SEED Podcast, Episode 0__ Mathew Sanderson and Field Courses Automated transcript.

Rachel: Hello, and welcome to the SEED eLearning podcast. My name is Rachel Willder, and I will be your host for this podcast where we focus on all things eLearning in SEED. Today, I'm joined by Matthew Sanderson and we're going to be having a discussion about running a field course with dual teaching. Hello Matt. How are you?

Matthew: Hi, Rachel, good morning. Great to a great to meet you again.

Rachel: Yeah, it like you're going to be like one of our regulars, I think. So you have recently completed a field course with some of your students attending online. How did you find that experience?

Matthew: Well, we've actually recently completed three field trips with students attending online and they all differed somewhat in format and in the technological approach we took and we found that as we went along we've learnt things and we've picked up new skills, new techniques; And from an acceptable beginning, which gives students everything they needed to know through to the final session We actually did really well and it was commented upon by those people, that it was actually quite engaging in quite enjoyable to watch. So it's going well. It's going well,

Rachel: So, could you tell us kind of those various different, So, those three different approaches that you had to, to doing these three field courses?

Matthew: Yeah, of course. So the first, the first field trip was purely remote in terms of ourselves, ie, staff and students and we dialled in Via Zoom to, I think five people, five residents of the Lancaster cohousing site, which is at Holton on the river Loon and immediately adjacent to see the Holton hydro and so it's a community Hydro Energy scheme now, we'd spoken with them beforehand and in fact we visited, the site inperson in previous years, but we've spoken with them beforehand and arranged that they would, they would walk around the site armed with mobile phones and they would film things for us and give us

live commentary. But also then allow for live interaction as well with the students. So taking questions there and then giving feedback responding to our inputs and students inputs as we went and really looking into the details of cohousing and also into the community hydro and yeah, it went Okay, we got everything we needed the students to know from the field trip, but the well, there are several issues the mobile signal there is mediocre at best, even the onsite Wi-Fi is quite mediocre. We had five members of the cohousing, actually we had four members, one of whom was very bravely, carrying two devices and We had to cope with the fact that they didn't necessarily start with charged batteries, or they didn't have waterproof cases on phone so when they went out to walk from one building to the other, in the pouring rain, the, the smartphone screen went off because it got wet or packed up and we had quite a few Mmm, Oops, moments the bloopers video I daresay, will have a few episodes, you know, a few episodes to run.

certainly we looked back at that and thought yeah, we got everything we wanted but you know what we could do to be better next time.

Rachel: Yeah. Yeah, that's that like the wind coming through it.

Matthew: Yeah, very much. So when all you're doing is literally just going straight from a handheld mobile phone and the rain is blowing sideways and the wind is up you know with, So that was, that was the first one. Okay. That was yeah. The second field trip was for, our master's degree students, on the planning for environmental, change module and Joanne. Dr. Tippett, who I work with took the students on a, two coach loads of students first to the Lancashire mining museum at Astley, And then On the down to the flushes. I stayed at home. I should we say I drove the zoom from home and we had agreed Well, in the first instance, we'd established that we were going to need two mobile phones, one of which would be for filming. So that would be purely used for streaming the picture and capturing the sound. And the second mobile phone was going to be held by Another TA because we would have had one of our TA's. One of my colleagues would be holding the phone for filming the Second mobile phone was going to be held purely for monitoring chat. So, I could interact with the people in the field and not interrupt the flow. But at the same time, if we had any questions coming in from students who were watching the field trip virtually as opposed to attending live they could be asking questions live. Now the First issue we face was getting hold of mobile

phones. We'd already established that this was going to use a lot of data. So we'd already established that, it wasn't really fair to ask your TA's or even staff user and phones now, Dr. Tippett went away to try and get phones from the University and there were none to be had. It seems as though that whilst people are working from home, still, all the universities phones are with staff for the purpose of working home. So we had to Rely on students and staff phones for that purpose. So that was the first issue. That's not insurmountable, that can be overcome in the future. The second thing we found was that as the people were moving around site with the mobile phones motion So, as you walk around, you really, really shake up and down quite a lot. Even if you walk absolutely as gently as you can, you still put quite a bit of vibration into the video. And it seems that Zoom tries to really, really minimize the amount of data that it uses by Well, I would say it certainly appears to be over compressing the video image. Okay. So if there's any sort of vibrational motion you end up with a very blocky, very, well It looks like a, you know, a crayon drawing rather than a decent video picture and then we found of course an issue with sound, mobile phones really at the end of the day, their phones. They're designed to be held next your head, despite the fact you see people walking down the street shouting into them nowadays, the desired to be held next to your head, to speak into the listening to, they're not designed to be used as professional audio capture devices. So, we found, especially when the weather, you know, when the wind again was up, which it was that day, the audios going to really suffer and Of course, you're surrounded by the all the, the students who are actually there on the field trip, you know, students Don't stop talking on a field trip So all the surrounding noise Going to make it difficult again to capture the sound. So they were all lessons. We learned the second time that said, we did gather generally better video because the, well, the person who ended up doing the filming had a top-end iPhone 12. And for whatever reason, it was able to better process video than the older, Android phones that have been used at Holton on the first field trip. So, although there is vibration causing issues when the phone was moving, when my colleague stood still the video, they were able to capture was better and I say, I guess that's down to the processing power of the phone and when things took a quiet, the sound was good as well. That field trip was, ooh crikey was, nearly three and a half hours long. And of course, we encountered issues of batteries. So, that's when you very carefully, have a battery pack tucked into your pocket

Rachel: and you've got to very gently without the sound.

Matthew: Yeah. That's right. You've been there before. So we kind of bit like kids wearing

mittens on the string through the sleeves, you know, you end up with a power lead, coming

down your sleeve out and out of the hand that holds the phone. So, yeah, you're not going to

drop your phone because it's just like your mittens, but that would generally, that worked a

lot better though. We did find and this is a bit of a no-brainer, but we found that the minute

that the mobile signal starts to go below Excellent You're going to start to suffer. That was the

second field trip. You can see I guess that these, you know, things we're improving,

Rachel: as you were learning how to

Matthew: Yes. Well with us, right? Yeah, that's right. Our third field trip was actually this this

Monday just gone and we had a visit this was with undergrads rather than postgrads. The

post grads have already had their day out to the class So this was for the undergrads to run

free and stretch their legs. And we took them to Peel Park and the University of Salford, to

look at some of the, some of the sustainability issues and some of the sustainability projects

are that's going on around the campus there. And before we started. I thought, right. Let's try

and make this now. We've had a social experience. We've had a moderately good experience.

Let's try and make this an Exemplar experience. I'm going to dig into my box of goodies at

home. Fortunately I do have access to professional media toys and things here in there. So

I've got a good quality phone. IPhone 12, plenty of memory is 5G enabled, which is important.

I have an you can see though People who are listening? Can't see. I have a lapel, mic Bluetooth

lapel, mic and earpiece. And of course, she's got the fuzzy little top on, so it's wind is wind

protected.

Rachel: Yes, the err, dead dead kittens, which is just a weird name.

Matthew: I just think of it as a small rat. But, yes, you're right.

Rachel: Yeah, it's well, it's, I think, especially for the size of the lapel, it's more like dead

hamsters, isn't it than dead kittens?

Matthew: But yes, sure. We avoid animal cruelty and torture. So we have the Pom-Pom on a stick microphone and I also have a gimbal mount for my phone, a powered gimbal Mount so that even when I'm walking around the video image doesn't suffer from vibrational motion. So we've got the toys now, we've got good connectivity or you got a good microphone and indeed earpiece so you can listen to the feedback from Zoom. And we got a good gimbal Mount, so that we can avoid any sort of excessive, or well any motion, really on the video picture. And to cut a long story short, that worked really well, where we had 5 G. We were streaming 1080p picture consistently to zoom and you couldn't tell that we weren't sitting in front of a webcam in a classroom. When it toggled back to 4G. I'd say it went down to 720p. So that's kind of the lower high res and on the big screen that still looks a bit blocky. Okay, but he was still very, very good, the gimbal Mount made a huge, huge difference to the quality of the image, it was a little bit awkward carrying it around all the time, but equally so it really, really improves the video quality and having the lapel mic in Bluetooth, the Lapel mic on the person who was doing the majority of the speaking, Again, It will first, to start off it meant that they didn't have to shout They could speak with their normal voice. It also meant that we didn't necessarily pick up the noise of students speaking around either We only picked up the presenter's voice. On the downside Of course, if somebody in the field, wanted to ask a question, the presenter invariably had to repeat it back but very, very minor inconvenience and sometimes it's actually better to do that. Anyway, if you if you repeat the question back, you know,

Rachel: It gives you a second just to, yeah, process it and think about what you want to say.

Matthew: Yes, absolutely. So, by having, as I say, the gimbal Mount the really good connection and the microphone we got the imagery. We got the connectivity. We got the audio up where we want it. And that's great. That, that really, really helped and say afterwards. People have said, yeah, that's probably the best that we can do with mobile phones. Yeah. So so that was our three virtual field trips to date and Yeah, as you can see or as you can tell it's been a learning experience.

Rachel: How many, how many students were online? Was it a mix between the three different experiences?

Matthew: The second field trip which was to the Lancashire Coal mining Museum and to the Wigan flashes, We ran that over two days. And only the first day was the zoom dual learning field trip. We had two coach loads on the first day in the field. And if I remember rightly, I had about 25 with me on Zoom. So a reasonable number. Yeah, and of course we didn't join them until they arrived on site and then we left them when they hopped on the coach to go back to Manchester, but even so we were probably online for about three hours. But we found that the students stayed engaged or at least awake enough to be asking questions. Sometimes it was. Sorry. I didn't hear that. Could you could you ask them to repeat it, which, of course we did. Other times it was. Yeah, that's really interesting. But could you just turn around and show me something over there? For example, yeah, which again, really, really handy. The third field trip. We were actually had a fairly small groups for that. The trip around University of Salford grounds We only had about 15 students with us on the ground because we'd actually split them into four blocks throughout the day. The field trip run four times on the ground and we just recorded the first one to zoom. And if I remember rightly we had about 18 or so with a zoom, which was what we expected. I know that Zoom performance, suffers, the more people you have on the zoom call. Though, I don't know the effect of having a really big Zoom call on the incoming video. For example, that's probably something to play around with actually and try and you know, find out for the future. But I think numbers aside coming back to what we've done, you know, the three different slightly different approaches and the learning all the way. I think there are various things that we can take away from this. The first is we have to accept that there are places and there are times when you were just not going to be able to run a decent, dual learning field trip. And that's almost always going to come down to video quality and mobile signal. And I think in those circumstances you've got two approaches. One is to film as you go using a non connected device treat it as though it's a virtual field trip. So as you walk through with the students, who are there, you're filming, your recording, you're capturing everything, you can, you're speaking to the microphone, but then when you replay it with the students, You then make sure for the students who aren't there; You make sure that you are there to be able to answer questions and not only you there, But if at all possible you get the guest speakers, who you encountered in the field, Get them to connect via Zoom as well so that they can respond to questions as well.

Rachel: I wonder as well, having a student in as a guest speaker as well to kind of get that on the ground experience as well. So obviously to have their experience, they'll be things that because you were all filming, they'll be their perspective as well? To have that, 'Oh, well, actually I saw this, and that was like that would be interesting to the online students as well? Matthew: So I think that would be brilliant. I hadn't thought of that. But yes, it would be great if you could get more than one person. I mean it definitely helps, We say the site experts in but also to get the students perspective as well. It really helps. Another approach might be, and again, this is something I want to play around with in future. We might have different streaming approaches. So the moment we've been predominantly messing around with zoom. We've had a little play with teams, but it didn't really do what we wanted. But have we yet played around with, for example, GoPro cameras and the facility to stream live to YouTube or other media. We haven't played with that yet, I think I would like to. I'd like to see how they cope with the data transmission side of things. Can we still get a live picture through? So if you were going to do that, then you could stream. Let's say you stream to YouTube for example, and you would have probably a have private channel for this, but at the same time, you might have zoom open purely in the chat mode so that whoever's remote. Can still interrogate the people in the field. So that's that might be a possibility for when the signals have been marginal. I don't know. We need to play with that. The second approach I guess would be as I say, you know, you've got to just film and treat it as though their there. But another thing that Occurred to me that we relied quite a lot in planning on things like Google Street View. Now. Field trips don't always have or they are not always in places where there are good, good Google Street View options available and the camera only looks at what the cameraman's looking at. So, you know, those people who are on zoom are never going to get the full immersive experience because they can't just look over their shoulder, oh I hadn't seen that or cool, What's that over there or whatever? Now, there are Wonderful and really relatively cheap 360 degree cameras where you can take photos, the Ricoh Theta, For example is really good one. And again, I suppose I'm obliged to say there are other Brands. I just happen to really like that one. I've got one kicking around on my desk here somewhere. So I wonder again, If, for example, when we go out on these Virtual Field Trips, even if we are

broadcasting it live via Zoom, we could potentially have someone who's dedicated to taking either a lot more additional video, or even a series of these 360-degree Photo Spheres as you progress through the landscape, or through the building or wherever you are. And then, that way the person who isn't there live will have the option later on to be able to view these photographs and take an absolutely panoramic view of each point. So again, it comes down to technology and I think at the end of the day, we have to ask ourselves. Are we treating this as a making do? Well, we can't necessarily do things process, or do we want to for not a great deal of investment. And it would be hundreds rather than thousands, but do we want to for not a great deal of investment, provide each department with the kit to provide certainly semi-professional dual learning or remote field trip experiences. I think we can do it. I think we can do it really well.

Rachel: I agree I think especially for those students that are international and not able to be in the country at the moment, the ability to walk them through these field courses. And these experiences is, its invaluable, if you start to take into consideration your DASS students that wouldn't, that couldn't, that may not be able to be there with you?

Matthew: Well I can entirely identify with that. I don't necessarily, I don't Hide the fact that I'm disabled myself and Mobility Can be an issue for me. I hope my colleagues. My peers out there, don't feel. That technology is a barrier to providing a dual learning field trip because I don't think it is. It's nothing to be scared of, you know, a mobile phone is a mobile phone. Well the end of the day although students are here to learn in some respects are also customers as well. And I think they deserve on us to try our reasonable best to provide them with the learning experience. And especially, if for example, their assignments depend on the field trip. Then it's in their interest and it's in our interests to give them that good quality field trip, whether it be, you know, live or whether it be remote via Zoom or what. And I hopefully what we've done will at the very least give some of my colleagues out there who You know who were who were nervous about the fact or who possibly been avoiding the Virtual Field Trips or the duel field trips. Hopefully you know, you can see that it is possible. And without too much effort. You can at the very, very least, provide something that's sufficient.

Rachel: Sounds really, really interesting, especially like, like, you were saying that you've done three now, and each time you've learned something new each time, you've been able to adapt to the challenge that you've had to do, so no that sounds really interesting. Thank you. Thank you for coming and telling us about it.

Matthew: Oh, thank you for the opportunity. I mean, we I wouldn't say we're entirely Cutting Edge on our modules, but we've been a spoken to you twice now and I think it's because we are embracing dual learning, We're trying and I know it's a scary thing for some people and it's scary times for me. When you are sitting here on zoom and you're facing people from the other side of the world and you Thinking how on Earth do I engage them? But yeah, if we don't try, it won't work. And I think we are trying and I think it is working.

Rachel: Completely agree. So thank you to Matt, for a really interesting chap, there about field courses and dual delivery. You can find out more about this topic and so much more by visiting our humanities Pages which includes our best practice resources and is full of information from the e-learning team in Humanities. There is a link to this from the notes section of the podcast, where you can also subscribe to this podcast and you'll automatically get the latest episode on release. From wherever you get your podcasts. Finally if you liked this episode tell other people about us or if you have any ideas of things we should be covering get in Touch with us. We love to hear from you. See you next time and stay safe.