

## Tech in Field- Process Evaluation

Group 1 8/3/22

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Interviewer: And so, my face real question is about you know you've been out on fieldwork all week so far, during your fieldwork how do you know that learning is happening? And how would you guys capture your learning during fieldwork?

TiFPE C: Interesting question. For me, like, I think I'm learning, I was saying this earlier, I think this was to <External person 1> earlier, TiFPE A was there, is if I feel challenged by something. Being uncomfortable because you can do stuff like you know how to do it, it's good, its easy, its comfortable, as happy, you are having a good time, like I don't feel I learned a lot. And so, when I am out of my comfort zone, struggling with something, not struggling but being challenged then I feel like I've learned something and then upon reflection got to push myself to do that to learn. What was the other part of that question?

Interviewer: How would you know learning is taking place, and how would you capture that learning.

TiFPE A: I feel like for me, I don't usually know until we're done. Because I feel like in the field, you don't often have like enough one to one you just kind of left to go off and then it's not until you get back and be like all like; "Oh my data is not correct." Or something like that, but you don't realize like for me, me I don't really know that learning is happening.

Interviewer: So, it's almost afterwards in some form of assessment.

TiFPE A: Yeh

Interviewer: That's when you know learning has happened.

TiFPE B: I mean I'd say that, like when I like learn something usually, when like I'm comfortable enough to, if someone comes and asked me like. "Oh what have you done there like?" If I'm comfortable enough to like explain something or maybe talk someone else through it and that's when I feel like I've learned at like, engaged with the whole situation feel comfortable like teaching, not teaching, but like kind of helping someone else with it.

TiFPE C: And I would say the same thing. Sharing the knowledge, as you vocalise it again, that's helpful.

TiFPE B: Solidify it as well.

Interviewer: Do you use field notebooks out in the field?

TiFPE A: I do to like to write literally the recorded data down, and even then like sometimes if the weather is bad or something like you just end up with soggy paper.

TiFPE C: Yeh doesn't really work.

TiFPE A: Yeah, you just end up putting it in like just a notes app.

TiFPE C: Your app is the first time I've used something like that for something else other than the data.

Interviewer: You're just recording what you have been told to collect? And have to collect.

All: Exactly, yes.

Interviewer: And TiFPE A you were talking a little bit about using notes on your phone already, is there any other way, which might use your mobile phone during fieldwork?

TiFPE A: well, I like to take photos for like, they're usually not useful. But that from the APP like and I know that's kind of jumping ahead, but I like enjoyed taking photos of actual fieldwork. Yeah, I usually just take scenery pictures and be like, "Oh yeah this is where I was." But yeah, that's the only other thing and then just the notes app, recording data.

TiFPE C: But if I find something really cool, I will take a picture of it.

TiFPE B: Like the nudibranch. Taking photos right stuff that's cool. Right, so not thinking too much about it just taking those photos but never like going back and looking at them again. Sometimes notes for data collection, things like that.

Interviewer: What about any apps? Do you use any apps to support you in the field?

TiFPE B: Snapchat.

**<All: laughter>**

TiFPE A: No, like like I've never thought too it's always like recorded on paper or like roughly on notes, yeh.

TiFPE B: Yeh literally.

Interviewer Interesting and have you had any information from your lectures about field notebooks and what you should be recording out in the field?

TiFPE A: Not really, we kind of just obviously get set with the task, and then we kind of know that we have to draw a table or something, yeah.

TiFPE C: And yeah that's basically what we do.

TiFPE A: Yeh that's basically what we use it for.

TiFPE B: But it does sound like we are like, not the bare minimum but we're doing what what we need for the specific tasks like it's very like like focus like focused and narrow. In the sense that, like we don't actually do much of what's actually there it's more like we need to get the task done.

TiFPE C: It would be nice to have a bit of freedom, I think that the stage we're in like it feels like we are being very babied. So, you got to do this, they know what they want us to produce, why do we need to get it, it's organized. The freedom to be collecting some other data around this. Like there on the field notes nothing was limited and you need someone to say like like collect more data than you think you need, just so you can use it even if you don't need it. Means and ranges are nothing like extraordinary.

Interviewer: And can you reflect on any ways that either yourselves or other lecturers have kind of helped you explore the wider significance or or the point of what you're doing ultimately in the field? Or connecting it to some broader concepts?

TiFPE B: It depends on the lecturer I think it's rarely talked much outside of it. Partly, like maybe my friends who don't do my course I'll explain it to them and explain why it was important that we collected that data, but apart from that explaining to people who aren't on the course. Or unless like if they don't ask, like there's no reason why I'd like look back on it, but I guess it depends like sometimes the lecturers that are out there, like will ask you more like prompting questions and kind of help you. But yeah, again it depends on people.

TiFPE A: Yeh like I think it depends on if we get that like interaction with the lecturer while you're out like sometimes you can just be left to your own devices, if they do come over, then you often end up having a chat about it. Yeah or it's like really roughly mentioned like; "Oh, this is part of this module and it's linked to this." But then you can't remember what's in that module, so you kind of ignore it. Just ignore it and you just focus on that one thing, rather than like holistically like that kind of thing.

TiFPE C: We were speaking to <External person 1> today and he said that like the wider context in the end see it's considered if you get a consultancy job you appreciate not just the data collection but what is going on behind the scenes. Like the preamble and what not, the sampling and the data analysis. He was talking about like employability and stuff which is what we need someone to start talking about, especially if they know exactly what we need to get into it, so they know what we need.

Interviewer: And those conversations that you talked about that happen with your lecturers in the field, are they useful? Should they happen more? Should they be more structured?

TiFPE A: I think yeh, maybe not more structured.

TiFPE B: Yeh I was going to say probably the opposite. I think it's a lot more helpful when it's kind of, it's quite hard for it to happen naturally between the lecturer and everyone on the course. But at the same time, like if you're being forced to listen to it that's when it doesn't necessarily. It's quite nice sometimes to just have it as more of like a casual conversation with them in the field so then like you, actually like interested in going out of your way to learn and then they're actually, like they're more excited to tell you, because, like you showed an interest in what they actually do.

TiFPE C: On a sort of selfish note, the ones who are on the course who don't care, the ones who don't want to get that experience. You put in that extra work to go and chat to them and spend that time with them. Then you should benefit from that. Useful to have more of a chance to do that, if they spent more time, hanging about but as soon as it becomes structured it becomes a chore.

TiFPE B: Like you don't even have to be like the one asking the questions and stuff like that, as long as like you're like interested you want to hear more, like someone else starts, like that's really helpful.

TiFPE A: Yeah.

Interviewer: Yeh because I think that's an interesting reflection isn't it because, if you're confident to go and speak to your lecturers. You can perhaps ask those questions. But if you're the learner who isn't confident to go and ask questions to the lecturer but there's still value you're saying in just listening to what other people are saying.

TiFPE B: There might be something that you wanted to ask or wanted or either like something you wouldn't have thought of, but now you're like, "Oh, now that's made me think."

Interviewer: Explore it a bit more.

TiFPE C: Although some, sorry go on.

TiFPE B: I was going to say like, I dunno, maybe there can be like it seems more structured but like some sort of like flexibility in the time when you're out there. So, they can account for like not having to like just be focused on getting it done as soon as possible.

TiFPE A: Hmm yes.

TiFPE B: And, like actually being able to like go and ask them questions or go and do your own thing, like but if there's like some sort of time pressure, place to be.

TiFPE C: There's like not much hanging about, like some of the lecturers, I know what you mean, I don't like that structure that rigidity takes out the value of it. Like today when we were chatting to <External person 1>, he was just naturally in his element, and obviously in lectures he's so often stressed, so it's like I can't really ask that now. Having it structured sometimes makes it more rigid from their side and our side.

TiFPE A: Yeah.

Interviewer: And I, and I guess, as well as that I'm just thinking back about some of the work that you might have done with like your qualitative feedback observations at Cullercoats. Dredge your mind back to those but maybe having the space and time to do those in the field when you get there, would those type of things be useful do you think?

TiFPE A: Yeh maybe just coming to an actual like before we just all rush out and like like you're saying before like because, I feel like we're stuck to a time frame. Where I must get out, get the data. Whereas I feel like if we got there and right, right, what are we actually doing.

TiFPE B: Like quite often we literally have just enough time. But barely enough time to collect the bare, literally the bare minimum to get the data that they want us to get. And I it just means that like you're just so not like literally you don't think of anything else I think. How how many are there? 123456. Write that down, move onto the next one.

TiFPE A: It also makes you like miss things as well because, like on the shore like lecturers be like "Oh, and that parts got like seaweed and what do you think of that?" And you'd be like, "Oh I didn't even look at that." Or like, like the boulders today with <External person 1> where he was like, "All like have a look." And like my eyes, I was literally seeing like sea and sand but like as we explored it a bit deeper and like had a look before we started. To look before we started it was quite, it was easier afterwards to write about it. Yeah.

TiFPE C: I think like being here in Millport, where we get like a day to do the whole task. And then, but then it's like you're free to sort of come and go and do, how you like. I think that's more beneficial is, and you are, you actually care a little bit more about the work you do, as you get more into it. And then, then you can have the chance to chat to lecturers, you're not stressed, they're not stressed. I've got more out of this week.

TiFPE B: I reckon it will show in the marks, in the marks we get as a percentage it'll show by comparison maybe not in everything because some of them, some people will find it more

challenging than others. But I reckon if you average out the marks that people got here, it'll probably be better where they have just got the time slot to do it and just get it done and get it in.

Interviewer: Lovely, thank you and I guess thinking about the app that you've been using and your kind of understanding of it, how have you found it? Did you find any of the questions were more or less kind of useful in helping you think about that wider significance of what you were doing?

TiFPE A: I think the landscape questions was quite useful because, like, I was saying before, like that was a kind of look what is around, and then there was a question about like how has it changed like in, and you can obviously be like; "Well people live here now probably rather than before." But yeah, just made me think more about the whole area rather than just here are my snails, here is my seaweed, because yeah, head down kind of thing.

TiFPE B: I feel like some of the questions actually like make you think, as opposed to like, like I was saying, most of the stuff that we do is like so focussed that you don't, you don't even have time to like think about why you are doing it? Or like what's actually going on? Like sometimes you don't even know what's causing the data that you've got. So, like it's really good in that regard, to like help you I dunno analyze stuff that you won't see when you're back in the lab, recording your data and stuff.

TiFPE C: And I agree but like doing that, like it's a bit too much effort in a way. Like it felt was very rigid, you have to do this, so maybe like if we discussed some of the questions before about the landscape so more things before we went out in the field then got that as part of our data, I think that would be a bit better. Because like me, it felt a bit rigid, getting our phones out and doing it. Like what am I getting from doing this? Like if I'm being honest out in the field, I wouldn't want to do that, like get my phone out. Like I don't mind writing stuff down if I know it will be relevant later on. But maybe its drilled into us that you shouldn't take them out in this kind of environment, weather and all this kind of stuff.

Interviewer: So maybe better connecting the actual task with those notes. Not having them separate. But better connecting them.

TiFPE C: Yeh.

Interviewer: That's something for me to take, thanks.

TiFPE C: Yeh. Like it was two separate tasks really. Like we were doing the data, then we were doing that which obviously you couldn't help or control.

TiFPE A: You had set questions from the lecturers.

TiFPE C: Yeh.

TiFPE A: Oh yeah and maybe if they came around.

Interviewer: Yeah that is true.

TiFPE B: I felt like some of the questions were a bit weird, when they were like; "How does it make you feel?" I was like hmm. Yeh like it felt like I was in therapy or something.

Interviewer: They are different questions.

TiFPE B: It was like very left field. I was like it makes me feel cold, because it's freezing. Yeh, it makes me feel like, yeh I mean I dunno, I don't feel like that question would help, that's more like personal reflection as opposed to maybe specific like helping you with regards to what you are doing.

Interviewer: Yes, almost that separation, that you're finding the stuff that is related to fieldwork tasks was useful and potentially the stuff that's much more I guess the personal reflection or the wellbeing aspects was kind of less useful to you in the field?

TiFPE B: Yeah, yeah, it just felt like it felt like a bit disjointed that I answered one where it was like; why is this landscape changed? This and this. And then like how does it feel? How does it make you feel? And it's just like it's like I'm like answering two completely different like probably like not not arguments for like very different things. That's a bit yeah, it's a bit hard to flip from one to the other. I don't think I'd ever do both at the same time.

TiFPE C: I think some of them were a bit irrelevant to me not being mean at all.

Interviewer: It's not about being mean, this is helpful.

TiFPE C: Like emotions, this is nothing to do with the work. But it is something to think about for yourself. I don't really, it wasn't anything special, my life didn't change.

TiFPE B: Yeh it was brown algae on a rocky shore.

**<TiFPE C: Laughter>**

TiFPE B: So I wasn't like, "Wow!"

Interviewer: So connecting with your emotional literacy was tricky.

TiFPE B: Yeah yeah yeah. I wasn't like, my life didn't change when I saw some *Fucus vesiculosus* on the rocky shore.

**<All: laughter.>**

Interviewer: Are you sure?

TiFPE B: Well, I can name that one.

Interviewer: Winner.

TiFPE C: It just seemed like, I know that's your speciality in mental health and stuff so it makes sense but I didn't really see the place for it there. But maybe there is. Obviously, everyone is different, but for me.

TiFPE B: I guess like that there is probably a way it could be done. I just don't know what that is because it just is it seems so simple, I understand the importance of it, they just seem very separate to the task at hand. And it seems like going out of your way lots to discuss stuff that quite a lot of people probably don't even feel comfortable about discussing.

TiFPE A: So, I feel like for some people like you're more of a negative person, I'm not sure if that's the right way to say it. But I feel like it would help maybe uplift you a little bit. I don't know if you could sit and put a value on something like, "So does this make me happy? Or does this make me sad?" Or whatever I feel like I'm quite a positive person already so like I'm always like "Woah!" To everything. And so I don't think I really need that either, yeah I can see how it might help like some other people like kind of organize their thoughts and emotions.

TiFPE C: Yeh like it can go either way. Like if someone was reading that, how does it make you feel? Like I don't feel anything. Why don't I feel anything about this?

Interviewer: What about some of those reflection questions that asked you to think about the knowledge that you gained or the skills that you were looking at? Were those useful, less useful?

TiFPE A: Right so those I think, because I tried to fill them in while we were doing the task which obviously, I hadn't really properly thought about all the skills. Well yeah I feel like if I filled them in afterwards they would have been more useful, more detail.

TiFPE B: Like maybe after you have done the tasks associated with it, and like then you can look at the big picture. It's quite hard to like whilst you're in the moment.

TiFPE C: Before you have had the chance to be tested or speak to other people. You don't really know what has gone in.

TiFPE A: I think it was just the timing of when I did it.

Interviewer: So actually, the questions are important as in what they are. But actually, when that reflection happens as well within your day in space to do that.

TiFPE A: Yeah.

Interviewer: And, and then I guess some questions related to suggestions I asked for improvements. How would your experience of using say technology in the field, such as the APP be improved?

TiFPE B: I feel like it's quite a hard one. Because like it's quite like what TiFPE C and I said we actually don't use stuff in the field, other than like if we have to record numbers for data so I think to do suggestions on that. So I think one of the strengths are it was like, well it's maybe not I don't how to say it? Maybe doesn't associate so much with the field, but more like if there was some, more like interaction with the photo part. So like, so when you take a photo kind of does it, and it just goes to the top menu and you have questions. But if there's more like interaction maybe you can start pinpointing somethings you have seen in the photo. Well like highlighting stuff and then like kind of, I don't know, I I hear is like making points on on the thing and I guess like more interaction with the thing. So, you like just take the photo.

Interviewer: So, like some form of annotation or hot spots within the photo but still having those kind of geolocated.

TiFPE A: I think one thing I was thinking about was maybe having more multiple-choice questions so it's like we could complete quickly.

TiFPE B: Less of a hassle.

TiFPE A: Or like you know with the personal reflections ones, maybe more, you could have like a smiley face system.

TiFPE C: Yeh yeh.

TiFPE A: Yeh like happy or sad.

TiFPE B: So, lots of people might actually not say how they feel or say what they are thinking. Even with, maybe well definitely with those questions like even with the other ones. Like it's quite,

it's quite, some people find it quite hard to express themselves in words. So like maybe like there's some sort of prompt there or something, some sort of scale.

TiFPE C: Yeah. I think about for me, I don't know how applicable for me as for feelings I don't like getting my phone out. You might drop it. Or your hands are wet, and it's cold. But if it had some kind of element, where you could link it back to your phone or computer when you get back. Then you can go in and edit, and sometimes retrospectively you'll have more to say than you do at the time. But maybe like a voice element. "I'm getting blown around." Say how you feel, and then you can go back.

Interviewer: So, like voice notes.

TiFPE C: Yeh I think that would be good.

TiFPE A: So, I think if you're not in that location, you can still put them in.

TiFPE C: Yeh. You can do it from memory. But actually, getting the phone out not access to the app itself was challenging. But it would be good to be able to engage more with other people. Because it's just yours then. But it would be cool to see what other people said about it, how everyone's like links together, but I think that would be quite cool.

TiFPE B: I'm no expert, but I think there could be, instead of having to answer all the questions in the field like as well as the photo, I don't know a video aspect would work or some sort of way to record surroundings rather than one snapshot. It may be the case of more photos or a panoramic, or a video or something. But something to sort of link, helps with what TiFPE C is saying. Again, in the field it's sometimes like pissing it down with rain, it's windy and it's cold and your hands are getting freezing, and it's hard to type. It sounds pathetic but like it's like what being in the field is like.

Interviewer: And so, thinking about that app in particular what other ways, could you use it or how might you use that app?

TiFPE B: Like outside of marine biology.

Interviewer: No within your fieldwork. Bearing in mind the questions you can change questions to anything. So that the purpose of the APP is you have maps and you can add information to your map.

TiFPE B: Yep.

TiFPE A: Say maybe an option to be like where you can draw a table. I know that's kind of what another app could do in the Field Notes section. Like obviously you can take a picture of your paper. But then I feel like that defeats the point if you're trying to use an app and you've got paper. So, if you could put, like all of your field work notes on to the table there that maybe roughly that would be good.

Interviewer: So that's like digital at point of capture. So, you could put your I don't know your salinity measurements your whatever measurements today straight into there.

TiFPE C: Do you use like Strava? Or Map My Run? I mean something like that would be sick. Especially if you're out on the rocky shore seeing where you went and stuff would be really cool.

Interviewer: So rather than points, having your tracks, do you think?

TiFPE C: Yeh track it along your way.

TiFPE B: And gradient.

TiFPE C: What?

TiFPE B: You know.

Interviewer: So like elevation, whilst you're out. You can collect some data in that sense.

TiFPE B: Yeh or some sort of like mapping, but in a different way in terms of relief.

TiFPE C: Yeh that would be a cool feature to look back on. Because in terms of looking back, I haven't looked back at what I did, but it would be cool to see where I was, where I walked. And what I did when I was there. The pictures I got when I was there, the little video clips whatever. Think that would be quite useful.

Interviewer: Were there any barriers in using the app?

TiFPE A: I think it was just once again the err just the elements and having to use your phone out.

TiFPE B: And if your phone gets wet it's not very useful.

TiFPE A: And you're just trying to get it done, and I feel like that's where you rush it and if it's meant to be reflective and you shouldn't probably rush it as much but yeah.

TiFPE C: That's not really the app.

Interviewer: No no, but it is in using the device in the field.

TiFPE C: But when you're like on the app. It's a bit clunky to get back to the Millport map. And obviously if you were using it properly you wouldn't have loads of maps. But just a map with your current location, this is where I am, then it loads up an OS map. Erm and then, maybe it's a bit clunky with all the options, then you've got to scroll through all the questions.

TiFPE B: There is a bit where it says recent maps.

TiFPE C: Ahh yeh, that is true. But when it's cold, you would want it just to be there. Maybe that's me being picky.

Interviewer: No no, it's all really useful, because there's loads of ways you can display it. And ultimately, the trial is about trialling everything.

TiFPE C: Yeh yeh

Interviewer: And then it's working out which bits are really useful and why they're useful and which should take priority and what we're going to lose those type of things, so all really useful discussions.

TiFPE C: What I think would be useful is if when you open it up, it came up with a big tab on top with current location. Something that you can use for quick access and go ahead. And then all the others ones you have like saved underneath. Because when your hands are cold, sometimes it doesn't respond.

TiFPE B: I just I didn't I didn't like use it a lot in the sense that, like I've not used it enough to know all the features, but like I don't know if there's a way to like share with the people that you're going into the field with or people that have been in the field, maybe recently, not necessarily doing the same thing, but just people that have been to a similar area or an area close by. But yeah, it might be good to like share.

Interviewer: So yeah, so that's ultimately what how the APP is used is used a lot by industry, so they will go and all be collecting data remotely and they'll work on the same map so it's used in your like environmental consultancy, that type of thing. And they'll have whatever data or questions they need to ask, but they'll all be working on the same map. Yeah it's an interesting reflection.

TiFPE B: Maybe more specifically like a way that you can literally you know you might be able to do this use like a way where you can like select a specific question and compare all the answers about that one questions so like if it's if it's, how do you think this changed in the past, like so you can analyze all the answer to just that question. An easy add on.

Interviewer: Yeah and you would be able to do that, you wouldn't necessarily be able to see that in the field, but if everyone was say Answering that particular question and inputting data to it when you've got back you could load your map and have those questions up and see the responses to those and you could present and analyze that data yeah. And I guess my final question is about, and I think you've touched on it already, but was there any barriers to any of the understanding any of the questions that were in the APP?

TiFPE C: I would just say the Field Notebook, I don't really know what to put. Like you said the lecturers, I haven't been told about that. About what you need to put in there. What you should put in there. What would be useful.

TiFPE B: Like again on the personal questions like you know, they aren't, I don't know how you would put it but. But they're just, they're quite vague and when it comes to matters like that where you're vague it's very hard to get like the answer you're looking for or the right answer. And so, it's a bit like I don't know if like airy fairy is right.

TiFPE C: I literally wrote wishy washy.

TiFPE B: Wishy washy. Airy fairy. In a sense like that I don't, yeah, it needs to be more specific, more targeted, because otherwise I'll be like, "I don't know." Like, yeah.

TiFPE A: Yeah, more specific questions or just more questions in general as well I'm not quite sure what they would entail but yeah just more questions. Because then rather than like having to fill them all out there's probably more that you can fill out now. So, if you don't understand a question, there's another one and you can answer that one instead. But yeah, maybe more questions.

Interviewer: Thank you and I guess my final bit is do you have any questions for me or any further comments about using the app or anything like that?

TiFPE B: Like what are you actually doing? Like what what's your association.

Interviewer: My my thoughts with the app is it stems from I think a lot of people go out and do fieldwork and just head down they count basically. They don't know where they are and they don't connect it to anything else, and they don't necessarily think about how that relates to their fieldwork development and their knowledge, skills and understanding. So, trying to better support that ultimately, with some digital point of capture qualitative data collection. And, and also to try and build some GIS skills, erm because what you would do within the APP if you were to combine that with your quantitative data collection, you could then analyze that using a GIS presenting analyzing. which I think is embedding within undergrads would be really useful.

TiFPE B: Like find a good way to do that GIS.

TiFPE C: It would be cool if we could see like it more developed like obviously this more of a beta version of the app, whatever or that map so that we can so because you see how like that's another community like bringing everyone together, seeing how everyone engages with it.

TiFPE B: And obviously like it gets better with more people. That's how it works. It's better when you collaborate and compare.

TiFPE A: If we were were to use the app again obviously not being in the field anymore. If we went home and used it. Would we? How would we? Would we just? Would it be just be a new map? Or yeah.

Interviewer: So it would collect it at the location you are at. So, it would be on say on a map if that makes sense and those layers of information would still sits on it yeah. But obviously I've inputted the questions to answer within that APP, but I think there's value in learners themselves developing the questions that they want to put in the APP so that everyone is using something personal to them of what they want to record.

TiFPE A: Hmm hmm.

Interviewer: I think there's something there. Then it because it is really you know, then it becomes more personal of what you guys need to record in the field that your quantitative data or whatever.

TiFPE C: So that would help with the irrelevance in like you'd probably get more value out of it.

Interviewer: Any other comments any questions anything else, no all good. Excellent Thank you so I will stop recording.