**STAGE 3**

**EUROPEAN EFY STUDENT**

File ID: SS08\_M\_EU

File Name: Voice091-M-EU-Latvia

**Keys:**

I - Interviewer

SS08 - Interviewee ID

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Interview:**

**PART A**

**UNDERGRADUATE EXPERIENCE**

I **so, how is it getting on now, your first year of undergraduate programme?**

SS08 well, I’m waiting for my results, but I kind of expected what I’ll get. I have a feeling about how much I will get in the end, not as much that I would want, I think the score is going to be adequate

I so, what’s your destination course now?

SS08 currently Civil Engineering with a year in industry, however, I might potentially switch after the year in industry with Civil Engineering with architecture

I okay

SS08 because, I think most of the important modules that I would want to study they overlap, they are in both courses. Is just that there are more modules that I would want to study and one degree than the other one, but it’s not finalised. I have not fully decided on that

I umm

SS08 I still have some time for it

I so, you’re allowed to switch after a year?

SS08 I think so, I might have another talk but from my conversation about a half a year ago with people who are like close to graduating, they all said it should be possible

I umm

SS08 there’s no reason why you shouldn’t be able unless you have really low results

I okay

SS08 if you have let’ say fifty five or less, then yeah, that might be an issue, but

I umm

SS08 other than that, there shouldn’t be any issues, because there’s such a heavy overlap, they are both Civil Engineering

I umm

SS08 because in first two years you have, I think identical modules, it hasn’t been like that for all the modules in the past, but currently it is like that, so

I right

SS08 should be possible

**KNOLWEDGE ACQUIRED**

I so, now coming back to my research questions, so **what is your attitude towards critical thinking skills now? Has it changed, or remain the same since you joined the Engineering Foundation Year?**

SS08 oh! It hasn’t changed too much. Of course, obviously I can see the importance of it (laughs) in actual real life scenarios

I umm

SS08 and definitely they are more important in those than in academic setting

I more important than in?

SS08 academic setting, because some people can just absorb things from the environment automatically without that much of critical thinking than adapt slightly. That doesn’t mean they can perform very well, they can just get through it but in real condition you can get into trouble

I umm, right. You mentioned about academic context, can you give me an example?

SS08 just like exams, course work studies, theory based things

I umm, any specific example

SS08 it doesn’t have to be a specific example, like any subjects that focusing on memorisation of jus things, for example we have chemistry and geology subjects like where as long as you remember key points you basically understand the subject

I umm

SS08 where else some subjects you need a real good understanding of things in order to solve problems. I would say, for example like we had a thermal and fluid mechanics

I umm

SS08 and that is vastly more difficult than anything in geology or for even in Maths for that matter I would say

I umm

SS08 because, you need to remember the properties and you also need to know how to use the equation looking at the system and applying logic to be able to divide specific parts and applying what you know to each separate parts to create a way to solve a problem

I right

SS08 not just vaguely remembering a definition or let’s say a property and just writing an answer

**PART B**

**CRITICAL THINKING SKILLS IN EFY AND UG**

I right, okay. Now you’re already in you first year of your undergraduate programme, **so to reflect on your foundation year in your opinion do you think critical thinking skills are important in the foundation year to help you to cope with your programme now? Or it doesn’t matter?**

SS08 to certain extent yes, especially for people like me it does to an extent ( \_ )

I how, yep…

SS08 I see it as a more combination of that and as a preparation for the university environment itself

I umm, if you could **recall any of the skills you’ve acquired in foundation year which do you think you’re applying it now? Skills you’ve been explicitly or implicitly exposed to you in your foundation year which you’re actually applying it now?**

SS08 yeah, well, I guess just the content, it doesn’t really count it’s just content stuff

I umm

SS08 ah, I would say that, let me think ( \_ ) for example in programming they did have, yeah, there were some stuff that themed with design a project because in the first year I think I also had a similar project but completely in a different subject. But I think, the way of think and work ethics applied to that partially transferred to design which is completely a different subject to programming. But, I really thinking of it really into that because like sure, when you let’s say making let’s say a piece of software

I umm

SS08 or let’s say an algorithm you need critical thinking but it’s very easy for a person to be really good at coding and creating like algorithm to solve a specific issue and be really bad at like I previously mentioned fluid mechanics

I umm

SS08 even though they both require critical thinking skills, so I’m just started to think whether it’s just knowledge specific or ( \_ ) because now I’m also started to think of previous experiences. Because, I think may be in some extent some modules is kind of limited because I just a few days ago met a guy who also in the foundation year and I think he is now doing, I’m not sure what’s specific course he’s doing but it’s focused on programming, so it could be computer programming or something to do with that

I umm

SS08 and even though the foundation year gave like the basics he still felt like that there is this real steep jump

I umm

SS08 because in the foundation year like, yeah you studied syntaxes and general idea, we didin’t study like inheritance use of classes where you branch out the actual code for it to like become for sophisticated and more complicated could be described as understanding the programming logic and syntaxes which is more of a critical thinking skills

I umm

SS08 so, foundation year definitely useful, but it can improved may be in specific aspects

I umm, like?

SS08 like, may be specifically like programming content slightly, that’s a very specific thing. Although, Electronics I think it also quite well improve your critical thinking skills, since Electronics is the most challenging thing in the foundation year

I umm

SS08 I think it’s really good

I **so, you think Electronics had more application of critical thinking skills in the foundation year?**

SS08 I think so

I umm, okay. **So you think it is important to learn some of the essential critical thinking skills for engineering in your foundation year, at that stage?**

SS08 I would say that the importance of critical thinking skills in foundation year compared to this year are about the same I would say

I umm

SS08 but, that doesn’t necessarily mean for every other course

I every other course, what…

SS08 because, I think there are some courses that can be more challenging like Electronic Engineering

**PRACTICE**

I right, **if you think it’s important in the foundation year in your opinion what would be the effective way for the students to learn and actually acquire the skills. For example, would you prefer a separate module for critical skills in foundation year or would you prefer it to be embedded in all the modules? Or, something more explicit that the lecturers actually…**

SS08 I probably, I think what would get the actual result, it doesn’t necessarily mean that they would raise the score of the people or even the opposite of it and really improve it is probably integrated to most of the subjects. It doesn’t have to be really heavy in every single subjects but in most of them they should be that component

I umm

SS08 because, it’s really puts things in perspective when actually go to the course and then you are given an opportunity to apply that knowledge to something practical, let’s say you have studied about something like Mechanics or Engineering Principles or what not. And then, at the end of the semester you get an actual access to some physical resources or workshops something like that and you actually have to create something based on that stuff. But, that also includes like, that able the (teachers 14:32 ?) to work with tools and understanding the logics of how you do something, because like you can draw something really nice in the computer, but it doesn't mean it would be easy to actually built it, the tools that you have

I umm

SS08 that, when you put that person in that position he automatically, it’s a necessity for him like think in that manner, the more he does it the better he’ll adapt to new things

I umm. Right, so you’re stressing just now that it should be included in most subjects so in retrospect…

SS08 in Maths, I can see in Maths it would be like you can’t like fully apply like in workshops or something like that, the Maths you can apply to other subjects but yeah, Maths is non-applicable subject like practicality or what not

I right

SS08 but Electronics for example you can obviously make a circuit or something like that and we did, and we actually did it and it was really good, I think

I umm, so you believe Maths did not give you the opportunity to apply the critical skills is that what you saying?

SS08 no, to an extent it does but you can easily pass the module which is memorising things

I formulas

SS08 yes, it’s possible

I umm

SS08 I think you can definitely get fifty to sixty percent of the module which just memorising few matters of solution, that’s it, however if you really try to push it like, you can try to like try to derive solution for specific problem without like additional help and that does really improve your critical thinking skills but that doesn’t happen that often

I umm, for an exam for example, I’m talking about Maths, you have this question and then you have to solve the problem and sometimes there are more than one way of solving the problem

SS08 yes

I so, one could be a longer way which takes time, and in exam condition you’re rushing for time

SS08 exam condition don’t allow it, not all the exams, but some of the exams they’re designed for you to even not to finish it everything in time even you know everything

I umm

SS08 like for example we’ve statics tree, that exam be like be bending, bilateral bending all that, and it’s not possible to cover all the topics well enough to be able to do the exam really well, but you just don’t have the time. It’s just so much you have to write there, and that’s the hours they give you

I umm, right. So, you’re claiming that it is not possible to answer all the questions…

SS08 some exams it’s possible, but some the other one is impossible

I which one is impossible

SS08 like Electronics I remembered there was no time to do it

I even though you know all the answers?

SS08 I had to skip at least one twenty percent question

I umm

SS08 but then again I probably not well prepared enough, but this year I spent a lot of time on preparation than in the foundation year

I so were you aware that critical skills also involve time management?

SS08 oh! Yeah, that definitely does, because the foundation year give the taste of the actual exam here because mine where I came from was quite different unlike any real time pressure. And, once I came here I realised like it’s quite difficult and even impossible to get ninety percent in an exam

I umm

SS08 it’s just impossible, and now I’m completely okay with sixty five percent now

I yeah, umm okay. Another thing is that just now you mentioned sometimes you’ve to write a lot, you can’t finish to cover the other section of the exam paper, so when we talk about critical thinking skills, it also involve precision. That means you got to be very selective of what you need to include, so that needs skills isn’t it?

SS08 oh! Yes, but that you can only get from the feedback

I feedback, how it that?

SS08 well, maybe it’s not feedback

I like you could write given the time, let’s say about hundred and fifty words for that a particular question let’s say

SS08 yeah

I but again, even if you look at the layout of the exam paper they have very small space, so you must be wondering how can I feed in everything, so you got to be very selective of what you want to include in there, is it not also critical skills? Do you think it’s indirectly testing your critical skills on how you prioritise things and how selective you are?

SS08 yeah, it definitely does

I umm

SS08 but it kind of depend on simply how they mark this specific exam, because now I constantly think about my current exam and also the one I had in my foundation year

I umm

SS08 because it’s a bit different

I they’re really different? Or is it a slow progression…

SS08 not extremely different it’s just that amount of work load is larger, it's twice as larger as previously, and a let me think ( \_ ) because I also have feeling I might not have prepared that well enough for exams in the foundation year because I didn’t invest a lot of time in that but this year I did. Because in the foundation year I spent about a week or maximum two weeks, where else this year I already stressing about it a month and a week for that

I umm

SS08 but then, I also had construction project on top of that, then I had really heavy revision days, after that I also participated like group-study

I umm, okay

SS08 which is really useful especially in the subjects in which you’re not doing well, group study is really critical because in there, a week before the exam I was able to learn more than in the last two or three months (laughs). But then again, this also question about how well you manage the presentation for that specific module it’s kind of long winded, the slides are really long and standard a bit long winded with time. They cover all the information but it’s kind of spread out really

I right

SS08 inconveniently for exam purposes

**LANGUAGE PROFICIENCY AND CRITICAL THINKING SKILLS**

I so coming back to the critical thinking skills, in your opinion do you think students need to have good command of academic English, because English language is different based on the usage. For example spoken English literature is different to academic English

SS08 yeah

I academic English is very different because it’s very specific with specific academic words with academic word lists and things like that, **so do you think students need to have good command of academic English to learn academic critical thinking skills? If yes why and if not why as a non-native you…**

SS08 I don’t think it’s critical but it depends what’s your starting positions, if you…

I for you for example

SS08 oh! If me it’s definitely not critical at all, but it kind of impede my results slightly

I how?

SS08 well for example, let’s say you doing something practical which is part of your course because there’re some practical parts in your course

I umm, what subject is this?

SS08 in general for engineering?

I yeah

SS08 in designing project, to be able to understand everything is really important than having this language barrier

I what will happen if you lack language skills for this kind of practical work, what will happen, possible outcome you think?

SS08 it’s slightly annoying because it slows down the process, it impedes your progress, like for example in group work let’s say you had to do this or this in a specific time frame. Let’s say somebody gets sick or others or there’s a problem or something like that. You have to do on your own or you have to like give instructions to somebody to do this or that, and if you have communication problem then it’s just ( \_ )

I okay, in your experience have you worked with someone whose English is not his native language and you think it has been a struggle to complete a task, because his deficiency in the language?

SS08 I think luckily not, I mean I have slightly experience it but it did not, it’s small not knowing a specific word something like that. I don’t think it really counts. I would say no.

I so you mean for practical work at times?

SS08 yeah, I would say so

I okay, right

SS08 although, to be fair like I have one friend like studying in my course but he didn’t go to foundation year which he went in directly, and even though his English is decent it might have some effect on him on certain subjects that are more complicated because something is pretty easy that you like intuitively can grasps kind of easily where else it’s more difficult doing something more challenging like something related to aspiration layer or turbulence or combustion things like that and if you don’t have experience using that types of language you can’t even like visualise it, so…

I technical language you mean?

SS08 yeah, that may make it challenging but other than that it’s kind of surface level

I so, in your opinion do you think, because from the beginning you mentioned critical skills are important for engineering?

SS08 yeah

**ASSESSMENT ON CRITICAL THINKING SKILLS**

I so, on that basis **what would be the effective way to assess students’ critical thinking skills do you think? Do you think it’s necessary to assess students’ critical thinking skills for engineering?**

SS08 it would be good even just for self-assessment purposes would be good

I umm

SS08 because it kind of shows like how you would be able to cope with actual real life problems later on because that’s what actual engineers will deal with, real life problems

I so, this self-assessment do you think you would have benefitted if you was given to you when you were in the foundation year?

SS08 in a way, yeah, any, almost any feedback is useful

I so, **do you think engineering students need to take engineering critical thinking test before they pass out from any engineering programme? Or it not necessary?**

SS08 umm, that’s a very good question, because I’m thinking the implication of that, because it’s entirely possible for an engineer to graduate with an okay score and go into work and still be able to do the job, it’s entirely possible. But, because there are times when I think I completely fail in terms of like critical thinking skills for example a week before in a workshop like we discussed different metal, even though I really can memorise about materials really well, but even a simple question like what type of size will you use in cutting let’s say a specific type of metal. It was quite challenging at the practical experience of it and you draw wrong assumptions because you know that this material is harder than the other one and start thinking about grains, tiling and detail things. But, in reality you just need to understand, okay if something is softer you used it for something like stocking and in the parts between the handle and edges of the saw. That, you just don’t think of it you just need some set of critical thinking to have immediate thought and understanding that, so to some extent it’s kind of important but some of it, lot of engineering stuff is memory based, it’s like intuition like

I umm, right. So self-assessment is good in a way, is that what you’re saying?

SS08 yeah

**FIRST LANGUAGE, CULTURE AND PREVIOUS LEARNING**

I okay, right. So, now we’re looking at the UK context, you know students come from all over the world. They come from a different culture, different language and also different learning background and academic culture?

SS08 yeah

I **so, in your opinion to what extent your first language affect your critical skills? Like what’s you first language?**

SS08 my first language is Latvia, I think it doesn’t have that much affect in my experience because I know people who come from same country but they perform differently. It’s just really depends on the personality type that you have, your approach to study

I so, it doesn’t affect at all in your opinion?

SS08 I think it’s very negligible

I how is that? What do you mean by negligible?

SS08 like its importance of it is so low that you can almost ignore it

I is it?

SS08 I think so

I so language is not a big issue when you want to apply your critical skills?

SS08 I think so, yeah

I but then in the context of the UK, studying in an English speaking country you have to apply you skills generally not in your language but the way the target language practise it, right?

SS08 yeah

I so, for example how would you explain the word analyse in your own language, is same in your language?

SS08 it’s slightly different but it’s not that much of a different, I think it’s more about being able how to formulate yourself rather than the language that you use

I for example the word synthesise in English, synthesise something okay, so how would you use it in your own language, can you directly translate it? Because if there’s a confusion then it will affect your performance, right?

SS08 yeah, I think. It’s kind of straight forward at least in my situation. I don’t know about others, personally it’s somehow straight forward

I umm

SS08 it’s about you being able to take concept and then explaining it in somehow efficient manner

I umm

SS08 and that depends on the language itself, that's the thought processes

**CULTURE**

I so, okay, that’s language. **How about your cultural background has that ever affected your critical skills now?**

SS08 my cultural background? It’s less cultural back ground than social background

I social background, right

SS08 it’s mostly just social background, yeah. Like what school you studied in, what types of class-mates you have and did you challenge yourself when growing up, things like that. So, it more important than…

I than your cultural background, yeah?

SS08 yes

**PREVIOUS LEARNING**

I so, you mentioned about your schools and all that, in your previous education did you have lot of opportunities to apply critical skills or about the same now? Do you find it different?

SS08 I think there’s more opportunities now than before

I you have more opportunities now?

SS08 Now, I’ve progressively improved

I okay, so did it…

SS08 yeah, high school. I think in comparison I did not put enough effort in high school at all

I in teaching, in class room practice, did you enough practice in your previous education

SS08 in the classroom?

I did the teacher explicitly explain, or you’re given a project where you’re expected to perform? Or, were you consciously aware that you’re learning critical skills?

SS08 to an extent, but I think comparatively I weren’t

I so you’re getting more now?

SS08 I think to an extent, yes. I think so.

I umm, can you give one example in your previous education that you learn critical thinking skills consciously?

SS08 yeah, for example in Economics we had some projects where you just logically decide what business ideas will be viable in certain situations, or I also had research project about sea port and how you could attract more cargo to it. But, it kind of spread out in small doses

I umm

SS08 I think it would have been easier for me like the stuff I had in my foundation year I already have when I was sixteen or fifteen. I think that would have helped me quite a significant impact in a positive way

I right

SS08 but, that is not something that I can change

**PRACTICE**

I okay. So, on the whole do you think you had enough practice in the foundation year on critical thinking skills? Or would you prefer you should have more?

SS08 I think it was adequate. It was adequate

**ACQUIRED KNOWLEDGE**

I right, so final question. **How would you define critical thinking skills now?**

SS08 well, I would define critical thinking skills as being able to extrapolate the necessary information for you to start creating a framework for a problem and then solving it in a manner that is efficient and logical. I don’t think that is a good definition?

I no, because you’re doing Civil Engineering your perception towards critical thinking skills and how you apply will be different to others from different field isn’t it? So, that’s fine. So, what you’re basically saying is problem solving?

SS08 yeah, that's basically problem solving

I and you mentioned about efficient, what do you mean by efficient?

SS08 because, that’s always that you say in Civil engineering specifically the efficient way is the most solid, easiest and cheapest way, it’s the combination of those things

I umm

SS08 because ( \_ )

I cost effective, yeah?

SS08 yeah, cost effective. That’s why we still use concretes, it always cracks and metal can erode but it doesn’t last forever, it’s not carbide or super materials but it’s cheap and we can produce in a large quantity

I umm

SS08 and, it’s fairly applicable to, in lot of conditions so we use concrete

I and also you can avoid wastage, yeah?

SS08 well

I efficient is also avoiding wastage isn’t it?

SS08 yeah definitely. Yeah, especially nowadays, resource management

I resource management

SS08 and cost necessarily important, always save cost

I cost is most important, yeah? right, thank you very much. It was really helpful

SS08 okay