuals and the information along with it. I felt like I had a chance to dive down and go see. You know, I really like lingcod, so it was kind of nice to see. Have more of a connection in that way and yeah, I mean I think the little flip over interacting thing was cool too. It's always nice to have something, some hands on feature

KD: were there any parts you disliked?

P35: I kind of wish there was more, more information. I wanted to keep going.

KD: Is there anything in particular you wanted to learn more about

P35: Uh I'm not sure. It made me more curious I guess. (Later came back to tell me he was interested in human impacts)

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P35: Well, that I guess if you guys end up redoing it, I'd definitely come back and interact with it again. And yeah, I guess that's really it.

12/16

Participant 36:

KD: So what can you tell me about the habitats in Oregon's deep sea?

P36: Oh gosh, the habitats. Well there's coral and fish and things we don't even know about.

KD: Okay, so did you learn anything new about the deep sea today?

P36: I'm not here to learn deeply today, uhm but it's always interesting to have more pieces of it. I don't think of coral as being in Oregon, but it's nice to know that it is there. I didn't realize it was as deep as it is, close to the shore. So that was definitely new.

KD: Do you think Oregon's deep sea has an impact on human life?

P36: I'm sure it does, but everything impacts human life.

KD: Can you think of anything specifically in the deep sea?

P36: We eat a lot of food from the sea, so that specifically is important.

KD: were there any parts of the exhibit you liked in particular?

P36: The photography is good, I liked the clear pictures.

KD: were there any parts you disliked?

P36: Not specifically no.

KD: Is there anything in particular you wanted to learn more about

P36: No, I think it was good.

KD: Was there anything else you'd like to tell me about your experience with this exhibit today.

P36: No.