**Interviewer:** Hi, I am X. I am a student from DSV - Stockholm University. We are carrying on a research project on “How student use digital tools in order to learn”. Thank you for participating in this interview. You will be kept anonymous.

**Interviewee:** Thank you

**Interviewer:**  I will start with the first question of which educational program do you study and what year are you in?

**Interviewee:** I am studying IT project management program and I am in the first year

**Construction of digital material for learning**

**Interviewer:** Thank you. Now i am going to ask about construction of digital material for learning. There are a few questions related to this part. Do you do drawings (or mind maps) using digital tools?

**Interviewee:** No. Actually i don’t do drawings or mind maps using digital tools. What I do though is I do mind mapping on paper. And i have a white board in my kitchen, and i do mind mapping there. Because for me it’s more real, I can see and have it in front of me. I can actually...I don’t need to go anywhere or open any electronic tools to find it. And i can quickly erase it. So the white board in my kitchen is where I use to do mind mapping. And it’s been very useful for me

**Interviewer:** So do you record or take note of your ideas in the white board?

**Interviewee:** No, I just leave it there. I don’t take note from of it. So there is no digital tools for mind mapping, I use to do it on paper.

**Interviewer:** Even you do mind mapping on the white board, can you describe the procedure of doing it?

**Interviewee:** So what I do… is …when i have many things to do or many things that i need to think about, I write them down. I have a starting place and put it on the white board. Then i start to go from there. I start brainstorming like what i need to do now, what i need to do later and see if there is anything connected to something else. And by the time i finish, you can clearly see it’s the mind map. Somehow it is the same as the one you could see in any kind of digital tools but it’s on the white board. And no one else would understand if they look at it. It’s only me that could understand what it is. Because if someone looks at it, it probably just looks like a spider web. So that’s how i do it... I just start an idea of what i need to do, I put it on the board and it goes from there.

**Interviewer:** How does that help your learning?

**Interviewee:** Yeah, It helps my learning, because I have too much to do, so much to think about. I can’t possibly keep it all in my head. I need to keep it visual for me at all time. If it’s embedded in any digital tools. It will become invisible to me, so i don’t think about it anymore. I have to conscious effort to open it up to look at it. And i found that for me it did not work very well. To help me with my study, I need everything to be visible at all time. And I also…I work better with paper, pen and whiteboard. If i actually write something by hand, I will remember it and if i type something, I often do not remember it very well. But if I write it, I feel it…hm…much easier for me to learn.

**Interviewer:**Do you take notes using digital tools during seminars or lectures?

**Interviewee:** Eh…no…again..., I don’t take note using digital tools during seminars or lectures. I use to keep notebook. So I have a notebook per course. The note book is have here is the notebook for this course. And again, I do it because I really need to write things with pen. So if i use digital tools for taking note, then I have to go and look for my note. I used to have this little…Sticky Note…that posted note app. I have this posted note app that i used, you can download it for android and I used to use those. But again i found it cumbersome to have it like…go and look in there...

**Interviewer:**Do you use your phone very often?

**Interviewee:** I do use my phone a lot. But for taking note, I find it’s much easier like ... i listening to a lecture or listening to a seminar to just write down quickly instead of typing down something. It’s also slow me down bit when taking note with my phone like...press down each and every letter.  It’s so much faster for me to take note by hand

**Interviewer:**But will it be faster when you use your laptop or computer at home, instead of phone?

**Interviewee:** Yes. of course that probably would be. But as I mentioned earlier, if I do that i am more disconnected from it, I do not learn very much, I just take note with the laptop. So I take note… and I find it easier to find my note too, I can just flip back and forth to find my note. That’s always how i have been studying, with the notebook. It started many many years ago when i was in high school. And there is no smart phone, no laptop …there is no internet. So using notebook is what i have always used. I don’t really use digital tools for taking note.

**Interviewer:**How do you concretely do it, can you describe the procedure?

**Interviewee:** When i take note during seminar or lecture, I often will listen to it and pause it then take note. Because studying distant course, we have our lectures and seminars online and I can easily pause it and take note, I can also go back to listen again then take notes. So that’s how I take notes.

**Interviewer:**Why do you do take notes that way?

**Interviewee:** Well, like i said it’s probably because i am getting older. I am in my 40s and that’s how i have always taken notes. So I went through university that way. I went through highschool that way. And... I have 2 degrees from universities in the US. I took notes with notebooks and …that was how everyone did. And i still do that today even though we have the technology to take notes ...digitally, I don't do that

**Interviewer:**How does that help your learning?

**Interviewee:** By taking note, it helps my learning…coz I tend to write down things that I feel are important. And also it makes it easier for me to ... find them again. And ...I can reread my note again. The only problem with that is my hand writing can be a bit sloppy, so I can...if the long time has passed, i would have difficulty understanding what I wrote.So ...that is the only downside.

**Interviewer:** OK. You have mentioned the Sticky Note app before. Is that the only digital tools that you use to take note?

**Interviewee:** That I have tried to use…yes…that is the only one. But…I haven’t found it useful. What I find useful is the notebook that I have for each course…that i keep for each course.

**Interviewer:**Do you write text using digital tools in your studies? Perhaps to summarize literature/lecture material, or for other purposes?

**Interviewee:** Well…writing text using digital tool for my study…the only text that I have to write so far using digital tools has been…for example... using Word … to write papers and our exams. And …I am converting those in some cases to  PDFs…hm…So that is the only time that I use text…digital tools for writing text is when I use word and pdf.

**Interviewer:** But don’t you use it to summarise literature?

**Interviewee:** No, I use the notebook. I don’t use digital tool for that. I only use digital tool when we need to submit a paper or...something.

**Interviewer:**How do you concretely do it, can you describe the procedure?

**Interviewee:** And… yeah…so if i have to write text using digital tools, this is like I said …when I need to submit something. So I start by writing out...a high level outline in word that I start to go fill in ... slowly. And something that I submit may take quite a few days even a couple of weeks or more…to actually write it or submit it. So I cant sit down in one night and just like write paper. It must come over time. So i may open up word, document and just start with the high level outline and then start to fill it in slowly. And I have to leave it alone for like a day or so and go back and read it again and add some more information… it takes time to build it in word

**Interviewer:**Why do you do write texts that way?

**Interviewee:** Ehm...I have found that for me it’s easiest way…for me to start small and I…you know…with the high level outline with a lot of small texts that I fill in slowly…more text then more text when I think about it…ok what could I add here, what information that I can find that I can add to help my argument or support my idea. So I have found that for me it’s one of the…better way for me to write.

**Interviewer:**How does that help your learning?

**Interviewee:** Because It is... slow …It’s very slow so it helps me to learn as i am going along. So I have like...the whole evening or the weekend to piece together some information very slowly and to do research very slowly. So it helps me to learn in that way. So it’s not too much information too fast. Because then…if it’s too much information then I would very likely to not understand it.

**Interviewer:** So... which digital tools do you use? Do you use only word?

**Interviewee:** If I am writing text, then i need word. Sometimes i use powerpoint slide when i need to do a presentation. So if there is a course that I need to do a presentation then I use the powerpoint slide.

**Interviewer:**Do you audio record your self or others for learning purposes?

**Interviewee:** No, this I have never done... I have never really ...thought about doing it…so I have not use any audio recording of myself or others for any learning purposes…I must say…I mean audio recording myself or anyone else for learning purposes…I …I have not done…at least not in the context of learning…in this particular program. We have done this at…work before. When we have guest lecture comes and we need to learn something…and not everyone can attend the seminar then we done like an audio recording and like …almost like the webinars….And you can listen to it again later

**Interviewer:** So in that case that you need to record something. How do you concretely do it, can you describe the procedure? Let’s imagine if you need to record for your colleagues or maybe yourself later on.

**Interviewee:** Yes…what we use for audio recording …and …at the company that has been quite useful is something called goToMeeting . So we use this goToMeeting to audio record …like discussion that we are having or …meetings …demonstration of the new product so we use goToMeeting to record the audio and then we put it up on the internet so that people can access it.

**Interviewer:**How do audio recordings help your learning?

**Interviewee:** Yes…Yes…I mean not in context of this program but at work then yes…that has helped because you can go back and listen to it again…As I mentioned earlier, you can pause it, take note… you can rewind, listen to it again if you misunderstood something. So that is really helpful in learning the material... that someone is trying to convey

**Interviewer:**Which digital tools do you use?

**Interviewee:** So far it has only been that goToMeeting that we use for audio recording. I don’t think that we…not that I can remember if we have tried any other tools for audio recording.

**Interviewer:**Do you video record your self or others for learning purposes?

**Interviewee:** No…Not for this educational program that we do research for.

**Interviewer:** Can you give us a general idea about your learning, no need to be about this particular course.

**Interviewee:** Generally…no …not really…so much… not that i can remember really….We have done some like video recording …with just a normal camera, at the office…Again when we have someone coming to give a speech at some point in time..and we did video recording of that. So people who could not be there could watch it later. So it is just a regular video

**Interviewer:**How do you concretely do it, can you describe the procedure?

**Interviewee:** Yes…I mean...The only example that i can give is that one time. What we did is when the…when the ... lecture we had came to the office. We set up the camera on the tripod. So this is just a regular, old-fashioned video camera on the tripod in the room. And we can video recording him giving a presentation…you know…at sometimes he was writing on the white board so we were able to capture all of that in the video

**Interviewer:**How do video recordings help your learning?

**Interviewee:** Eh…again…I think It is the same as audio recording. You can watch it again. You can pause it. You can rewind. You can fast forward. I think the pausing feature for me anyway is really really nice. Because I can pause it and then i can write note. Or else it’s gonna be very hard to attend a lecture or seminar and take note when someone is speaking. Because often by the time that you are done taking your note, they move on to another subject. And then you are behind. And then you are left wondering what did they say, if I miss something. So when it’s recorded you have an opportunity to pause it and take your note. And continue…and you can even rewind and listen again …what is really the presenter says. So I think it’s been really helpful in learning.

**Interviewer:**Which digital tools do you use?

**Interviewee:** The only experience I have had doing it is just the regular camera that we set up on the tripod to do video recording.

**Interviewer:**Do you take pictures for learning purposes? Perhaps of your own notes, or lecture slides, etc.

**Interviewee:** Eh…This is…yeah...I have taken picture of the…like…some…I have taken picture of the mind mapping that I have drawn before. Eh...  also take picture of the specific slide that we have had. But no other picture for learning purposes. But …just the picture of the whiteboard that i mentioned before

**Interviewer:** Probably that’s for learning too because when you take picture of the mindmap, you can learn from that later on

**Interviewee:** Exactly..

**Interviewer:** How do you concretely do it, can you describe the procedure?

**Interviewee:** Yeah...If i feel like i have to take the picture, then I use my phone…the android app that taking pictures. Yeah… and i have it in my picture gallery

**Interviewer:**How do images/pictures help your learning?

**Interviewee:** If i have forgotten something or maybe i think i have misunderstood, then i can go back and I can look at the picture again. So it’s basically just to follow up and make sure that i understood something

**Interviewer:** Which digital tools do you use?

**Interviewee:** For taking picture. it’s the android app.

**Interviewer:** We come to a general question now.  What digital learning practices do you do, except of the already mentioned above, in order to learn and increase your understanding of course material?

**Interviewee:** Ehm…I think the only digital learning practices that I do ...primarily is the one that we have in the program…the iLearn. So listening to the audio recordings, listening to the video presentations. I have found the ebooks to be incredible helpful, It’s much more so than the actual paper book … because the paper book is really heavy and it feels… it feels daunting to think that I need to read that entire heavy book. But if it’s the ebook, i don’t realise how big it is maybe because you only see one page at a time so it feels smaller. And it feels like that’s something you can read. I only have one page to read, instead of feeling like i have 300 pages to read. And also the search function in ebooks, pdfs is really really great. I use the search function a lot. I may search for keywords that can hop me through the book a bit and I can learn more about that particular topic. So i use the search function a lot in the ebooks and the pdfs.

**Interviewer:** Do you take note or highlight with ebook?

**Interviewee:** Eh...No i use paper or notebook. I don’t use any digital tools for that

**Interviewer:** OK so how do you use digital tools when you prepare for exams (both ordinary and written home exams)?

**Interviewee:** Well, as i said I primarily use ...the audio recordings, the video presentations …ehm…and I also really enjoy the ebooks and the pdfs. I listened to the audio book that we have in this PPM course, which is really nice. I am able to listen to that book when i was on the subway train..like to and from work. I also listen to it when i was on electrical machine when i was training. That’s really really nice that i can combine it with something else. Because I work full-time, i only have the evenings and the weekends for study. So it has to be something that i can do simultaneously as i am doing something else. So the audio book is really nice. I can listen to the book when i am in transit to work or in transit home. And listening to it is so much easier than carrying the book back and forth. So it is really nice

**Interviewer:**How does that help your learning?

**Interviewee:** As I said It makes it easier for me and faster I need everything as smooth as possible…as efficient , as effective as possible for my learning because if it is too much... to …learn or too much to do, i would not be able to get it done. I am too busy with other things in my life so i really need the learning to be efficient.

**Interviewer:** Again which digital tools do you use?

**Interviewee:** Yes the camera in android, I use ebooks, video presentation, electronic information like that…i use word to write home exam.

**Interviewer:**General: Describe how you go about when you have to learn before an exam with a particular focus on the use of digital tools/technology

**Interviewee:** So what I do with the focus on digital tools and technology is ... watching the video presentation…and reading the material online, ebooks, and the articles if you go to the.. library database. There are a lot of articles that you can use there. So primarily is the ebooks and listening to videos, presentations.

**Use of pre-existing digital material for learning**

**Interviewer:** Now we move to the next part of the interview. It focuses on user of pre-existing digital material for learning**.** And the first question is do you use pre-existing video recordings when you attempt to learn something?

**Interviewee:** Yes, actually I do so there is quite a lot of video presentations and seminars that you can listen to online such as youtube, ted talks…also very very good…I enjoy watching those… Yale…The Yale business school has…they share a lot of their seminars online. So you can watch it as if you are students sitting there in the classroom. And that is really really nice. And I listen to those as well. And they have been really helpful. So I use those pre-existing videos to help me learn

**Interviewer:**How do you concretely use videos in your learning, can you describe the procedure?

**Interviewee:** Yeah..what I do is I think of something that i want to learn more about, then i just google it. Often you will find some information, articles….Or you can go to Youtube...search on youtube to find like some…presentations and seminars. I also use slide share where people have shared their slides, which is really nice. So you can search for something and there will be slides that people have share from previous presentations. You can read through it and take note of them.

**Interviewer:**What kind of videos do you use (YouTube, recorded lectures, etc.)?

**Interviewee:** What I use is primarily youtube and also some of the recorded lectures that are published from Yale business school that are really really good. So they are primarily video presentations so you can actually see the lecturer and feel like you are really there.

Interviewer: Yes, do you use any function such as repetition, fast-forwarding, selective viewing, etc when you use video for your learning

Interviewee: Yes, fast forwarding…no not really…unless I am watching the pre existing video that I am not sure if it is relevant to me I might fast forward to see if there is information they start to talk about that I feel might be useful….Repetition …yes If i need to rewind and listen to something again. I do pause it and then I can take note as well

**Interviewer:**Why do you look at videos in your studies and how does it help your learning?

**Interviewee:** I look at the videos... because i think this is…this is something that really help when you feel like you present and you have an opportunity to see someone speaking. And if they are good speaker, then you feel that they has been very useful. Also you can pause it and take notes. And it’s really quite useful.

**Interviewer:**Do you use pre-existing images when you attempt to learn something (for instance Google pictures)?

**Interviewee:** Ehm..No …google pictures i haven’t really use…But I do search…or maybe google picture …like if I look for something and I would like to see charts and diagrams then I can click on the images…google images then I see lot of the pictures that are charts and diagrams, pictures that can be quite useful to me.

**Interviewer:**How do you concretely use images in your learning, can you describe the procedure?

**Interviewee:** Yes, so what I do is If i need to find something that I need to see the diagrams or to see a chart or something that is statistics for example…it is much easier to see the actual chart than trying to read it. Then I go to google, I search it then I click on images. Then I can find lots of pictures and useful images to use.

**Interviewer:**What kind of images do you use?

**Interviewee:** Basically just charts and diagrams. That’s what i have found are most useful.

**Interviewer**: Why do you look at images when you attempt to learn something?

**Interviewee:** It can be easier to see the actual picture than trying to read it. They say picture worths a thousand words then a video worths a millions words. So actually have a video, or have a picture, it can worth quite a lot. I mean to see the actual image so that’s why I use it.

**Interviewer:**How does that help your learning?

**Interviewee:**  Just to make it easier…to have a visual of the text

**Interviewer:**Do you use pre-existing audio recordings in your studies?

**Interviewee:** I use the audio book that we have in the course.

**Interviewer:**How do you concretely use audios in your studies, can you describe the procedure?

**Interviewee:** Yes so what I do with the audio recoding and take note, I listen to them and take note. I may use the rewind and pause function.

**Interviewer:**What kind of videos do you use (YouTube, recorded lectures, etc.)?

**Interviewee:** I use youtube …I use recorded lecture that you can find through youtube, or just by googling.

**Interviewer:**Why do you listen to audio recordings when you attempt to learn something?

**Interviewee:** Eh,…because it is easier to fit into my schedule, instead of trying to read the heavy book, so  i can also listen to the text, listen to the presentations instead of just reading them.

**Interviewer:**How does that help your learning?

**Interviewee:** It helps my learning by being able to fit in my schedules and having another way to learn, so it’s not just reading, I can actually listen.

**Interviewer:**Do you use digital text and information in your studies?

**Interviewee:** Yes, digital text and information I use in my study are primarily …with the ebooks, pdfs, presentations in powerpoint. So I use them in my study.

**Interviewer:** I think learn platform or information you can find online using goole is also one type of digital text. Do you think so?

**Interviewee:** Yes that’s right

**Interviewer:**How do you concretely use digital texts in your studies, can you describe the procedure?

**Interviewee:** Yeah..so..one of the thing I do is I go through digital text that we have in ilearn for that course. And if i feel that i need any extra information then i can use google and try to find more text and information there.

**Interviewer:**What kind of digital texts do you use?

**Interviewee:** The ebooks, the pdfs, powerpoint presentations, all kind of information, articles you can find online

**Interviewer**: Why do you use digital texts when you attempt to learn something?

**Interviewee:** Ehm…to make it easy for me...I use searching function to help me look through the information that i need. There is so much better than in a book because in a book there is no searching function. Unless you try to use the index . But it’s very cumbersome to use the index because you might find one word and it ends in 10 different pages and …it takes more time…it’s much faster to use the searching function.

**Interviewer:**How does that help your learning?

**Interviewee:** It makes it faster, more efficient and more effective.

**Interviewer:** Ok, Thank you very much. We have come to an end of the interview. Do you want to add anything or is there anything that you forget to mention above?

**Interviewee:** I think have mention everything. I just want to add how important it is to have ebook available because those are really useful. Because i don’t need to carry the book everywhere, i can access the ebook anywhere...I can even access it with my phone...That's what I would like to add.

**Interviewer:** How do you find about our current learn platform?

**Interviewee:** I think it’s really good. I am pleased so far.

**Interviewer:** Thank you so much for your time and good luck with your study.