

Interview Transcript

Interviewee	Vance Stevens - Learning Designer, Petroleum Institute, Abu Dhabi.
Interviewer	Alexander Hayes - PhD Candidate, University of Wollongong, New South Wales, Australia
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Co-supervisor	Professor Teemu Leinonen, Aalto University, Helsinki, Finland
Conducted	28 Feb 2013
Format	Skype
Location	Online - Skype
Duration	00:59:05:09
DOI	10.6084/m9.figshare.7076687

Research Question

What are the socio-ethical implications of body worn video camera recorders on society?

Research Focus / Outcomes

This research examines the historical developments and contemporaneous challenges that location enabled body worn camera technologies pose for humanity. The potential benefits, risks or harm on society from body worn camera technologies will inform the development of a socio-ethical framework to provide context, inform and address these issues where gaps in the literature have been identified.

Alexander Hayes: I'll put my recorder on here.

Vance Stevens: That sounds like its come in.

Alexander Hayes: Yep...that's all good...so ah....I'll just swap this to that side...yes....so are you keeping well?

Vance Stevens: Yeh...how you doin?

Alexander Hayes: Yeah good...look I'm really sorry I couldn't to your session as I'd actually had three nights where I have been up till 1:30 in the morning writing papers for a number of conferences that I am attending while I am away in Finland and it's just been hell...in terms of...work life balance has been a little bit hectic so something have had to go as you know ...do you know what I mean?...you know what I mean...indeed.

Vance Stevens: I've got a long commute and that's my bug-a-bear at the moment but it's passive and I get to read.

Alexander Hayes: Nice.

Vance Stevens: I get to listen to music.

Alexander Hayes: Good! Absolutely and...look Vance what I am going to do...in the context of this interview is give you some background very briefly for about two minutes as to what this about, then I want to give you an opportunity to respond to a number of prompts that I have to do as part of the ethics clearance for the PhD research project. Then we will launch off into the interview process itself and I am going to ask of you to provide a background for people who will listen or will read this transcript in the future and who may not know who you are or how to get in contact with you or understand a bit about Vance Stevens so that's the sort of....that's the sort of the nature of this interview and it is a semi structured interview and we have a series of pre prepared questions that...in that portfolio page you will notice the interview questions half way down the page, maybe a quarter of the way down the page.

Vance Stevens: Yes. I had looked at them before.

Alexander Hayes: If you could open those interview questions would be great.

Vance Stevens: uhmmm....under research?

Alexander Hayes: Yes.

Vance Stevens: ah...interview questions....yes...ok.

Alexander Hayes: So...without any further adieu at the end of this interview and so on and I'll be sending an email which is requesting of you to fill in...see where it says 'Participant Consent'?

Vance Stevens: Ok.

Alexander Hayes: If you can post the interview, click on the link, download the consent, sign it, get someone to witness it. I don't know who will witness it but somebody will and take a photo or scan it and send it back to me. What that does, it allows me then to lodge the audio transcript into the Database repository which is a secure repository for storage of our research data and then in 2015 I am seeking to publish this data under a new accord which we are hoping will be released and will allow me to not only transcribe and provide you with the transcription of our interview...in terms of what we speak about but in the future for us to be able to release this all under a Creative Commons licence with your permission of course.

Vance Stevens: My permission is granted.

Alexander Hayes:wider world so what I would like to do firstly is thank you sincerely for participating in this PhD research which is supervised by Associate Professor Katina Michael as part of...through the Faculty of Informatics, School of Information Systems and Technology, University Wollongong Western Australia. I am also supervised by Professor Teemu Leinonen who you might know from Aalto University where I am heading to in Finland and I am also co-supervised by Professor Michael Keppel who is now part of the Aged Services, Education and Research at the Queensland University of Technology in Queensland Australia. The nature of this interview tonight is regarding my PhD research which at the end will be fully transcribed and made available for you to make amendments or to add or subtract or whatever you would like to do with the nature of that...so it's 11:15 PM here Wednesday and it is the 20th February 2013 ...I know that because it is my birthday today.

Vance Stevens: Well happy birthday!

Alexander Hayes: Thankyou and eastern states time in Canberra and I have with me Vance Stevens who I have known for quite some number of years now and Vance's....I have greatly admired Vances work over a period of time and I will let Vance give an introduction as to himself in the context of the interview, but firstly, Vance are you happy for this interview to be recorded in the context of this for transcription?

Vance Stevens: Certainly....sure.

Alexander Hayes: Great!

Vance Stevens: No problem.

Alexander Hayes: Ok so for the purposes of people who don't know who you are or perhaps wonder as to how we came in contact with each other can you give us some background on Vance Steven's please.

Vance Stevens: Well, lets see. I've been teaching. I guess, went travelling for a couple of years at a stretch and I decided I wanted to be an English teacher to stop the perpetual travelling. So that was back in the 70's and I went overseas to Saudi Arabia and got involved in Computer Assisted Language Learning CAUL in 1979. I've been in that game ever since and the 80's I got my MA at the University of Hawaii and I did a thesis on Computer Assisted Language Learning, got a job in Oman, well actually I got a job in on the big island of Hawaii and setup a computer lab which was very novel at the time for a bunch of high school kids and ...ahh...went to Oman and ran a learning resource centre in addition to teaching English always with technology in mind. From there I went to a software company in California in the Cupertino area that was making Speech Recognition Software built into a gaming environment so basically it was, we designed a game where you spoke to the characters and they spoke back to you and then from there I came back to the middle east Abu Dubai as a consultant on a military language institute whicha company (incomprehensible) in Washington hired me to help get it running and they hired me to be...for six years to be the the Computer Assisted Language Learning coordinator and consultant for six years. So for six years I didn't teach I just sort of troubleshoot specific academic computing situations andof by the way, something really significant happened at that time and that was in 1985 ...1987 sorry when I went there. I had started when I was working for the software company I started teaching online for free at study.com just to keep my hand in teaching and when I came to UAE Abu Dubai I was perpetually kind of hanging out at the...finding students and teachers online and that's how Webheads got started and we started it up to teach students. We had a student group and put their pictures up before Facebook was invented and before Moodle even started putting ...they hadn't developed yet but they also attached pictures to peoples objects online which was an innovation at the time. So in any event, we had walls of photographs of people that ended up in Second Life and places like that so it became kind of iconic but in 2002 the student group sort of gave way to a teacher group mainly because of the fact that we were getting into, we were taking the students to virtual conferences and sometimes going to conferences and bringing them at a distance into the conference and getting into, hooking up by voice with other people. I think Pow-Wow was in existence then and it was before Skype or any of these other, you know, it wasn't really normal to be talking to each other online and about the year 2000 or 2001 ...yes about that time so in any event, we attracted a lot of teachers and that's how Webheads in Action got started and so WIC developed into a fairly significant community of practice and probably that's kind of put me in touch with TALO which is Teaching and Learning Online because Bee, Barbara Dieu was in the Webheads group and she sort of connected us, and Michael Coghlan who was one of my very close colleagues as a Co-Founder of Webheads so, he was one of the people that I would, that I sort of hooked up with accidentally online and we have been colleagues ever since and have become good friends actually and I suppose that connection and the fact that Bee went over to see you guys when Stephen Downes was there and you had a virtual hookup.

Alexander Hayes: Hookup?

Vance Stevens: Yes...yes...I guess it was the networked learning.

Alexander Hayes: Yes. Future of Learning in a Networked World (FLNW).

<http://www.lulu.com/au/en/shop/leigh-blackall/talo-2006-the-future-of-learning-in-a-networked-world/paperback/product-1411175.html>

Vance Stevens: Yes. That's right, which then again I have had my hand trying to perpetuate that as in for a couple of years we have, well last, two summers ago I met Bee, Barbara in Brazil and Michael Coghlan came over and so we sort of progressed through Argentina and Brazil and tried to carry the networked, Future of Learning In a Networked World.

Alexander Hayes: The flame.

Vance Stevens: Carrying the banner forward (laughing) and yes anyway so that's kind of what we have been doing, but since then when the consultancy at the Military Language Institute at AmidEast stopped, then I had a choice and they needed a computing teacher but I could have taught English or computing so I decided to teach computing. So I did that for eight years and so that put me even more firmly in the technical side, even to the point then that it was hard to get a job as an English teacher now but I did for the Higher Colleges of Technology and kind of trying to help students and teachers to use technology appropriately and teach English and that's me, I guess. I do a lot of publications and things like that and presentations and if you Google me.

Alexander Hayes: You can find out a lot about you online! So Vance that's a very comprehensive overview and it's very evident to the reader and to anyone that your history, your experience, your knowledge in this area transcends that of many people that I know. It is going to be of particular interest to me as to how you will address these questions that are coming up. Now what I would like you to do is just contemplate these questions, are you happy to answer them in chronological order?

Vance Stevens: Sure.

Alexander Hayes: Okie doke.

Vance Stevens: Do you want me to just keep going.

Alexander Hayes: I am happy to pose them (questions) and I probably will sort of and we will deviate a little bit as well because what I would like you to do is to consider them as a question not necessarily the main specific, so I'd you to answer them in any way that you like. It doesn't need to be specifically about or answered from a wearable computing or human computing social computing side. You might want to, well whatever you want to do you let me know and I would just like to go

with the flow so just in a general context what do you think the term wearable computers means to you.

Vance Stevens: Pretty much what I know about wearable computers is paraphernalia in sports shops, maybe skiers and things like that and extreme sports people is from your conference and you might want to remind me of the name of them but anyway I think Katina Michael was a speaker at one of them and so.....

Alexander Hayes: Yes...that was AUPOV'09 which was held in 2009.

Vance Stevens: Yes. I think actually that was the one that I downloaded quite a lot of podcasts.

Alexander Hayes: Yes. We had a lot of recordings on Archive.org and then we have had a number of Mobilize This conferences through Charles Darwin University in Darwin, Northern Territory and prior to that with the Learnscope projects back to 2005.

http://lrrpublic.cli.det.nsw.edu.au/lrrSecure/Sites/Web/13289/ezone/year_2007/dec/report_elearning07.htm

Vance Stevens: Yes, so I suppose I have been following that conversation not only through conferences but also through TAFE Talking VTE recordings you guys have made.

<http://talkingvte.blogspot.com/>

Where you know, you send welders out into the field and they do evaluations according to what they have got on their head and they are looking at their welding and their not only have to do it properly but have to verify that it is them and things like that. So there is a lot of issues which have been kind of interesting and its obviously got a lot of benefit to people at distance who are trying to work with people people at a distance. Especially in the vocational sector so its been kind of interesting and I'm interested to hear about veillance and sousveillance and surveillance of course and all the differences between those terms and how they come up and how they are bandied about and at your conferences and presentations there so there is a lot of food for thought there. I have to admit I haven't had time to read the things you have been posting of lately.

Alexander Hayes: That's fine...there's plenty. (laughing).

Vance Stevens: Yes but still this background I do have so you know its ...and of course I am familiar a little bit with the equipment you have and that you were wearing the other day last time I saw you on video like...sort of a goggle on.

Alexander Hayes: Yes...

Vance Stevens: I suppose using a computer that is strapped to your head and gives you hands free...sorry a camera strapped to your head, wearable computers. You know wearable computersnow hang on a minute. I'm thinking wearable devices that, I'm thinking of point of view technology. That's actually the context I was coming from.

Alexander Hayes: That's ok. I mean if that's what springs to mind that's perfectly fine.

Vance Stevens: hmmm...wearable computers...hmmm....Ok maybe I'm curious about that well what do you have in mind with wearable computers.

Alexander Hayes: (laughing)

Vance Stevens: (laughing) Well.

Alexander Hayes: I like that. Swings and roundabouts. You can interview me now, well for a lot of people and this is what these questions are geared around is about, for differing sectors and for differing domains people have different nomenclature to describe the nature of what they do but the wearable computing or perceptual computing has been much like others, social computing and others has been around for some time, perhaps two and a half decades and wearable computing is quite an established domain. If you put it into Wikipedia and looked up wearable computing there is a multitude and history there that goes back through Thad Starner and Steve Mann and a whole heap of others but essentially people started to think about the computational side of the devices that they could be wearing and therefore as we have seen, smartphones perhaps could be seen as you know, a wearable computer. They do computational things. They connect to a network, they give away location....all those sorts of things so, yes.

Vance Stevens: Yes...the Google Glasses for example.

Alexander Hayes: Yes.

Vance Stevens: Augmented sort of stuff.

Alexander Hayes: Yes that's it. Augmented and so there is a range of things there. So I am happy for you to ask the questions or...

Vance Stevens: Wrist wearable and I am looking at the Wikipedia article you recommended just now so a wrist wearable. In fact I am a scuba diver and I wear a computer on my wrist.

Alexander Hayes: Yes.

Vance Stevens: We used to have a cartoon called 'Dick Tracy' when I was a kid that would be in the 50s maybe, in the 1950's and he wore a big thing on his wrist that he could contact people and that was pretty amazing back in the 1950's as that was a science fiction back then, actually see people on the device on his wrist.

Alexander Hayes: Well that's a question I might raise a little further on about where you think science fiction fits amongst this but really if we can move on to what do you think the key differences are then between these terms, handheld, wearable and body worn technologies in your opinion?

Vance Stevens: Well, I'm not personally familiar to, I mean I don't, it's something that I try to achieve in my classrooms. I am looking for a small device that I can walk around with and you know, make notes on it. I mean I don't know if the device, I need a device with power where I can open a database and that sort of thing, you know, maybe communicate with a smart board or something but I don't know if the wearable and body worn technologies would do that in the, at least not in the classroom. The things I need to do in the classroom but here again as I mentioned, scuba diving I never considered that I am wearing a wearable computer. I hadn't even thought, I take it for granted so there are certain you know I guess the Google Glasses for example have gotten, they are of interest to people because you know you have got ARG technologies where you can read out to some people and there is an issue of distraction while you know while, you try to do something very complex and then be distracted by the data that is coming through your glasses and in your field of view. What do you think of that by the way? Is that an anise because some people say it is not?

Alexander Hayes: Well for somebody who has worn the technologies for a long period of time I must that I am still in two minds. I'm for some reason I don't...well augmented doesn't really gel with me. I think more of an augmented term, that's something that Steve Mann coined and I have picked up a long time ago. Augmented meaning that you can see through and interact in an everyday life but you are also receiving some, maybe it is an overlay combination that you are interacting with, perhaps it's a passive side of things where the glasses facilitate like I have been doing, capturing video from the first person perspective. So I think the usability and acceptance testing is really going to be big time in terms of the population soon. I think we have had limited numbers of people who have been doing, have been involved in it for long periods of time except for people like Thad and Professor Mann and people like that so from a personal perspective I still reserve my judgement, I'm not quite certain as to whether it really does distract me or whether it doesn't.

Vance Stevens: because you are in early days of the hardware development.

Alexander Hayes: Yes I think so.

Vance Stevens: You could put on a contact lens at some point and just be totally off to the side...

Alexander Hayes: That's exactly right but I am very hopeful Vance that whatever is...well this is what I am interested in terms of research. I am interested in the social impact of these technologies and what they are going to mean in an educational context, specifically and educational context, as they are so many other variants on

what this maybe but my PhD research is looking at what does these wearable, location enabled technologies mean in a socio-ethical societal impact type of arrangement particularly when we think of it from an educational context.

Vance Stevens: Yes the ethical ones are very interesting. Was it Katina who had her students track everything they did?

Alexander Hayes: Yes.

Vance Stevens: For a certain amount of time.

Alexander Hayes: It was and it was very interesting the results on that too, how quickly it was for a number of the students decided it was significantly affecting their lives and yet the same students did admit that they always had their mobile phone with them and never out of two metres of their reach in a given 24 hour period and that their phone was constantly powered on and that they understood that the apps that were in their phone actually tracked them most of the day anyway so it's interesting when you impose something on and in a research context that it can significantly shift that person's attention towards that type of setup.

Vance Stevens: Yes well you guys have brought up some interesting issues in the TALO list about the parking lot data that could, the ramifications.

Alexander Hayes: Yes... 'Park Assist' parking cameras and its convenience.

Vance Stevens: People know where their kids are because you know what part of their school are they are in.

Alexander Hayes: That's right...RFID tagging, RFID tracking which is in the States. There is a lot of that so we are from a research perspective we are interested in understanding also understanding what the key differences are between these different domains and their language as well. So, when we say hand held what does it mean to you? Does it ring of anything specific at all?

Vance Stevens: Well lets see. I've got a Kindle that is handheld. I've got my iPhone and the one I use in class is a Netbook.

Alexander Hayes: So which one do you wear? Do you wear the Kindle or do you wear the phone? Or neither?

Vance Stevens: I wouldn't say I wear it. I've got a, well I could wear it. I've got MP3 files on a different device because I find it more convenient just to pick it up and run with it but ah, that's almost wearable or maybe, I actually hold it in my hand but I could. Sometimes I've taken the iPad, sorry the iPhone, and listened to that in the same way which is, I use it as a handheld. I can slip it into a designed thing that you can strap to your arm, going between handheld and wearable but I don't think I have any except for my dive computer which I hadn't really thought about that's possibly

the only one apart from my wrist watch which is low tech Casio thing but it is a computer.

Alexander Hayes: Yes..yes...so in terms of...if we are thinking then of body worn so you are saying that the wrist watch type of arrangement is a body worn technology?

Vance Stevens: Yes. Divers have you know. They have been doing that for a long time as you have said, for decades and its carrying a calculating device but it does give..they have gotten more and more sophisticated and they are definitely computer based and it's something we take for granted and I hadn't even thought about it like the wrist device as wearable computing...

Alexander Hayes: Hmmm...sure sure.

Vance Stevens: So I guess I can't think...

Alexander Hayes: It's a consideration of a type of technology whether it is wearable so...Vance, in what way have you been involved in past, current or proposed use of these technologies ...like have they always been in your kind of...on your radar or have they sort of crept up on you.

Vance Stevens: Well I guess they are kind of on my radar in the way that you know that. I am a podcast addict and that's why I suck down all the other podcasts I can grab and I can't, but you must have been in the EdTech Talk stream. I also listen to the EdTech Crew...your know, Darrel Branson and Tony Richards.

Alexander Hayes: Yes, yes.

Vance Stevens: They are pretty prolific so I just listen to as much as I can especially when people are interesting and Stephan Ridgway's little chats.

Alexander Hayes: Oh yes, yes.

Vance Stevens: Informal chats. I listen to those because they come my way you know so I guess, that's probably kind of how I track it. It just kind of comes to me and then I consider what people are saying and you guys are talking a lot about the wearable technology and the TAFE.

Alexander Hayes: TAFE sector.

Vance Stevens: Yes. I am trying to think of, Sue Waters.

Alexander Hayes: Yes. Sue Waters.

Vance Stevens: She had the podcast site where she was especially talking about the wearable technologies, used in the vocational training sector.

Alexander Hayes: The vocational training sector, yes.

Vance Stevens: So it gives me a lot of ideas you know so it's good to have arrows in your quiver and if a beast comes along and you need to address it you can just pull one so it's, the more you know the more you pickup and that eventually you might just head into it that way so I guess that's my involvement and it doesn't, like chasing mobile technologies at the moment.

Alexander Hayes: Well Vance given you know your experience and your presence online for almost three decades what do you think the benefits, risks or harm are from your perspective on the users of this technology? I mean it's a triple barrel question but....hmmm....lost ya...ok....(Skype calls) hey Vance.

Vance Stevens: Yep....don't worry as I was just rambling anyway.

Alexander Hayes: I just moved into another question that after three decades of being in this environment what do you think the benefits, risks or harm are from your perspective on the users of this technology ? Now that's a triple barrel question but benefits, risks or harm?

Vance Stevens: Well here again I suppose what I would say is coloured by the discussions that I hear you people engage in and a lot of my awareness of the harm for example comes from things that get passed along on the wrist. Like privacy issues obviously where you can go online and Google where the Mayor of your town is at any given time you know, according to public records and things like that so but then benefits you can of course make mashups and there is Craigslist and there are beautiful mashups of how you can use these technologies to track beneficially, well I'm not going to be too articulate on this one.

Alexander Hayes: Well it's not about that, its just how you would like to respond to that?

Vance Stevens: Well, obviously the more some people like the...oh....hang on a minute I've just locked my Family out and left the key in the door and they can't get in....just a minute....

Alexander Hayes: Your right....your right.

Vance Stevens: Grand daughter is visiting.

Alexander Hayes: No worries.

Vance Stevens: Well we have sort of, we have sort of talked about Sue Water's work for example you know, the benefits of being able to have a supervisor in one place and being able to have anybody showing what they are doing.

Alexander Hayes: in another?

Vance Stevens: Seems to be lots of applications and being able to communicate across distances, take pictures on your mobile phone, incorporate those and work you are trying to do in education or take pictures of what you see where you are and you see on the news for example all the news. Interesting news from Syria for example from differing peoples mobile devices that they are carrying with them. Its changing what people are able to report, it decentralises the information transfer and there are no longer gatekeepers, on the other hand the gatekeepers are to, you know, they have more ways of tracking in where people are and what they are doing and so that's a little bit ominous sometimes.

Alexander Hayes: and do you feel that there is any specific risks for people using this particular type of technology?

Vance Stevens: Well I am not too concerned about Facebook, I feel kind of....I suppose if the government were trying to track you, some of the podcasts I have listened to are like National Public Radio and Democracy Now so there are people who have been surveilled and there is one guy where sometimes they react in the opposite way. There is one guy who sends the FBI all the data he can collect on himself. He's become obsessive about it because they were tracking him and wanted to know everything, an intrusion on him so he just decided to intrude of them back so he just gathers everything he can and he just floods them with information about what he's doing so then there's also people who document just because they can and so there is so many aspects about you know. Personally I don't really feel threatened because there is nothing that has hit me you know, nothing has really entered my realm of me personally so I guess I am just aware that you know I don't care about Facebook and I don't feel that Google is trying to control me and I don't mind my data in return the quick benefits that I get. To me it's benefitting more than it is hurting but of course we must be aware of the potential.

Alexander Hayes: of course....of course.

Vance Stevens: Our government is becoming more tyrannical anyways so....

Alexander Hayes: Vance what does, sorry just trying to find the questions here ...what do you think then when we are talking about tracking and tracing and all that sort of stuff, what do you think the term location enabled means to you within the context of location enabled body worn tech?

Vance Stevens: This means that it gives you GPS coordinates or location enabled. Location means that you are constantly broadcasting your location. Is that what it means?

Alexander Hayes: It could do...yep yep.

Vance Stevens: Ahhh....yes I didn't Google any of these. I guess I could Google location enabled. I could have been sitting here doing that now but what it seems to mean to me. I am just sitting here looking...ah....location enabled must mean that you know on your mobile phone you have a GPS and it tells people where you are

as well and I believe. I think I heard heard Katina say that these things never with off, you switch off your phone and they are still working?

Alexander Hayes: Can do yes.

Vance Stevens: (laughing)

Alexander Hayes: Its pervasive yes that's for sure so if that's the case then what do you think ...which issues if any are you aware of that involve that type of networked technology? ...and we are talking about the location enabled stuff here. Are you aware of any issues with it?

Vance Stevens: Well yes. Here again some of these could be issues like there was a lady that wanted to track her son so she bought him a device that somehow switched it she bought one that would track him and bought one for him and one for herself and gave him the wrong one so he realised that she was being, he could track her so he realised what had happened and then caused a rift in their family.

Alexander Hayes: (laughing)

Vance Stevens: So you know there is people not being honest about data that they are gathering on people that could be a problem so you don't really know whose you know, you don't really know what use people are making of what you are broadcasting so I guess there is a potential that's kind of alarming. Then we have instances where people are feeding into public networks and then people can go onto these networks and get information that is out there that they don't really realise is there but like tracking your ex for example to find out where she is or he is you know or a person you hire to find out where he or she is (laughing).

Alexander Hayes: (laughing) Yes indeed. So it could go back on themselves so ah...what impacts have these particular technologies had or are likely to have on yourself, your colleagues or your industry?

Vance Stevens: Well, there are beneficial ones as I said at the moment. Personally I haven't really been impacted too much to my knowledge but you know you can't really, well lets see. Body worn if you whatever you do is that's attached to an IP address identifies where you are. I was just looking on the news. They just located the building in Shanghai where the hacks were coming from.

Alexander Hayes: Ah right.

Vance Stevens: So yeh...so yeh this is a not really body worn but its an example of the possibility of you know. It's hard to really be anonymous and obviously as far as well my industry is education and people in education are careful about how they you know. Sometimes they overreact and try to, you know, suppress technologies that could be useful because of the possibilities of violations of privacy, but, well there with some the trend nowadays is it used to be just a few year ago that lots of things were blocked in schools and lots of over-paranoid fears and now things are pretty

open. Well at least that seems to be the trend because that's the educators talking about what they do and what to do, so unless somebody comes across a real tragedy you know in education like for example people carry cell phones and you know like the shooting on campuses, it is a lot easier to communicate with people quickly and you know, where to avoid. Doesn't have to be a shooting, could be a flood or something like that and of course you know the parents giving their kids technologies is good that kids can get in touch with parents if they need to or but you know tracking of the children. You don't know that they are tracking them.

Alexander Hayes: Hmm...hmmm. Yes well that's certainly one thing that the tool can be used for indeed, indeed, in that case then, what do you envisage these location enabled body worn technologies being used for in the future and I am particularly interested in what you think they could be used for in an educational context.

Vance Stevens: Yeh. I suppose you know like, I said I get a lot of my cues from listening to and hearing your work and the work of other people and I think that Australia is an interesting case because it's such a big place and like kinda like in the West for example they are also doing for the same reasons, They have big areas and if you can reach people through the internet especially not just the internet going to websites but enabling some of these technologies to bring experiences much closer. For example I was teaching my kids about, we just came on a reading on the Iditarod Dog Race <http://iditarod.com/> in Canada, sorry it's in Alaska, it's in Alaska and I think this topic has come up in the past. Usually have kids read about something and there might be some pictures but now you can go onto the, you can pop online and not only can you get a lot of information about it because of course you get Youtube videos and so then I was kind of I just realised that someone who did the last one who carried....first of all you get....you've got the view from the guy who's driving the sled and the dogs are going in front and he's in the race and Facebooking what he is doing so you know this brings a lot of, it's not just people driving dog sleds but it could be people in space or you know, people doing anything. I mean people could be going on these round the world solo ocean voyages constantly broadcasting what they are doing but I don't know if there is one that ever happened but you know one of the last ones none of the racers didn't know where each other were but you know it could have easily been that they were broadcasting their locations and not only that the views of what they are doing you can send people out on projects and they can report back and it decentralises your class and you don't have to be in one place. People don't have to be in one place as they can be learning from wherever they are.

Alexander Hayes: Has that happened with you Vance?

Vance Stevens: Ah, that, I was in. I can't think of something off the top of my head but where I was looking at in a learning situation ah. I mean, I dunno sometimes will communicate with each other and show each other around our house or you know some of the occasions we do online. I suppose it's always interesting to when commuting acting with a class of teacher trainers in Bahia in Brazil in Amazonia and it's nice to see their classroom and you know it's....hard to think of a situation till you

come on it and then all of a sudden it's there and if you are aware of what you can do then you can really broaden the the context, so I can't think of anything.

Alexander Hayes: So we would have to have students who would be connecting with you through mobile devices would they?

Vance Stevens: Yes, it could be students where you could have. You could have your students with you and they could be connecting with someone else with a mobile device.

Alexander Hayes: Right, yeah.

Vance Stevens: They could be do almost anything anywhere so if you had training situations where you want people to see what someone else is doing let's say on a boat at sea you know something like that. You might have simulations but then you can also bring people who are doing things to make the situation real for them.

Alexander Hayes: and....so that brings the educational experience to the educator but also allows for the reverse connectivity to happen where the educator is also perhaps and could be remote to the student and engaging.

Vance Stevens: That's going to be a lot more likely when you are teaching a student English, which is what I do yeah, so.

Alexander Hayes: and in what way? how does that happen?

Vance Stevens: Well we think of bringing celebrities into a classroom or people into the classroom that the students wouldn't normally interact with or wouldn't be able to interact with so yes...you can or even other classrooms...you know there is a lot of that we do...we connect with other classrooms. April 22 is Earth Day and twenty four hour webcasts go on where students are connecting with one another just on that one day. Just take one day for example.

Alexander Hayes: Pretty incredible really.

Vance Stevens: Yes it is, you know.

Alexander Hayes: Well I have always admired the dedication that you've had to that...to availing that to the world and as I've sort of raised a number of times you know I am very interested in the mobile based aspects of learning and how people can get access to information wherever they happen to be and it seems to be that ever pervasively it is on a computer that they have got in their pocket or they are wearing it in some way and if they are wearing it on their head it's even more significant.

Vance Stevens: Yes, you can setup polls and poll audiences or poll classes. You have a computer at the front of the room that is broadcasting results and you can have people to check in on their mobile devices, people at conferences are starting

to use that a little bit you know and so teachers are finding out how it works because they go to a presentation where someone uses that and so that they can see what the possibilities would be in class because on the other hand some classes, some settings try to disable mobile devices or try to prevent them from being brought in so there is some of that but it's like the instant messages used to be banned.

Alexander Hayes: Banned yes.

Vance Stevens: In many educational contexts and then all of a sudden there just everywhere and I think mobile devices are going to be accepted maybe even next year. Probably twice as many every year. The pockets of resistance are going to be probably, where I work is a military base and they won't let you on it if there is a camera and they just, I think maybe, my son worked in a refinery that had the same stricture, he was also teaching there but he had to lead his mobile phone at the gate and could not enter with it and at the military base where I am working right now they....it's just become accepted...all the phones have cameras (laughing).

Alexander Hayes: Cameras. That's really interesting. So, you think that over the period of time the acceptance of the actual technology particularly the mobile body worn stuff...it's pervasively crept into...and I'm really really keenly interested in your perspective. If it's become, if it's pervasive and it's quite a ubiquitous technology, its become acceptable within the class based settings such as the mobile phone and it used to be considered the height of all rudeness to answer a call or even to have it switched on in audible reach. Now people just have them on in a class setting and listen, and talk. Do you think the same thing is going to happen when these popularised lifelogging cameras like Memoto and Google Glass and all the rest of them start to become commonplace? #00:50:26-4#

Vance Stevens: Well yes if they have a purpose you know like a mobile phone is not just a phone because it's also your connection with the world and source of information and does lots of other tasks for you, tells you when you are near your favourite restaurant or a product that you have got on your list of things to buy that is nearby you know that go over there or you can, there are so many affordances that people use them. Any wearable devices, I don't think we are there yet because there are people like yourself who are sort of at the cutting edge but I am sure you don't see a lot of people on the streets with Google Glasses, yet, but ah, but sure, why not. I was listening, somebody they were talking about somebody who had a phone as big as a shoebox and was making one of the first phone calls in New York. It was in New York City using this huge telephone but the amazing thing was they were able to make a phone call. It was amazing like, you can just stand here in the street and make a phone call? You are looking at people wearing these funky glasses that you know. They look a little weird but these things might become so integrated with your clothing or whatever, implanted in your retina maybe, but you don't really know what the, as it, as the device, as the hardware becomes more well designed, when it becomes more seamless, you don't know what is going to happen. But sure, I would think that I'm sure that just looking at YouTube, a lot of people wear a device on their person as they do in sport so there is quite a lot of one upmanship about where you can jump, ride a skateboard, ride a bicycle, crazy things there is something called

Trasour? Parkour? where they jump over the gaps between buildings and things like that.

Alexander Hayes: Ah yes, yep.

Vance Stevens: So.

Alexander Hayes: Crazy stuff.

Vance Stevens: Yeh?

Alexander Hayes: Vance, that brings me to our last question which is throwing it right open what do you think the effects are going to be of these sorts of technologies on society? You know, you have touched on a lot there saying around privacy but do you think, is there anything specific that you think that's going to, what is the impact going to be on society?

Vance Stevens: Arhhhh.

Alexander Hayes: If everyone is going to be wearing a camera, and everyone is filming a camera and everyone is life logging and putting their data up somewhere is that going to affect the way that we are as humans?

Vance Stevens: Well, that's you know, they are so many, if you look at some of the literature back in the 15th century or the 6th century where the printing press was made. Within just a couple, within a year of its invention, people were putting out pornography all kinds of stuff so it's sort of revolutionised things but then it became very accepted. I often tell people that social networking is media, people are very concerned because there is so much information around but if you look at any media you know like for example you think because you overslept and that night you got a thousand tweets and how are you going to keep up with all that and people (break in transmission)

Alexander Hayes: Another break (Skype call sounds) (incomprehensible) this it was that police siren that did it.

Vance Stevens: (laughing) Yes.

Alexander Hayes: Something going on outside that's for sure.

Vance Stevens: People are so concerned that about the information overload that they don't really realise that there is information overload all around through media a that they take for granted so they don't worry that they don't have ...you know when I was a kid there were free TV stations and your had to make choices but now there is three hundred that you can listen to anytime. So nobody cares anymore because people haven't really got to the, they haven't really got to that stage which with social media, so, when you are talking about a new technology like wearable software or wearable hardware sorry wearable computers or wearable devices you know

obviously it's going to go through this transition where it is going to become ubiquitous. I can't even envisage how it will be. It will be like when Steve Jobs comes along and all of a sudden re envisioning them.

Alexander Hayes: Hm...hmm..hmmm so its certainly the dawning of a new time do you think.

Vance Stevens: Always is, every day.

Alexander Hayes: Yes yes.

Vance Stevens: It's a lot different from the last one.

Alexander Hayes: We wake up and here we are and we are in a completely different day and new things going down absolutely. Vance have you got any other comments that you would like to make perhaps around the research area area or what do you think of this whole thing we are looking into?

Vance Stevens: Well I am very interested in what you're doing and you have tightened my awareness over time on these issues so I am following what you are doing.

Alexander Hayes: Well that's an honour for you to say so.

Vance Stevens: (laughing) You are quite the, you are organising conferences and you are projects like Streamfolio for example.

Alexander Hayes: Thats been a very tricky one that one which I will go into one other day (laughing)

Vance Stevens: (laughing) Yes.

Alexander Hayes: but ahh...I just want to thank you Vance for participating in the PhD thesis again and it's Thursday, it's actually midnight here on the 28th February 2013 and I really value your time as an interviewee. When I have the opportunity to be able to transcribe this you will be supplied with a full transcription of our interview for amendment purposes and then it will be published as part of the final PhD project in early 2015 but ah, I'm very busy over the next three months going to Finland then back across to Toronto and back and all over the place so it's quite likely that the transcription might not arrive for three or four months from now.

Vance Stevens: I won't hold my breath.

Alexander Hayes: You can be certain that it will and without further adieu will let you get back to your Grandchildren.

Vance Stevens: Ok.

Alexander Hayes: And I'll go and get some sleep.

Vance Stevens: It's no longer your birthday so can stop celebrating.

Alexander Hayes: (laughing) I can stop drinking at least.

Vance Stevens: (laughing)

Alexander Hayes: and thank you very much Vance I really appreciate it.

Vance Stevens: Anytime...oops just lost my mic.

Alexander Hayes: Thanks Vance. Speak to you soon.