**SAMPLE INTERVIEW: INTERNATIONAL EFY STUDENT**

File ID: SS01\_M\_I

File Name: REC033-M-I-Bahrain

**Keys:**

I - Interviewer

SS01 - Interview Participant ID

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**Interview:**

I so, how would like to introduce yourself?

**SS01** well, I was born and brought up in the middle-east, born on an island called Bahrain. I live there for around 10 years, and then we moved to Dubai, and we spent 9 years in Dubai before I came here to the Southampton

I so, may I ask your age?

**SS01** 19

I so, what type of education in the past

**SS01** it was like British curriculum when I was in Bahrain I went to British school, and then when we shifted to Dubai I went to an international school and there they did the IB programme, International Baccalaureate a diploma programme

I right. So, this is at an international school?

**SS01** umm

I and this you join at secondary level?

**SS01** grade 6

I so, what is grade 6?

**SS01** that’s the last year of primary

I Last year of primary? Year 6?

**SS01** I was 11 years old. Yeah, the high school starts at year 7

I Um, okay. So, 12 years that will be your secondary school?

**SS01** Yep

I so, this British school, what do you mean by British school? Was it a public …

**SS01** No, no, it’s a private school, but it was a, it had the British curriculum like they did the A Levels ( \_ ) this is the one in Bahrain

I and this is sort of a private school as well? okay, right.

**SS01** and that was in Bahrain

I right. So, how do you find yourself as engineering foundation student, being a student in the foundation year?

**SS01** I mean it’s very different to high school obviously, and the fact that I am so far away from home makes everything a new experience for me, but do you mean just foundation?

I um. You mention it’s different. So, how is it different?

**SS01** well, the cultures are very different, what I’m used to obviously going to an international school then living in Dubai which itself is an international hub. Going from that to less internationalism, if there’s a word? You know one coming here and then adapting to the culture here and learning, I mean the ways that are common here, things like that, and that’s what different. As a student, I’m obviously used to at high school classes of maximum 20, 22 students and then coming in the foundation year, walking to the lecture hall for the first time and surrounded by 200 students, that was all very different

I so, the class organisation itself from a small group to a large

**SS01** yeah, exactly, that was a big change

I and that don’t you think even in Dubai if you enter varsity the population, the organisation of a class will be a huge class as well or are you aware of any kind of …

**SS01** no, I wouldn’t know of the universities in Dubai, but from what I’ve heard from my friends there is 50 may be 55

I umm

**SS01** something like that, this is what I heard from my friends, I wouldn’t know myself, but that doesn’t seem like their lecture halls their classes as large as ours

I umm. So, just now you mentioned about UK being less international

**SS01** not less, not the UK but Southampton itself, majority of my friends were born and brought up here they’re locals all are here as England. Few of my friends are obviously come from abroad but it’s the intensity is not as much as back in Dubai

I is it because you don’t socialise much?

**SS01** no, is just that what I come across? I mean for example in high school I knew people from the (grade?) of around 100 students?

I umm

**SS01** I knew someone from, like all over from every country Papua New Guinea, South America, North America? Where else here is not as much, majority of my friends are British and others are Europeans. A few are like far-east Asia

I umm

**SS01** that’s about it

I so, these friends you’re talking about, are they from foundation year?

**SS01** a mixture of both, foundation as well as friends in my Halls

I okay. How about the learning experience, compared to previous and now? Is there any different or it’s about the same?

**SS01** I feel much more independent

I umm

**SS01** I mean in high school you have teachers constantly checking up on you, where else here you’re given work and it’s up to you to do it or not. No one will come around and asking have you done it. If there’s a deadline you’re just expected to hand in the work. No one will ask you how your progress is going things like they do in high school

I umm

**SS01** so, yeah. I find this different

I so, lack of monitoring?

**SS01** I don’t think is monitoring as much as they trying to help you to be more independent, like just telling you how it is may be in reality. So, it’s not lack of monitoring, it’s just helping you being more independent

I be responsible?

**SS01** be responsible have better time management things like that

I umm. So, sort of being responsible of your own learning, yeah? Right, umm. So, this going to be sort of, I don’t know how you’ll take it, but you can always try. So, what are critical thinking skills for you?

**SS01** [laughs] like, how do you mean?

I so, if you were to explain, okay this is what entails critical thinking skill, so how would you define it, personally as a student now…

**SS01** umm how would I…

I you don’t have to like sort of refer to a scholarly view

**SS01** yeah

I as a student…

**SS01** how I see

I yeah

**SS01** so, what’s expected of me when I’m asked to think critically?

I yes

**SS01** I’d say, well, you get a wide I mean a good idea

I umm

**SS01** of the problem you’re facing

I umm

**SS01** and then, I’d say you break it down into parts and then you look at each part individually

I umm

**SS01** and you go into more depth, and that way you for me that’s critical thinking because you’re going into more depth allowing you to understand the problem a bit more?

I umm

**SS01** therefore, coming out with efficient solution for it. To me that’s critical thinking

I that means a big chunk

**SS01** yeah

I you break it up and then you analyse it in depth?

**SS01** yep

I of each pieces or…?

**SS01** each piece

I and then what?

**SS01** fit it into one piece of chunk again

I umm

**SS01** that’s for me that’s what I would do

I so, what would be the word to describe the whole process, because you’re using lots of word to describe simple things? If you were to, I mean it’s good that means that you’re very clear about what you’re saying?

**SS01** uhm

I but, there are some words which are critical

**SS01** yeah

I which you can use that word and it means that. You’ve just said that, you the big thing you break into pieces, what is the word?

**SS01** ah ( \_ ) divide? (laughs) did I just said? Ah ( \_ )

I yeah, that’s absolutely the good thinking skills, that’s critical skills, but there’re actually some critical words when you use it means that?

**SS01** analyse may be?

I umm, when you put it together?

**SS01** ah ( \_ )

I s…?

**SS01** I’m lost

I so, it’s analyse, you break it into pieces

**SS01** oh, analyse

I and when you put it back is synthesise?

**SS01** oh, synthesise

I so, usually what happen is it’s easy to say critical, what is critical?

**SS01** uhm

I it’s a vague word isn’t it?

**SS01** yeah

I so, you got to have the idea of what it is, for example is actually breaking up big chunk and analysing

**SS01** yeah

I so, synthesise is putting back everything together

**SS01** okay

I so, for you critical is about analysing and synthesising, can I say that?

**SS01** yes

I so, did you have any experience learning this is the third question okay?

**SS01** uhm

I did you have any experience learning critical thinking skills in your previous education? If yes how and if no, why you haven’t had the chance to learn the critical thinking skills you think?

**SS01** you mean like…

I in your previous learning…

**SS01** how?

I yeah, like a module

**SS01** ah!

I like critical skills as a subject…

**SS01** if we were taught what critical thinking is?

I yeah

**SS01** er we weren’t taught as such. It was sort of implemented in all of the subjects we took in high

I umm

**SS01** there wasn’t such okay this is critical thinking and this how you meant to carried it out?

I umm

**SS01** it was just implemented

I umm

**SS01** in the subjects we took, so I guess

I umm, so it was incorporated yeah?

**SS01** yeah, I guess we’re doing without us knowing that we’re doing it

I but you know you’re doing something challenge

**SS01** yeah

I your normal…?

**SS01** we knew that but we didn’t know that it was critical thinking

I umm, give me example of things that you’ve done which…

**SS01** well, I took economics at higher level in high school

I umm

**SS01** as part of my [ IB? ] programme

I umm

**SS01** and that involved lot of critical thinking because you have to take into account various factors and how they affect the problem you’re trying to solve?

I uhm

**SS01** so, that’s how you have to take a problem like I said, break it up analyse it and then synthesise it

I umm, so sort of identifying contributing factors?

**SS01** exactly

I umm

**SS01** and then, their affects in the short terms and long terms things like that

I umm

**SS01** yeah, that’s an example for economics

I umm

**SS01** yeah, we’re doing it without knowing we’re thinking (laughs) critically

I so, it’s more of implicit yeah?

**SS01** yeah

I implicit approach?

**SS01** yeah, okay good

I so how important do you think, this is question number four, how important do you think critical thinking skills are for engineering foundation year as a student?

**SS01** I would say obviously they’re very important for us

I umm

**SS01** umm, as because, I’m trying to say the word correctly

I but, you think it’s important?

**SS01** I do believe it is important because…

I how important, if you were to give a figure, a percentage on it?

**SS01** a percentage?

I yeah

**SS01** I would say in the 90’s probably because…

I very important

**SS01** yeah, very important because foundation year students we haven’t sort of you would say being introduce to our actual degree. You know next year is when we actually start our proper degree, so critical thinking will obviously help us to understand how we’re meant to approach and solve problems in which we’ll face next year

I uhm

**SS01** for foundation engineering student critical thinking is very important as it preps us for next year

I as a preparation, yeah? Right, next we’re going to move on to critical thinking skills specifically for engineering because critical skills they’re very generic where everybody use it or chose not to use it?

**SS01** uhm

I and there’s also critical skills very subject-specific, we have engineering, medical, law, business like just now you mentioned about economics?

**SS01** yeah

I so, people use critical skills in a different context

**SS01** uhm

I so, how a humanities student approach a task could be different from how an engineering student approach the same task?

**SS01** yeah

I so, now the questions will be directly relevant to engineering critical thinking skills, okay? Right, so, in which semester, one or two do you think you had more opportunity to learn and practise critical thinking skills, is it semester one, two, both or none?

**SS01** for me personally, I would say semester two

I umm

**SS01** because semester one is just me adapting to university life?

I umm

**SS01** so, maybe I was probably doing things without realising [how?] it was?

I umm

**SS01** where else in semester two was I had settled in in a way. I knew what to do and when to do things like that, that’s when I had the chance

I so, is it because in semester two, you’ve the knowledge already, the content?

**SS01** yeah

I and now you’ve to challenge the theory, or something?

**SS01** yeah, exactly, err yeah, in semester two I did for example more reading into our topics which in sort of what helped me solve the problems in better ways. Where else in semester one I would skim and then try attempt the problems and then I find them very difficult, so yeah, I would say semester two definitely

I so, you were adopting easy way in semester one?

**SS01** pardon?

I you were adopting easy way which didn’t work is it?

**SS01** (laughs)

I right, okay. So, you realised semester two was more challenging which actually challenge your thinking than semester one?

**SS01** yeah, personally yes

I and semester one is more of a adapting to university life, yeah?

**SS01** yes, and not really, well I mean focusing on work but not as much as semester two

I umm, okay right. So, in your opinion which module or subject in the engineering foundation year provided you more opportunity to learn and practise critical thinking skills and why this module is better than the other, if there’s one?

**SS01** err [ \_ ]

I of course, all the modules have something going…

**SS01** yeah

I but, there must be some modules which have something more than the other?

**SS01** for me it was Mechanical Science, because the thing about Mechanical Science is that you have a set of formulas

I uhm

**SS01** and from those formulas you can drive new formulas, and these formulas can be applied to various problems, is not like you have one formula it can only be applied to this topic, you can apply to different sub-topics

I umm

**SS01** so, that’s why for me Mechanical Science helped me to think like you can say outside the box more critically, because you’ll look at a problem, you would, I would see what I’m given, this is where I divided to analyse

I umm

**SS01** I see what I’m given, what I need to find and then what formulas I can use to find that

I umm

**SS01** sometimes I would find that if I need to find for example X, I would need to first find A B C than I would get X

I umm

**SS01** with that, this is why I always split up my problems individually and then once I have the (variables?), the components I need I would synthesise

I umm

**SS01** and then I find the main fact that I need to see

I umm

**SS01** so for me Mechanical Science was where it helped me to think critically more than the other

I umm, this practice was it in the class or was it the practice on the Blackboard?

**SS01** it was, in class we were given a brief understanding of it and then when the worksheet came out…

I understanding of what?

**SS01** of any topics of what we’re learning

I content?

**SS01** yes, and then when the work sheets came out, we attempted the worksheets that’s where we found that you have to use, and the workshops helped a lot because there were some questions just, we found them difficult and then when we went to workshops

I umm

**SS01** we saw how the professors solved it and then we’re okay it’s not just a one step process you have to do various things

I umm

**SS01** and that helped a lot because we understood that you won’t find the answer immediately. You have to do, you have to play around with the formulas first

I right, okay. Now, besides the lectures every students in the foundation year is given opportunity to use the support classes?

**SS01** yes

I and, just now you mentioned about workshop sessions as well, so have you attended the workshops or support classes? If not why or if yes, do these workshop sessions encourage you to be more critical?

**SS01** I’ve attended almost all the workshops

I uhm

**SS01** because I’ve found them more helpful, where else the support classes maybe not so much, maybe up to the first month of the year

I uhm

**SS01** because everything I needed to know I would find it in the workshops

I uhm

**SS01** so, I haven’t really attended many support sessions. I found the workshops were more helpful

I so, why is it the support classes were not helpful?

**SS01** it wasn’t that it was not that helpful, many of my friends found them very helpful. It was just that what I needed to understand I got from the workshops

I umm

**SS01** so, I didn’t need to attend the support group

I so because of the workshops sort of compensated to the…

**SS01** exactly, and the workshops I found them, there were two umm [ \_ ]

I PGTA?

**SS01** PGTAs there and they can get around to you faster

I umm, so, usually you know each PGTA how many what’s the ratio like in workshop how many of you usually at a time?

**SS01** it really depends on the module

I umm, generally?

**SS01** for Mechanical Science it was around ten of us ten, eleven

I umm

**SS01** and we had two PGTAs, which is,

I okay

**SS01** obviously not everyone needs help in the workshops, so the ratio to the people that needed help to PGTA was better

I umm, okay. So, this questions will be based on PGTA. Now, apart from support classes students also provided with PGTA assistance?

**SS01** yeah

I so, what are their roles? Do they provide any supports or opportunities to practise your critical skills?

**SS01** the PGTAs themselves?

I umm

**SS01** they do when we need assistance, they do talk through the procedures and explain as well as give us the chance to ask questions of why they’re carrying out certain steps. So yes, I’d say the PGTAs are quite helpful

I so, they also help you to answer the question ‘why’?

**SS01** yeah

I umm

**SS01** why they’re doing certain things

I so, they also like, once you’re given the opportunities to respond to those questions they’re already encouraging you to be critical isn’t it?

**SS01** yes

I umm

**SS01** because when you ask why they give you first obviously the background and then how that applies to the problem which helps you to think that way for the following problems?

I umm

**SS01** so yes, in a way you’re thinking, they do help you think

I is there any specific workshop that you incline to say that you had more from that particular workshop?

**SS01** again for me it would be Mechanical Science

I okay

**SS01** that really help me to think critically because of the, yeah

I okay, so as a student in the foundation year in what aspect do you think that you had more opportunities to learn or practice critical skills, like being a student in the foundation year you have lectures to attend, your workshops, support classes, you do course works individually or group work

**SS01** uhm

I like the computer application?

**SS01** yeah

I you also have personal tasks like doing the worksheets for every week sometimes, ‘EE’ you have that don’t you?

**SS01** uhm

I and then attending workshops and other, so you have all these choices which one you think, sort of like talking about independent learning and trying to solve problems by yourself, which one actually gave you more opportunities to practise your skills?

**SS01** my critical thinking?

I umm

**SS01** it would for me would be the worksheets that we got every week

I umm

**SS01** the lecturers do help they give you a brief understanding, the lecture notes were good as well, but to in order to actually apply what we’ve learnt

I umm

**SS01** I’d say for me is the worksheets definitely

I umm, so, you benefitted more on doing the worksheets than…

**SS01** yeah, in order to think critically

I okay right, thank you

**SS01** is that it?

I yes, thank you very much for participating

Stage 2

**SAMPLE INTERVIEW: INTERNATIONAL EFY STUDENT**

File ID: SS01\_M\_I

File Name: Voice\_074-M-I-Bahrain

Date: 10th June 2015

**Keys:**

I - Interviewer

SS01 - Interview Participant ID

MS - Mechanical Science module

EE - Electricity and Electronics module

EP - Engineering Principle Module

I so, how was the exam?

**SS01** I mean some were easier than others?

I uhm

**SS01** but like one was harder than I expected (laughs), but on the whole I think they’re alright

I yeah? So, is it something surprising or you already expected this is how you’ll be tested?

SENSE OF SURPRISE

**SS01** I mean the exam this year was a bit different to all the test papers that I had done

I uhm

**SS01** in order to revise for them so, because for example if you’re doing past papers up to 2006 you sort of get an idea of what types of questions will for Section A and what types for Section B. This year the questions were different to the exams we did, we were told it will be different, but we weren’t expecting it to be like that different

I umm, so when were you told about the changes, semester two, semester one or towards…

**SS01** it was in semester one

I okay. So, did they give examples of question?

**SS01** oh! Each module has its specimen paper to allow us to see the format and how the questions will be asked

I uhm

**SS01** and they were uploaded on Blackboard

I right, it was slightly different from past year questions, yeah?

**SS01** yeah

I umm, so when you were looking at the questions, could be any modules, so, how many questions do you think were not straight forward? They were actually encouraging you to be more critical in approaching the questions?

**SS01** [ \_ ] sorry, I lost the questions (laughs)

I (laughs) okay, looking through all the questions, since you’ve already attempted the questions, there might be some questions which you think you oh! I could it straight away

**SS01** yeah, when I’m looking at my actual exam? okay

I yeah, the one you just did

**SS01** alright

I and there might be some questions were, you think oh! This is beyond me, this question is actually asking me to be more critical

**SS01** yeah

I when approaching the questions?

**SS01** yeah

I so, in comparison to whatever you’ve seen, which questions, I mean how many questions do you think asking you, like challenging your thinking?

**SS01** for me it was, maybe up to three questions that I’ve in general

**SS01** for each modules that I found I’ve to spend more time on than I would have

I umm

**SS01** they’re other questions, umm some questions were fairly easy and straight forward to me, I don’t need that much of time on them, others were the general that I came across in the past papers

I umm

**SS01** so I knew how to approach them, so a few, two or three were new and I just had to think about it because it was the first time I was seeing that sort of a question

I umm

**SS01** I hadn’t come across it in any past papers that I’ve done

I so, these three questions that you’ve mentioned, what’s the distribution of marks like? Is it a Part B question…

**SS01** most of them were in Section A, so they carried five marks

I umm, no, the difficult ones, the ones you think…

**SS01** yeah, they were in Section A for some modules

I umm, and what are the modules

**SS01** there’s one in Maths

I umm

**SS01** MS I find fairly easy through out, so there were none in MS, EP there was one in Section B which carried fifteen marks and in EE I think there was two in Section A something like that

I umm, so EE had more questions which challenge your thinking?

**SS01** yeah

I so these questions which sort of encourage you to be more critical in approaching how you answer the questions

**SS01** yeah

I what’s the marks like, is it eight or fifteen marks, twenty…

**SS01** fifteen marks or five marks

I yeah

**SS01** in the case of Maths ten marks

I okay. so, even the five marks questions was difficult?

LANGUAGE

**SS01** yes, because it was like a new type, maybe it was asking for the same thing but the way it was phrased

I umm

**SS01** may have put be me off a bit

I right, the wording?

**SS01** yeah

I how the questions were worded, so is it because it was long or is it some words…

**SS01** for Section B yeah, (presently?) when I come across a question with lot like two paragraphs

I umm

**SS01** before even I start I’m immediately like not interested in it because I have to read a lot

I umm

**SS01** I prefer one to two sentences, I don’t mind the difficulties

I umm

**SS01** I just prefer shorter sentences and less words

I so, can you give example of questions with longer texts?

**SS01** EP, Engineering Principles, they usually have around paragraph and a paragraph and a half in the Section B questions

I okay. So, this is the third question, do you think having critical thinking skills, I mean some essential critical skills

**SS01** yes

I would have helped you answer the questions better?

**SS01** I mean in all the exams I was caring out critical thinking whether I knew it or not is a different story, but that’s how I’ve approached the questions and like I mentioned for MS I used lot of critical thinking in order to approach the question

I umm

**SS01** definitely critical thinking I believe is necessary to attempt the questions in every modules

I so, it really helps then yeah?

**SS01** yeah [ \_ ] maybe it would have helped more if we were told explicitly that what critical thinking is and how to apply it and stuff because I believe I was applying critical thinking without knowing that I was doing so, and it still helped maybe it would have been more efficient if we had been taught about it and told how to apply it

I umm

**SS01** in each module

I so, you personally feel that critical skills need to be taught explicitly?

**SS01** yeah

I why?

**SS01** so that it’s like the students can be aware of what kind of thinking to be applied to what kind of question. You can’t approach every question with the same

I umm

**SS01** mind set but, now like we were to do it like I said without we knowing, but if we were explicitly told than it would make, it firstly of all I believe it would have safe time

I umm

**SS01** because we’ll be in the correct mind set relative to the questions

I umm

**SS01** and it would be more help for us because we would know what the thinking process we have to go through in order to attempt the question

I umm, critical skills also involve time management

**SS01** right, I don’t know that (laughs)

I yeah, that means like quick thinking, making decision at the right time

**SS01** okay

I so rather than sort of pondering about it you got to make your decision

**SS01** yeah

I because you, during exam conditions you’re sort of working against the time

**SS01** yeah

I yeah? So to make the quick decision is also a part kind of critical thinking, so maybe that’s, they sort of implicitly testing as well?

**SS01** exactly, like as you said it’s implicit you know, umm, yeah if we’re told about it and how to apply it, it would have been helpful

I umm, okay. So, looking at the questions again, this is the fourth question okay? Is there any questions require critical skills which has not been taught or introduced in the class or during lectures?

**SS01** the thing is that I don’t remember being taught critical thinking in the year that we just had

I umm

**SS01** so maybe questions for example in Electricity and Electronics where you have to visualise what is actually happening in the circuits and in the EP, Engineering Principles where again you have to visualise what’s actually happening. Maybe we were supposed to apply certain ways of critical thinking but we didn’t know

I umm

**SS01** that we had to apply it, we were just attempting the questions based on you could say experience from the past papers

I umm, so doing the practice helped you more than what you’re getting in the class?

**SS01** yep, the lectures, I personally found the lectures it’s just a brief introduction of the topic

I umm

**SS01** what helped me the most were the online notes and the worksheets

I umm

**SS01** and obviously towards the exam the past year papers are available

I umm, so the worksheets were helpful as well? So, even then you’ve tried some past year questions, you tried the worksheets

**SS01** uhm

I is there any questions which is like is so different from what you’ve ever come across?

**SS01** in the exams that we’ve just did?

I yes, is there any questions?

**SS01** yeah, there were a few like again in EE there were some that it was the first time I was seeing it because I did past papers up till 2006, 2007?

I umm

**SS01** 2013 and 2014 and there were one or two questions in the EE, that’s just an example that I’m using

I uhm

**SS01** that weren’t come up one in all the papers that I had done

I umm

**SS01** so it sort of caught us off guard

I what was it about?

**SS01** it was about a ‘galvanometer’ basically the way it was phrased I needn’t see it before

I it’s the wording?

**SS01** I mean the whole question itself I’ve not seen it before

I umm, how about the topic?

**SS01** the topic that comes under that obviously pooped up a few times, but that specific device that they ask for the ‘galvanometer’

I umm

**SS01** and a way you can say that the question was phrased I was mixed up because are we supposed to draw one, draw a diagram as part of my answer, explain what is does or things like that. So, it was the first time I was seeing that sort of question

I umm

**SS01** and I can say from my friends like a few of my friends don’t even know what a ‘galvanometer’ look like

I umm

**SS01** so it just tells you that how frequent that question came in the past exams

I umm, so you have any practice on this in the worksheets?

**SS01** not that I can remember that, but the online notes, yes it does explain what is

I how about during lectures, did you have lectures on this

**SS01** yes, it was in semester one, very early

I semester one?

**SS01** umm

I I think even for MS, most of the modules you only have one exam isn’t it?

**SS01** yeah, only Maths has Part A and Part B

I yeah, so it looks like you’ve to go back and…

**SS01** yeah, it’s a whole year works

I umm

**SS01** obviously if you’re doing past papers you get an idea what comes up the most

I umm

**SS01** so you focus on that topic

I umm

**SS01** and like I said my friends don’t even know what a ‘galvanometer’ look like some of them

I umm

**SS01** so, obviously we wouldn’t focus on that part of the module when you’re doing past papers you get an idea of what’s most likely to come out

I umm, so, what was the allocation of marks like for this question?

**SS01** I believe it was ten, I’m not, it was a Section A

I Section A?

**SS01** yeah, it was Section A

I usually Section A would be easier than Section B isn’t it?

**SS01** but, it was the first question of the exam (laughs)

I oh!

**SS01** (laughs) like as you first open the papers we read it and then we were put off

I oh no! yeah, the first question should be easy isn’t it?

**SS01** yeah

I to give you the confidence?

**SS01** yeah, and they were in the past papers but

I this is, I mean there’s sort of, there’s a recurring pattern in how

**SS01** yeah

I from most of the students that I’ve interviewed responded, they said the first question itself was difficult

**SS01** yeah

I was for all the modules or just only for EE?

**SS01** just for EE (laughs) all other modules we knew, okay that is what we suppose to expect

I umm

**SS01** for EE was

I the first question, yeah

**SS01** put everyone off, many skipped that

I umm right. So, we talked about how many questions have direct relevance to critical skills been tested and if you’ve acquired the skills whether would helped you?

**SS01** yeah

I and now, if you actually have acquired some of the basic or essential critical skills do you think it would have helped you to really score to really do well in the exam

**SS01** if we were taught about them and how to use them? Would it help me?

I no, if you already acquired those skills

**SS01** would it help me

I to score not just to pass to really do well

**SS01** to score high, definitely. First, the time management, it would have safe time, because we would know how to approach the questions, secondly we would know what type of mind set to be in when we’re answering those questions

I umm

**SS01** cause, currently what I felt was you answered one question and then you had to at least spend thirty seconds looking at the second question and seeing how would you approach it recalling all the things related to it

I umm

**SS01** with the critical thinking acquired

I umm

**SS01** all these might have been done much quicker

I umm, coming back to time management, yeah?

**SS01** yeah, and also confidence, we feel confident yes that we’re applying and once we’re done, I mean you can acquire and answer in the exam but there’s still that feeling that is it even the right answer, that did I approach the question correctly

I umm

**SS01** because it make sense to us that doesn’t mean it’s right

I umm

**SS01** if we’re taught this critical way of thinking

I umm

**SS01** we at least have that assurance that I’ve applied the correct type of critical thinking and approached it correctly

I umm

**SS01** and that confidence really helps you in an exam

I so, you sort of a bit still doubtful about that, umm?

**SS01** exactly

I right. so, just now you mentioned about some questions being simple some questions being difficult, yeah? So, when you say a question is simple what makes it simple for you?

**SS01** we’ve come across it before and pass…

I no

**SS01** in the exam?

I yeah

**SS01** what makes it simple is that you come across that types of question before

I umm

**SS01** we know how to solve it

I um

**SS01** if the question has any hidden tricks things like that that we easily miss out, we recall those tricks, for example in MS you’ve to be very careful that you’re using, when you’ve (vectors?), you always make them in two components

I umm

**SS01** so things like that, umm that’s what make it simple basically

I so familiar, what do you mean by familiar? That means you’ve seen it before?

**SS01** yeah, a type obviously not the same question before

I yeah, so how do make things familiar for you

**SS01** for me if I’ve done it before, because that form type of question did not only comes out once in the pass papers that I did, but came up a few times

I so, past year exam practice, yeah?

**SS01** yeah

I so, the more you practise on the topic or the question when it’s tested in a different way you’re able to…

**SS01** yeah

I so, what’s make it difficult then?

**SS01** the wording can make it difficult sometimes as well as I said long paragraphs can put me off the question

I long text?

**SS01** yeah, long text and if I haven’t come across it before like the ‘galvanometer’ question

I umm, so how about skills, critical thinking skills

**SS01** like, what do you mean?

I like a question could be simple if you already know how to apply the skills

**SS01** yep

I or a question could be difficult if don’t know how to apply the skills?

**SS01** yeah

I So does critical come into play as well?

**SS01** in a way it does, but I think practise is what helps me more, because I’ve done that question before

I umm

**SS01** the critical part comes in when I have to take in the new information

I umm

**SS01** and know, what I already know and apply it to the new question. That’s where little bit of critical thinking, because not every questions going to be the same, there’s going to be a little bit of twist in them that’s where the critical thinking comes into play, but majority of it’s familiarisation

I umm, okay right. So, how about, coming to difficult questions, how about topics if the topic is not relevant yeah is the galvanometer?

**SS01** yes

I so they test on you on topics that you’re not…

**SS01** that I haven’t been tested before or in the past papers

I umm, yeah ok. Now, when you look at all the modules which questions you think, which module had more critical thinking questions, do you think?

**SS01** it’s not difficult, critical thinking?

I it depends, because for some critical itself can be difficult

**SS01** okay

I and for some if they’re already been exposed those skills that’s easy, so…

**SS01** in the exam that we did, the module that I found myself thinking the most critically it would be EP. I found EP, where I had to like you say critically, but the questions and see what’s happening, things like that

I umm

**SS01** and then, there would come EE, but EE was more difficult than it was more like panicking and rushing and having time to go through the critical thinking process (laughs)

I so, when you mentioned EP give me, and you give example?

**SS01** I mean, heat transfers

I umm

**SS01** when heat goes from one place to the other you have to see what components it goes, not component but how the heat is transferred from one place to the other, and if there would be any loses and where about along the stage there would be the loses

I umm

**SS01** there is, whether the question says it’s the ideal system there’s aren’t any, things like that basically, where you have to sit down and say that what happens for example, another example is converting ice to steam

I umm

**SS01** it has the whole stage, so that’s where the critical skills comes in to actually see what’s happening

I umm

**SS01** in each stage

I umm

**SS01** calculate each stage like we said the last time and synthesise the whole thing

I umm, is it something to do with logical order?

**SS01** sometimes, for EP

I because logical order is more on Maths and MS?

**SS01** yeah, the example I’ve just give you converting ice to steam, that’s all logical order, umm yeah

I so, you feel EP has more critical questions

**SS01** for the exams we did, yeah

I so, EP is more critical and EE

**SS01** (laughs)

I you classified as difficult, and how about MS?

**SS01** I found MS is fairly easy

I why easy?

**SS01** well lots of practice put into it and the questions which came up was similar to the questions that we’ve come across before

I umm

**SS01** with obviously with some change in the ways they were put across

I umm

**SS01** but still, I found that MS was easy because the things they teach in MS I’ve always been better at them, things like electricity, heat transfers

I umm

**SS01** I’ve always been good at the (kinematics?) and the mechanics questions

I umm

**SS01** that’s why I found MS fairly easy

I umm, how about Maths?

**SS01** Maths, was the next easiest one for me

I so usually MS and the Maths they usually go together isn’t?

**SS01** yes

I umm, okay. You’ve lots of worksheets on the Blackboard for every module, do you have it for every module?

**SS01** yes

I okay, so referring to the worksheets, that you’ve done looking at the questions is there any similarities to the exam questions or was it the worksheets were more difficult than the exams, or much easier than exams ir, if they complemented each other very well?

**SS01** for EE the exam was more difficult than the worksheets

I EE?

**SS01** yes

I okay

**SS01** for the other three modules, for MS worksheets tested you more, than the exam did

I EE the worksheets were easy? And then?

**SS01** than the exam

I okay

**SS01** for Maths, they sort of complemented each other

I umm

**SS01** and EP it was same case, I mean some worksheets were easier, and some more difficult

I so EP was like…

**SS01** almost complementing each other almost

I umm okay, so doing the worksheet you think it really helped you…

**SS01** it really help, yeah.

I So, when you look at the wordings in the questions could be any modules, so do you read it as a whole or do you look for key words?

**SS01** first as a whole then maybe that as a whole maybe twice

I umm

**SS01** depending like for EP when they’re usually longer I read them twice

I umm

**SS01** and then I go and I start, you can say dissecting the questions

I umm

**SS01** noting down what I know and what I have to find out and how I’m going to find it

I umm

**SS01** it depends on the module really

I so, the key words, can you give me some of the key words which you would look for?

**SS01** ‘prove’, umm ‘show’

I umm

**SS01** ‘calculate’, ‘determine’, ‘draw’, sometimes because there’s a few times that I’ve forgotten to draw the diagrams while doing worksheets

I umm

**SS01** and I looked back, and I realised as they want graph as well so ‘draw’, and yeah, those are the usually the ones

I okay, so the words ‘calculate’, ‘prove’, ‘show’, ‘determine’ and ‘draw’, based on these five words which words require critical skills?

**SS01** ‘prove’, because you need to get the outcome that stated in the question

I umm

**SS01** ah, graphs I use to, no not graphs, umm ‘determine’ and ‘calculate’

I so, what do you understand by the word ‘determine’?

**SS01** to identify, to find out the solution

I uhm

**SS01** which is why you need to think critically because you need to know how you gonna approach the question

I umm

**SS01** in order to get the required result, umm…

I so, when you talk about ‘determine’, actually what it is asking you to do? Okay the first is to identify, because one word has a lot of task involved…

**SS01** yeah

I yeah, so when you talk about ‘determine’ you say you identify, and then what do you do?

**SS01** you work with that to so the end result does ‘determine’ what the questions asking you to find out

I umm

**SS01** so you have identify what the problem is, see what you’re going to apply to it and then just calculate the final outcome

I so, when you decide which one to apply, what’s that involve? Let’s say you have three choices to choose from

**SS01** yeah

I yeah, so you got to choose one

**SS01** umm, the one that takes the least…

I for you to choose, you have to look at A, B, C but you…

**SS01** the three paths that I can take to the same solutions

I yeah

**SS01** which one…

I yeah

**SS01** the one requires the least amount of time

I umm

**SS01** I mean you can use different formulas to get the same answer

I umm, but how do you decide that?

**SS01** I guess it just that, I just play it out in my head that once I get this and I’m able to use that answer and get that. So, for me I just choose the shortest path to the question because of the time constraints, that’s how I choose which path to take

I umm

**SS01** and other than that, if I see that one doesn’t work then I move on to the next one

I umm

**SS01** and see if that applies

I umm, so that’s making decision?

**SS01** yeah

I right, anything else?

**SS01** umm (laughs)

I so, when you come across a question you think you don’t want to waste your time there, you want to move on, why do you make that decision?

**SS01** no, not move on from the question, I decide not to use one way of finding the solutions, I yeah, I don’t move on from the question. It’s the, like I’m at a question, I have three different ways I can use it to solve it. When I realise that one doesn’t work I then move on to the next way to solving it

I umm

but, I don’t move on from the question

I so, let’s say you have three sections for one question, and then you look at the first one, you think it’s going to take time or you really don’t understand, do you keep wasting your time on the first question…

**SS01** I mean to an extend I spend some time on the first question, when I really think that I can not solve it then only I move on

I umm

**SS01** to the next one, it’s not like I just look at it no I can’t do it next. No, I sit at it and I actually think about it, I don’t just move on from it immediately

I umm, why you don’t move on from it immediately?

**SS01** because I know myself that I don’t see the obvious, so I just need some time, that’s why just don’t quick move on quickly

I umm

**SS01** maybe I feel I’m missing the obvious

I right

**SS01** sometimes that has been the case

I umm

**SS01** so again it’s coming back to managing your time

I umm, so you make sure you spent some time on the question before deciding whether you want to move on? And then you mentioned just now about calculate, so why do you think critical skills to calculate?

**SS01** ah ( \_ )

I just now you mentioned calculate, proof, determine is critical

**SS01** yes

I yeah, so why is it calculate is critical for you?

**SS01** because in order to calculate correctly you need to apply the right amount of steps also the ones which I would take least amount of time which is why calculate involves critical thinking, and obviously you have to be able to judge if your answer makes sense in a way or not

I umm, so, but then but again how you would know that this approach is going to take shorter time compared to the other?

**SS01** I just try my chances never know for certain, I just hope it’s not going to take that much of time

I umm, okay right, and I also because you’ve done lots of past year questions

**SS01** yes, most probably

I that helps you to decide as well, yeah?

**SS01** yeah

I this is the last question, now, there’ll be some similarities to the previous questions, now looking at all the wording in the questions, there are lots of words which are verbs, action words which what actually asking you to do

**SS01** yes

I when we talk about critical thinking skills, skills are all about verb isn’t it?

**SS01** uhm

I like playing tennis in tennis skills is about how you play

**SS01** yep

I so in critical skills is about how you apply your critical thinking

**SS01** yep

I which is also a verb

**SS01** yeah

I so when you look at the wordings, what are the words when you look at it, oh this is critical based on the exam

**SS01** like what verbs do I look at?

I yes, I know you’re not going to focus on that but when you look at those words you these are actually asking me to be critical?

**SS01** umm ( \_ )

I like for example to ‘define’ something, okay. ‘Define’ is a verb word an action word, so define which asking to…

**SS01** state something

I so do you think that’s critical?

**SS01** no

I so, those kind of words is there any words that you can think of?

**SS01** ‘show’

I ‘show’, ‘show’ is critical?

**SS01** I believe ‘show’ is critical because you have to see how you’ve approached the answer

I umm

**SS01** which involves which critical path to take, umm decide which formula you can apply

I umm

**SS01** to come out with the outcome they’re asking you to ‘show’

I okay

**SS01** so, all those would be, again ‘show’ and ‘proof’, ‘proof’ as well. That’s the two words I sit down and think how am I going to ‘proof’ what they’ve ask me to do

I it’s more of to justify?

**SS01** umm, probably

I so these two words you feel more of critical words, ‘show’ and ‘proof’?

**SS01** yes

I so, that’s about it. Okay thank you

**SS01** okay

**SAMPLE INTERVIEW: INTERNATIONAL EFY STUDENT**

**File ID: SS01\_M\_I**

**File Name: Voice\_074-M-I-Bahrain**

**Date: 18th March 2016**

**Interview:**

I **what is your perception towards critical thinking skills now?** It has been a year now isn’t?

**SS01** I think it’s just as necessary and the, it helped, my idea of critical thinking back in foundation year

I umm

**SS01** is the same, like my critical thinking of a foundation year

I umm

**SS01** has helped me like adapt to the first year, so I would say that was quite helpful and yeah I would say more or less a same. Is just the way you approach question, for example any tasks first year

I yeah

**SS01** it’s obviously going to be different than foundation year

I so what programme are you in now?

**SS01** Mechanical Engineering

I Mechanical Engineering. So just now you said you tried to adapt to whatever you’ve learnt in foundation year, can you give some examples

**SS01** I mean the module that we’re taking in foundation year

I umm

**SS01** in a way similar to the some of the modules that we’re taking now

I okay

**SS01** they’re just named differently

I umm

**SS01** and the content

I yep

**SS01** is more in depth

I right

**SS01** for example, like we had Engineering Principle in foundation year

I yeah

**SS01** to do with fluid and stuff, we have the same stuff called (thermos fluid?), it’s obviously more in depth, more complex equation

I umm

**SS01** so that’s why I say it’s similar for me

I so, if you were **to put it simply critical thinking skills for engineering, how would you define it now**?

**SS01** define critical thinking?

I umm

**SS01** I would say…

I focus on engineering studies

**SS01** to use critical thinking to tackle tasks

I umm

**SS01** to use critical thinking to tackle tasks?

I umm

**SS01** I would say it’s we had to first look at what the task is demanding of you, then think about what you need to do to attack those certain problems

I umm

**SS01** then relevant solution and methods to tackle the tasks

I so, are you saying problem solving?

**SS01** yep, more or less

I umm, can you give an example

**SS01** I mean we would like, for example for the course works we received on individual problem they would require critical thinking because you have to visualise, come out with what involved. You know what’s going on in the whole problem and attack it in the relevant manner

I umm, do you think you’ve given me the same answer when I first interviewed you?

**SS01** I can’t remember the first time (laughs)

I (laughs)

**SS01** I can’t remember the first time

I I think it was slightly different

**SS01** yes, because it was a year ago

I right, so **do you believe critical thinking skills is important for engineering studies at foundation level?**

**SS01** yeah, definitely

I if they important, **what would be the effective way for you as a student, how would you prefer the skills to be taught?** Would you prefer the explicit way or would you prefer as an individual module or…

**SS01** what, critical thinking?

I umm

**SS01** I’d say not explicit, I’d say implicit way would be fine because every student gonna have his own way of applying the critical thinking methods. So if they’re taught in as a separate module students would think that they had to apply the certain, they have to work within certain guidelines, and some won’t be able to

I umm

**SS01** so, if it’s taught in a more implicit manner students can still use critical thinking skills in their own ways to tackle questions, so I won’t say it should be taught as a separate module

I you got to be more open than being very specific, yeah?

**SS01** yes

I right, so **do you think students need a good command of English to learn academic critical thinking skills**, if yes why and if no why? Do you think students need good academic English for them…

**SS01** I would say yes, because first of all the country we’re in and the language and the modules been taught in, so obviously we need to have a good, solid speaking understanding of English in order to comprehend what’s happening. So, I would say yes, definitely a strong background in English would be necessary

I **so, you think good command of English is important in order to apply critical thinking skills effectively in engineering studies?**

**SS01** oh! In that case applied, then no because applying critical skills everyone does it in their own way

I umm

**SS01** so, I don’t think language plays a necessary role in applying critical thinking skills. I think you can apply them in any language but obviously the solution must be in English

I okay, let’s try to focus on academic critical thinking skills

**SS01** okay

I in here, based on UK context do you think you need it’s important to have good command of English to apply critical skills? Because for example, I give you an example the word ‘analyse’ which is one of the critical word

**SS01** yes

I how would you perceive it in your own language? Is it same how you would applied in your own language and in academic English, is it same?

**SS01** it’s more or less it’s the same meaning, but obviously to understand what ‘analyse’ is asking you to do you need to have a good understanding, a good English speaking skills obviously. Otherwise you won’t even be able to translate it back into your own language to see how you’ll be able to tackle the problem

I umm

**SS01** so yes, in that sense you need to have a good base of English speaking skills so that you can comprehend what the tutors asking you to do and translate it in your own language if it’s necessary

I so, you believe it’s good to have a good command of English

**SS01** yeah

I to help…

**SS01** definitely, yes

I **is there any situations that it’s not necessary?**

**SS01** as a module?

I no, in general, being an engineering student you know how important…

**SS01** I think working with numbers, numerical, formulas and stuff, you don’t really need to, in my opinion you need to have a good understanding of English when comes to like writing reports and things like that, then yes English plays a vital role in ( \_ )

I the language doesn’t play a vital role when dealing with numbers is that what you’re saying?

**SS01** yes, but obviously critical thinking skills is still important is just that the language is not vital when playing with numbers for me. Where else if you were to write or if you’ve word problems things like that then critical thinking skills and language go hand in hand like together

I umm, let’s say you’ re given a formula or problem and you have to solve the problem, for example in exam setting, I mean you’re fighting against the time

**SS01** yeah

I so, do you think language is not important to answer the question? I mean there’s lots of ways to solve a problem

**SS01** yeah

I there might be a shorter or longer way to answer the question, but if you don’t understand what is…

**SS01** what’s going on in the question, but again that depend on the question. If it’s a Maths exam…

I yeah, that’s what I’m saying, if it’s a Maths

**SS01** then it’s fine because

I it’s fine?

**SS01** yes, you don’t need to, I mean if you see certain signs, like the (integrals?) sign or the differential sign you don’t need the language to understand what it’s asking you to do

I umm

**SS01** you automatically know, where else if you have other like word problems involve

I umm

**SS01** then yes, you need to have a good understanding of English

I okay right. So, **do you still believe critical thinking skills are very important for engineering studies**, or they’re not?

**SS01** yeah, I’d say they’re very important because without them you wouldn’t know what, like what you’re required to do basically or how to tackle the questions like you said easier way

I umm

**SS01** there’s a longer way, so like if you lack critical thinking you won’t find the most efficient way of attacking the problem in the limited amount of time you have for example in exam period

I umm

**SS01** I would say critical skills are essential skills

I right. So, because you believe it’s important and essential for engineering studies**, in your opinion do you think it’s necessary for the students to be assessed of their critical thinking skills, a formal testing**?

**SS01** how would they, what do you mean? So, just an assessment based on their critical thinking?

I do you think students need to be assessed because it’s important and to find out if they’ve actually got it before they graduate?

**SS01** isn’t that, aren’t they in a way are already been assessed through exams and tests and course works? Isn’t that already testing their critical thinking? For example someone is not doing too well or doesn’t know how to attack certain questions he would approach the professor and professor will show him the ways to attack the questions, therefore improving critical thinking

I umm

**SS01** so, I would say they always been assessed when come to exams and stuff

I umm

**SS01** so, I think there’s no need to assess them explicitly

I umm, so what you’re trying, you can correct me, okay?

**SS01** sure

I so what you’re trying to say is that learning of the skills is like in on-going

**SS01** yes, exactly

I therefore, you don’t have to…

**SS01** it just happens spontaneously while you’re working on the questions, you simultaneously without you realising you’re improving on your critical thinking

I umm, okay. But, do you think students will benefit if there’s sort of an assessment?

**SS01** umm, personally, no I wouldn’t

I you wouldn’t

**SS01** I wouldn’t because I used to have my own ways of attacking tasks and problems

I umm

**SS01** and if I’m assessed based on certain guidelines or marked schemes then I don’t, personally I don’t think I would perform well

I okay right. Let’s say a student need to be assessed what would be…

**SS01** on critical thinking?

I yeah, as a students what would be for you an effective way to assess?

**SS01** critical thinking?

I yeah

**SS01** I’m not sure, I wouldn’t assess critical thinking

I put yourself as a student

**SS01** okay

I because from the beginning you mentioned it’s vital, it’s important for engineering studies, and it’s one of the core skills you need to have, yeah?

**SS01** yes

I so therefore, the purpose of testing is to find out if students got it or not

**SS01** yeah

I yeah, because it’s vital it’s important to know if the students got it before they actually graduate, so, if you were the student how would you prefer to be assessed?

**SS01** umm ( \_ ) to see if I understood

I umm

**SS01** critical thinking?

I umm

**SS01** before I graduate?

I umm

**SS01** maybe more practical problems in my case

I umm

**SS01** because I’m more interested in practical work, like labs and things like that then, in theory stuff, so if I want my stuff to be assessed critical thinking present me a practical or real life situation

I uhm

**SS01** and then assess how about solving that instead of some text book questions, that’s how I want to be assessed

I umm, you, just now you mentioned you’re in Mechanical Science, if you were to be assessed based on that how would you prefer to be assessed in Mechanical Science?

**SS01** oh! In the context of Mechanical Science?

I yeah, because you undergraduate programme is Mechanical Science

**SS01** I ( \_ ) I mean at the, during our introductory meet

I umm

**SS01** we were given a chance to dissemble a lawnmower motor

I umm

**SS01** so, if I was presented with a problem to see what was wrong, why was it not functioning properly, something like that I would prefer to be assessed on

I umm

**SS01** then sitting down and solving some word problem from a text book or past papers

I so you prefer practical than theory?

**SS01** yeah, that would help me to assess my critical thinking as well

I so you prefer practical than theory, why?

**SS01** I’ve always interested in hands on work than learning from text book than, I always find myself, I perform better whenever we came to practical side of science

I umm

**SS01** both high school and here, lab as well

I umm, can you give example in the programme you’re in now an incident that you were consciously aware that, ‘oh, this involve lots of critical thinking’?

**SS01** umm ( \_ )

I say any project or individual, group work, or any observations

**SS01** we had to write a group essay

I umm

**SS01** on a (autonomous?) vehicles

I umm

**SS01** and I was given the economy aspect of it, what would be the economy impact if (autonomous?) vehicles were to be introduced commercially

I umm, what’s (autonomous?) vehicle?

**SS01** self-driving cars

I that means you don’t need a driver?

**SS01** you don’t need, it drives it self

I umm, okay

**SS01** yeah, umm so, I found that needed lots of critical thinking because I have to incorporate various perspectives and look at the implementation of the autonomous vehicles

I uhm

**SS01** from different point of views

I okay

**SS01** to see how they will impact…

I different people

**SS01** different people ( \_ )

I different people, stake holders?

**SS01** exactly

I okay

**SS01** from economy perspectives, so I found even though I don’t know I was doing it, but now I think about it, that involved lots of critical thinking too, because obviously they’ve have various impacts

I umm

**SS01** from high supply of labour due to unemployment to different, less demand for garages and stuff like that. So, now I think about it, that involve lot of critical thinking

I so, this was group work?

**SS01** yes that was group work

I and the example you’ve just given is individual contribution?

**SS01** yeah, individual contribution

I so, what about other members?

**SS01** someone took politics as an approach, others took environmental ( \_ ), what is it call?

I impact?

**SS01** yeah, environmental impact, some took law, safety measures and things like that, yeah

I and yours was writing a report on the economic factors, okay right. Now this question is about, you know critical thinking skills is a complex area to explore as it is. So based on your first language, your culture, your previous learning background, we’re gonna touch on that, yeah

**SS01** okay

I so**, in your opinion to what extent student’s first language affect their understanding on critical thinking skills?**

**SS01** umm ( \_ )

I what’s your first language if I may ask?

**SS01** English yeah, I think here they’re understanding of critical thinking and they’re comprehending it is more in my opinion based on the strengths in the English language

I umm

**SS01** because the stronger you are in English if it’s a second language the better like you’ve said you can translate back into your own language

I umm

**SS01** because I know I’ve a Greek friend

I yep

**SS01** and, recently we had essays to read and then compare them, write a report on them, and he obviously had trouble understanding some words

I umm

**SS01** so, what he would do obviously translate them back to his own

I umm

**SS01** but he would do it using Google translator

I right

**SS01** he wouldn’t, he hadn’t enough knowledge to do it himself, like we had to make it easier for him

I umm

**SS01** obviously when you use Google translator it’s not always close to the meaning

I yeah

**SS01** where’s me, I can fairy understand, I would find a synonym

I yeah

**SS01** or something like that and it would be easier for me

I umm

**SS01** so I think critical thinking is for me depends on more on your strength in the English language

I so, do you believe, first language does affect…

**SS01** no, I wouldn’t say no

I first language doesn’t affect?

**SS01** especially here, in this country

I yeah

**SS01** in the culture we’re in, I would say it strengthen their English language, that (assess?) how you critically analyse problems

I umm, so how about cultural background? Does it affect your thinking skills? Maybe, some students, because this is an international based university

**SS01** yeah

I many students are coming from different cultural background which promotes critical thinking skills and some don’t for various reasons. So, **do you think the culture that you’re from promote or does it give you any opportunities to apply the skills or has it been there all the time?**

**SS01** for me personally, it has always been there. I was brought up in Bahrain, went to school to a British school from the start obviously

I uhm

**SS01** like you said more open minded, was encouraged then at the age of ten I moved to Dubai live there for another nine, ten years

I umm

**SS01** went to international school, Dubai itself is a very international itself, so nothing, I’ve never felt like I was held back, I was always have been encouraged to be open minded, think critically, to think outside the box. I’ve never felt like I was held back due to like you said for various reasons

I right, that’s is because of the type of education that you received?

**SS01** and obviously the country where I was brought up in, both Bahrain and Dubai they not very, what can you say conservatives when comes to like education

I uhm, so now we’ll talk about your previous learning background, so **you had English medium all way through, yes?**

**SS01** yes

I so, how would you say, **does it affect the way you thinking now?**

**SS01** what having?

I studied in an English medium?

**SS01** like having gone through English speaking…

I do you know anyone from your same country but gone through a different education system? Do you feel the same or a bit alien when you speak to them, because of your background, education system?

**SS01** no, obviously ( \_ ) from back home? They’re from the same education culture which I’m from, so I don’t think there’s any difference

I umm, so was it an advantage for you…

**SS01** yes, definitely, because as I’ve said, I’ve always have been encouraged from school, from home to think outside the box and I would say, yes. Growing where I did, went to the schools where I did was definitely was an advantage

I so, did you have enough practice in your previous learning?

**SS01** I wouldn’t

I can you think of something, there must be something that was exciting that you did, and to think of it now you realised, ‘oh, that’s critical thinking’?

**SS01** in high school?

I yeah, could be any past learning

**SS01** they do it in a way, for example we had an experiment with a ball launcher

I ball launcher?

**SS01** yeah, and it was, I remember was our first lesson on it

I yes

**SS01** and we were given a task, for example at what angle would the ball will fly the furthest?

I uhm

**SS01** and that obviously involved critical thinking, because you obviously have to have a good guess vertically up or horizontally down. That, now to think about it involved critical thinking

I so, this is the final question. I’m going to ask the same question, I asked you to define what critical thinking skills to you now? And after talking about it, what is your understanding of critical thinking skills now? see it in an engineering student perspectives

**SS01** In engineering perspectives, I would say the ability to look at a question or any dilemma in front of you, understand first of all what is happening, then what it’s asking you to do

I umm

**SS01** then obviously the main part is that how you go about achieving the solution for the problem, that I would say my definition for engineering perspectives

I thank you very much for taking part

**SS01** hope it would be useful

I definitely, every words you said were useful