# School B Group 3 – 23 Jan 2017

Speaker 1: That's on now, I'm just going to open up the questions that I've got on the computer. While I do that, does anybody want to ask me any questions? No?

E- b airy: Can I go to sleep?

Speaker 1: No, you can't go to sleep.

E- b airy: Worth a shot.

Speaker 1: Surely school is more interesting than that?

E- b airy: No.

Speaker 1: No, not more interesting than that?

E- b airy: No.

Speaker 1: So while I'm opening this up, can each of you say your name so that when I'm typing it up I know what name to put down. It doesn't matter if it's your full name or what. And also, maybe what you want to do when you're older or what you want to use computers for when you're grown up, something like that.

E- b airy: I won't be using computers.

Speaker 1: You won't be using computers at all?

E- b airy: Nope.

Speaker 1: Do you want to start by saying your name, and what you want to do as a career, if you want?

E- b airy: My name is E-, and I want to be a vet.

Speaker 1: You want to be a vet.

E- b airy: Yes.

Speaker 1: But you don't want to use computers at all?

B– fst acc: You're going to need to use a lot of computers as a vet. In fact you'll probably need to take an IT-

E- b airy: I'm not taking IT.

B– fst acc: [crosstalk 00:01:05], at least.

E- b airy: Yeah, no.

Speaker 1: What was your name again?

E- b airy: E-.

Speaker 1: E-.

B– fst acc: I'm B–.

Speaker 1: Yeah. And what do you want to-

E- b airy: A scientist.

B– fst acc: Not too sure about it. I know I want to do something with computers.

Speaker 1: You do want to use computers?

B– fst acc: Mm-hmm

Speaker 1: Okay. Your name?

T– nml dper: I'm T–, and I want to be an engineer.

Speaker 1: Okay

T– nml dper: Some sort of, like, nuclear engineer.

Speaker 1: Let me move this. Okay, some sort of nuclear engineer.

T– nml dper: Yeah.

Speaker 1: Okay, cool. So work at Sellafield or somewhere like that?

T– nml dper: Yeah.

E- b airy: Let's hope it doesn't explode!

Speaker 1: How about you?

J– slw yng: I'm J–, and I want to work at Sellafield as well.

Speaker 1: Brilliant, great. Anything specific you want to do at Sellafield?

J– slw yng: Electrician.

Speaker 1: Okay. E-. What was your name?

T– nml dper: T–.

Speaker 1: T–. I forgot your name already, that's how bad I did.

J– slw yng: J–.

Speaker 1: J–, and ... ?

Ja–: Ja–.

Speaker 1: Ja–. What do you want to use computers for or what do you want to do when you're older?

Ja–: I want to be a nurse, but I'm not sure if I want to use computers.

B– fst acc: You're going to have to, again, a lot-

E- b airy: No you don't.

B– fst acc: A lot of it's about using computers though.

Speaker 1: What do you think? Do you think you'll need computers for being a nurse, or?

Ja–: Probably, yeah.

Speaker 1: What do you hope you'll be able to do with a computer as a nurse or hope you don't have to do?

Ja–: Probably you have to, like, look up information and stuff.

E- b airy: Yeah I wouldn't mind doing that, I'm just not doing Python and all that again.

B– fst acc: Oh you mean like as in actual computing?

Ja–: Yeah.

Speaker 1: You don't want to have to do any computing. You don't mind using a computer but ...

Ja–: Yeah I don't mind using a computer.

Speaker 1: Programming, enough of that.

Ja–: Yeah, I don't like that kind of stuff.

Speaker 1: Okay. So, to start the group discussion off, just a couple of easy questions. Can you guys, between you, name three computers scientists, or people who have influenced the field of computing in any way.

E- b airy: Mark Zuckerberg.

B– fst acc: I was going to say that.

Speaker 1: Okay. That's a good one.

B– fst acc: Steve Jobs.

Speaker 1: Another good one.

B– fst acc: And, the other guy.

Speaker 1: The other guy? Who's the other guy?

B– fst acc: Microsoft ... I can't remember his name ... Why can't I remember ... Bill Gates.

Ja–: Microsoft.

E- b airy: [inaudible 00:03:28]

B– fst acc: Bill Gates.

Speaker 1: Okay. Anybody else? Any other computers scientists, people influencing ...

Ja–: No.

E- b airy: Albert Einstein.

B– fst acc: I have no idea.

Speaker 1: You don't know?

B– fst acc: There's a lot, but I can't name them all.

Speaker 1: Anybody from history you can think of that you've been taught about?

E- b airy: Julius Caesar. I'm just saying any names.

Speaker 1: You're just saying whatever comes to your mind.

B– fst acc: Oh, what's his name?

E- b airy: If you're going to google that ...

B– fst acc: I'm going to have to google it because it's really annoying me.

Speaker 1: You guys have any idea? Computer scientists, people who have influenced the field of computing?

T– nml dper: Yes.

Ja–: No.

E- b airy: I would ask Siri, but I haven't set up Siri yet.

T– nml dper: I have no idea.

B– fst acc: Who's ... Gabe Newell.

Speaker 1: What?

B– fst acc: Gabe Newell. Steam. Have you ever heard of Steam?

Speaker 1: I have heard of Steam.

B– fst acc: He makes Valve.

Speaker 1: I know who you mean. Okay. These are all good answers. Any other ones on the tip of people's tongues? What sort of person do you think is good at computing?

E- b airy: A person who knows how to work a computer.

Speaker 1: What do you mean by able to work a computer?

B– fst acc: Need to be able to log on for a start.

E- b airy: My little brother can do that and he's one.

B– fst acc: I was using computers when I was three I think.

Speaker 1: So what sort of person ... is everybody good at using a computer?

E- b airy: Yes.

T– nml dper: No. I'm not.

Ja–: It depends if you're good at technology and stuff.

E- b airy: My parents aren't, because all I have to do is [inaudible 00:04:56] and play Modern like [inaudible 00:04:56].

Speaker 1: What do you mean, "good at technology," what sort of person is good at technology?

Ja–: People like my mum aren't very good at stuff. I think it's younger people, maybe.

B– fst acc: My mom and my dad are amazing at computers because my dad works in liberal art computers, and my mom uses computers a lot too, so it's like ...

E- b airy: So does my mum, but she has no idea how to work it.

B– fst acc: She know.

E- b airy: No. She's like, "How do you [crosstalk 00:05:18]?"

Speaker 1: So some older people clearly are good at using computers but not all older people. Are all young people good at using computers?

Group: No.

T– nml dper: Not me.

Speaker 1: Not you.

B– fst acc: My little brother breaks every computer he gets at this point.

E- b airy: Probably because you won't let him on your computer.

Speaker 1: Is it something about computing or something about you that makes you not good?

T– nml dper: I don't know, I just don't get most of the stuff on a computer.

Speaker 1: You find it ...

E- b airy: I don't either. I just know how to ...

T– nml dper: When he tries to show us stuff I just don't understand what he's doing.

Speaker 1: Tries to what?

T– nml dper: Show.

Speaker 1: Anything specific? What comes to mind first, specifically?

T– nml dper: Like one of the codes if he puts letters and then he gets the numbers it's just confusing.

Speaker 1: Okay.

E- b airy: Most of our teacher does I just don't follow like on Python and all the other things.

B– fst acc: I'm the opposite, I want to learn more. I feel like we just dip into Python and then it's like, "Well, that's the programme. Let's go on to something else now because we're not really doing anything with the programme."

Speaker 1: What about you, J–?

J– slw yng: It's kinda tough with a computer and all that. I'm good at my phone and all that, but when it comes to a computer, since it's a bit old, I don't really understand it that well.

Speaker 1: So you find that there's quite a big difference between your phone and a computer.

J– slw yng: I understand my Xbox's and stuff like that.

E- b airy: Exactly.

Speaker 1: Okay.

B– fst acc: I'm a bit of a PC gamer. I can only like Xbox's and that.

E- b airy: That's because you've got no sense of humour.

Speaker 1: How would you complete the following sentence? Computers are for ...

E- b airy: People.

B– fst acc: Learning.

T– nml dper: Actually, everything, really.

Ja–: Research, sometimes.

E- b airy: Life. Even Google can be wrong.

Speaker 1: Even Google is often wrong. Okay. I'm going to read three sentences. I want you guys to say whether you agree or disagree with each one. Okay? I am the same person when I am online as I am when I am offline.

B– fst acc: Oh know. Definitely not. You feel very ...

E- b airy: Disagree.

Ja–: Disagree.

Speaker 1: Disagree?

Group: Yeah.

Speaker 1: Does everybody disagree?

B– fst acc: I feel a lot more confident online, really.

T– nml dper: And mean.

Speaker 1: You what?

T– nml dper: We're meaner online because they don't know who you are.

B– fst acc: I'd hate to see you online.

E- b airy: Just because he'd beat you [crosstalk 00:07:34] grade level.

Speaker 1: So you think you can get away with being meaner?

T– nml dper: Well, not really harsher [inaudible 00:07:40] ...

J– slw yng: People do the same thing, like they send you messages and stuff.

T– nml dper: Yeah, online people seem to be mean a lot.

Speaker 1: So you can get away with more when you're online that way.

T– nml dper: Yeah.

B– fst acc: A lot of it's frustration too. I know I get really annoyed at some guys and just start screaming into my microphone when ...

E- b airy: Calm down.

Speaker 1: The next one weaved into that really nicely, which is "I say things online that I would not say offline."

Group: Yeah

B– fst acc: Yeah, I suppose. Again, that's more of a confidence ...

Speaker 1: You're saying confidence. You guys are saying it's because you get away with more. What do you guys think?

E- b airy: I don't know. I've said things, what I've said online, I've said to people's faces and they didn't like it and that's tough.

Speaker 1: Do you think you'd prefer to say things that they wouldn't like online, or do you think you just don't mind? You'll just say them?

E- b airy: To be honest, I'll just say it to my face.

Speaker 1: You just say it to their face.

E- b airy: Yeah.

Ja–: I think if I said something online to someone, I'd probably get away with it a bit more because not as many people would know.

E- b airy: Yeah, because it's like R­–, this last suit, I don't like. If she'd message me on the internet, she acts all hard, and then I come up to her face, and she like cracks [inaudible 00:08:52] into it.

Speaker 1: So people are meaner to you online, as well.

E- b airy: Yeah.

Ja–: Yeah.

E- b airy: Because they think they get away with it, but don't.

Speaker 1: Last one of these ones. How much a person knows about computers changes how they interact with other people when they're online. Do you agree with that or do you disagree with that?

T– nml dper: I don't know, really.

Ja–: I don't know.

J– slw yng: I know a lot about Xbox, but most people do that play Xbox.

Speaker 1: When you say you know a lot about ... is that you know how to programme that? What do you mean by that? I don't know that much about Xbox's.

B– fst acc: Yeah. We know how to do stuff on it. [crosstalk 00:09:33]

J– slw yng: We know where everything is on it about how to get there, about how to play games and all that.

Speaker 1: How to use it really well.

E- b airy: It's dead funny because my stepdad treats me like I'm stupid, and then like, I'm the one who works the telly. I'm the one who works the oven. I'm the one who works everything.

Speaker 1: Because he doesn't know how to use any of that stuff.

E- b airy: Yeah.

Speaker 1: What do you think of that statement? How much a person knows about computers changes how they interact with other people. Is that true or do you think it actually doesn't matter.

boy: Yeah. I think it does honestly.

Speaker 1: It does matter?

boy: It seems to me from what I've seen.

Speaker 1: Do you think that if you know more, you think more about how everything you write is recorded and remembered by the computers or do you think that you just forget about that anyway or you don't mind?

Ja–: Interesting.

boy: In their hearts or minds? Their hearts?

Speaker 1: Online feels very instantaneous.

boy: Mm-hmm (affirmative),

Speaker 1: In the next 10 years, what do you think the digital world will look like? However you want to interpret that.

T– nml dper: I don't know.

Speaker 1: You don't know.

T– nml dper: [inaudible 00:10:50] maybe like, just glass [inaudible 00:10:49].

Speaker 1: Glass?

B– fst acc: I don't know.

E- b airy: There's no more books.

B– fst acc: No, books will still exist.

boy: Everything's like touchscreen.

Ja–: All books and all that are online.

E- b airy: Yeah, my ... I [inaudible 00:11:01]

B– fst acc: No, books will still exist I think.

Speaker 1: Is that a good thing or a bad thing?

E- b airy: I don't like books.

Ja–: Good because if you like computers then it's bad to read them.

B– fst acc: I don't think they'll get rid of books in general. I think they'll move onto a different way of printing books, because of paper and that. I don't think they'd ever just get rid of books. We would play Kindles and stuff because the they just wouldn't be viable.

Speaker 1: That's kind of what Ja– was saying.

E- b airy: They're gonna get glass screens you can swipe over.

T– nml dper: I think that more computers stuff will be used more than they are now.

B– fst acc: That can damage your eyes after a long time.

Speaker 1: More computer stuff will be used for more things.

boy: Right. More technology

B– fst acc: We'd have to develop better screens and stuff that can't damage your eyes as time goes on, because that buys like ...

E- b airy: Well, if you think about when we were in year seven, we didn't have Firefly and we do have now.

B– fst acc: God, Firefly's the worst though. It's not a good system. It's just ...

E- b airy: Still, more schools are getting stuff like that.

Ja–: Yeah, because if you can't access the internet, then how are you going to ...

E- b airy: Exactly. And then you get in trouble. [inaudible 00:11:54].

Speaker 1: What do you think will be possible, in computing terms, in the future that's not possible now?

E- b airy: You don't need wifi for everything.

Speaker 1: What do you mean you don't need wifi anymore?

E- b airy: You won't need wifi for something. You can just ...

Speaker 1: It'll just always be there.

E- b airy: Yeah.

B– fst acc: No, you're still going to need to pay for it.

Ja–: Yeah, like you won't have more than one wifi and stuff.

E- b airy: Or like [crosstalk 00:12:14] has wifi.

Speaker 1: Okay. What do you guys think?

boy: We're let into the wifi thing but it'll take like 100 years or so because they'll have to put more satellites in space and all that to make sure the whole world is ... wherever you go is ... Say we [inaudible 00:12:34] 4G and I've got my phone. In certain places you've no service and all that. You'll have to make more satellites system [inaudible 00:12:39] the world [inaudible 00:12:40].

Speaker 1: So that you have 4G everywhere so you don't need wifi at all.

B– fst acc: I think we'll still probably get a lot better internet and that in Britain in that 10 years time because a lot of places get a really small download and upload speed.

Speaker 1: Yeah, especially around here.

B– fst acc: I know someone who has to use 4G most of the day. Pay about 80 pounds a month to keep streaming up and stuff.

Speaker 1: How much of your time do you think you will spend using computers and digital devices when you're an adult?

E- b airy: Most of the time.

B– fst acc: Probably a lot less than I do now.

Speaker 1: Less than, you're saying ...

B– fst acc: I use my computer a lot.

Ja–: Probably quite a lot.

Speaker 1: Okay. What do you think? Why?

Ja–: Because if you want a very good job, you'd probably have to do online coursework and stuff so you'd be doing it more.

Speaker 1: So a lot of studying and that.

E- b airy: My sister's studying for uni and she has to use computer a lot.

Speaker 1: All the time. As a general consensus ...

E- b airy: She's studying to be a nurse.

Speaker 1: Do you think you're gonna spend more time using computers than you do now, or less time?

T– nml dper: More.

J– slw yng: I'd say less.

B– fst acc: I'd say less for me, but everyone else would probably say more.

Speaker 1: Why do you say less, J–?

J– slw yng: Because they will probably have a job. They'll have to go to work and all that.

Speaker 1: You don't expect that you'll be using a computer all the time in your job? You'll be doing something else?

J– slw yng: My dad, he had a PS4. He used to play it every night. Now because he works at Sellafields, which was like night shift and all that, he usually has an hour on the TV and that sort. He spends hardly any time doing [inaudible 00:14:21].

Speaker 1: Do you know if your dad uses computers a lot in his work?

J– slw yng: He's an electrician at Sellafield. I don't know. He does use computers quite a bit but not as much as he did when he was 20 or so.

Speaker 1: Right. Do you know if he has any specific devices that only electricians there use? Or do you think it's ...

J– slw yng: There is certain ones they would use but he hasn't told us about them [inaudible 00:14:54].

Speaker 1: I'm just curious. Do you think that the computer lessons, like the one you're missing now, require you to change who you are or how you think at all?

B– fst acc: Not really.

E- b airy: No. I think it's just a lesson. It's pointless.

Speaker 1: It's just a lesson, it's pointless.

E- b airy: It's really so boring.

B– fst acc: It shows you what to do on the computer.

Speaker 1: So it doesn't change you? You don't think differently or problem solve differently?

B– fst acc: No, because computing is how I probably solve the ...

E- b airy: The beginning of everything.

Speaker 1: What do you thing the main purpose of you learning computing, and about computers, in school is? If you know.

boy: For later in life.

Speaker 1: For later in life.

B– fst acc: We need more programmers and that [crosstalk 00:15:40]

E- b airy: I think it's just to annoy us.

Speaker 1: Just to annoy you.

Ja–: Yeah, but it you had a computer and it broke, then you'd probably need to know how to fix it and stuff.

E- b airy: [inaudible 00:15:49] doesn't teach us how to fix them.

B– fst acc: I suppose but that's more of an IT award, so if she says anything about ...

E- b airy: Why don't you just look on YouTube?

Speaker 1: Those are all sort of the purposes. Do you think it achieves that? You're saying it's so we can fix them. Do you think you learn how to fix them?

boy: No. At the moment, I feel this is more of a crash course in computing. We're not doing actual computing because we're not really learning anything.

Ja–: Not at the moment, no.

J– slw yng: We're just learning what you can do with a computer.

boy: Yeah. We're we're sort of like-

Speaker 1: Is that helpful, learning what you can do?

boy: Some of it is.

Speaker 1: Have you learned that you can do stuff that you didn't know you could do?

E- b airy: [inaudible 00:16:21]

boy: A little bit. It's mostly programming different type of things.

B– fst acc: We haven't really dipped into programming properly either.

E- b airy: [crosstalk 00:16:27] that thing where we have to use one at school and [crosstalk 00:16:30].

B– fst acc: We started Python and we did it for about ...

boy: We're learning like [crosstalk 00:16:29] ...

boy: We're never going to use [crosstalk 00:16:30].

Speaker 1: You're never going to use binary?

E- b airy: Yeah, we're never gonna use that.

B– fst acc: We definitely will.

T– nml dper: Like graphs, we don't usually need graphs [inaudible 00:16:35] maths anymore. We're never really gonna use them.

B– fst acc: We dipped into Python, but we didn't really do anything with Python. We basically used the print command of it, and it just really ...

Speaker 1: Okay. Comparing computing to something like maths or English, do you learn less, do you learn more or less things that you think you'll use later in life?

B– fst acc: I feel like I learn a lot.

Speaker 1: For example, you said in maths you're using graphs, but you're never going to use graphs again. In computing, do you learn more that you'll never use or do you learn more that you'll use?

Group: [crosstalk 00:17:08]

B– fst acc: I think we learn even more than we'll use.

E- b airy: More that we'll never use.

boy: I'll not use most of it but ...

Speaker 1: More that you'll ever use.

Ja–: Definitely.

B– fst acc: I feel probably it's like, lessons like English or maths are a lot more linear though. We [crosstalk 00:17:16] use.

Speaker 1: Why do you think that?

J– slw yng: When you learn about codes and stuff. You might need them in the future and stuff if you're not meant to ...

T– nml dper: For a job that you might have in

Speaker 1: To what extent? We've covered this a bit already. Do you think what you've learned in your computing classes relates to how you use computers in your everyday life, if at all?

J– slw yng: Not at all.

Speaker 1: And to what extent do you think it'll relate to how you'll use computers in the future? Again, if at all.

T– nml dper: It definitely relates about how you'll in the future, but right now I mostly use games and that, so I don't really ...

Speaker 1: Anybody else think that it either does or doesn't relate to how they'll use computers in the future?

J– slw yng: I don't think it will ...

T– nml dper: In some ways.

Speaker 1: You don't think it will.

J– slw yng: ... because in the future I'll say computers will be much more advanced. And technology.

B– fst acc: It could mean it gets harder to use though.

Speaker 1: What do you guys think, Ja– and E-? You don't think it does relate.

E- b airy: [inaudible 00:18:16]

Ja–: No.

Speaker 1: Okay. What would make your computing lesson more exciting and more engaging?

E- b airy: If the teacher wasn't so boring.

Speaker 1: Putting aside the teacher, what you're actually being taught, what would that ...

E- b airy: If it didn't sound so boring. If he didn't make learning so boring!

Ja–: If every now and again we cut out from the lesson and just had a bit of fun like games and stuff like that.

Speaker 1: Okay. You don't feel like it's very fun.

Ja–: No.

E- b airy: Then if we scooped up all his [inaudible 00:18:49] and put it in the binnies, [inaudible 00:18:50] faint [inaudible 00:18:52].

Speaker 1: Anybody else? Anything else that would make it more interesting?

B– fst acc: I'd like to stick on the topic for a while.

boy: I think like, instead of always just doing the same thing, do something different.

B– fst acc: See, I think it's the opposite of that.

boy: Because at the moment, we're just doing coded programming and all that.

B– fst acc: That is what computing's about.

Speaker 1: It sounds like one of the difficulties with the programming, with the way computing is being taught to you guys, is that for some of you it's way too slow and for some of you it's way too quick but it's somewhere in between.

E- b airy: Yeah. Well B–'s a computer genius so ... He is more computer.

Speaker 1: It doesn't go into a huge amount of depth for it but you guys are finding that it's still really confusing. Is that right?

boy: Yeah. Sometimes.

Speaker 1: And still just really repetitive. Okay. Have any of you heard the term computational thinking at all?

B– fst acc: Yeah, I think I've heard it once or twice.

Speaker 1: You've heard it once or twice? Any guesses of what it might mean?

J– slw yng: What is it called?

Speaker 1: Computational thinking.

J– slw yng: Like thinking computers?

Speaker 1: Thinking like computers? Any other?

Ja–: Thinking of computers.

Speaker 1: Thinking of computers. Okay. Any other guesses? You said you haven't heard of it so [crosstalk 00:20:09].

B– fst acc: Thinking like a computer?

Speaker 1: Thinking like a computer. That's not a bad one. Okay. How many of you have a computer at home, or how many computers do you have in your house?

E- b airy: I've got two houses.

B– fst acc: What do you mean by ... Does an Xbox count as a computer?

Speaker 1: I wouldn't ...

E- b airy: You mean a laptop or a ...

Speaker 1: Maybe.

B– fst acc: Or a desktop.

Speaker 1: Do you think of it as a computer?

E- b airy: Everything ... a car is a bit like a computer though, isn't it?

Ja–: Yeah.

B– fst acc: It's like [crosstalk 00:20:40] control of something else.

T– nml dper: It's a bit like a dumbed down computer.

Ja–: A TV Is a bit like a computer as well because ...

E- b airy: Anything that's really like ...

Speaker 1: How many of you have a desktop or a laptop that is just yours to use? Maybe it's not yours but ...

E- b airy: Oh yeah. [crosstalk 00:20:53] like five.

B– fst acc: I used to have [crosstalk 00:20:54].

J– slw yng: I used to have a laptop but I sold it because I didn't really use it.

E- b airy: I have an Apple one.

Ja–: I have an Apple.

T– nml dper: My mom has an laptop and so does my sister because you can do a lot of things on them.

Speaker 1: Is your sister older than you?

J– slw yng: No, my sister's younger than me but she uses it for more things.

T– nml dper: My mom's got a laptop she uses every day for her journal.

B– fst acc: My dad works well with computers so I get a lot of spare parts and stuff which I plug into my computer at home, so I've got a pretty souped up PC.

Speaker 1: Okay. How much time do you feel like you spend using computers and digital devices?

E- b airy: When I'm at my mom's, I don't really use anything but when I'm at my dad's, I'm on it all the time.

Ja–: Yeah.

Speaker 1: So somewhere in between?

B– fst acc: I think it's probably pretty scary.

Speaker 1: A few hours a day?

J– slw yng: Three hours a day, something like that.

Ja–: Mine's the opposite to E-. I use it more at my mom's than at my dad's

E- b airy: But I'm at my dad's half the time and my mom's half the time.

T– nml dper: Sometimes on the weekend, I do like school and stuff, so ...

B– fst acc: I think it's pretty scary the amount of time I use a computer actually. I [crosstalk 00:22:00]

E- b airy: You are a computer.

Speaker 1: So how many of you use social media? I'm assuming all of you.

B– fst acc: I try, but I just give up after a while honestly.

Speaker 1: How many of you consider yourself part of any online communities, like a guild or a forum or a group of people who ...

Ja–: Yeah.

Speaker 1: ... you would speak to or spend time with but you might not know them in real life or you might not have ...

E- b airy: Oh yeah.

Group: Yeah.

E- b airy: I've got friends who live in Germany and America and so ...

B– fst acc: Yeah, and I do like to spend my time in ...

Ja–: I speak to people that I don't know on social media and make friends with them.

Speaker 1: And they're not people that you expect to meet in real life?

Ja–: No.

T– nml dper: I'm actually doing a game with [inaudible 00:22:36] and [inaudible 00:22:36] that.

E- b airy: [crosstalk 00:22:35] I'm not going to go to Germany to meet my friend.

Speaker 1: You might do. It's not that far away.

E- b airy: I've already been to Germany, but I want to go to Germany soon.

Speaker 1: What was that?

T– nml dper: Everybody I [inaudible 00:22:42] ...

Speaker 1: Everyone you know online, you've met.

E- b airy: His girlfriend as well.

T– nml dper: Yeah, all my friends I know [crosstalk 00:22:49].

Speaker 1: What about you?

J– slw yng: Same here.

Speaker 1: Same. Okay. When you're an adult, how important do you think it will be to understand how computers and software work?

J– slw yng: Pretty important.

T– nml dper: Yeah, pretty important.

J– slw yng: Because you have to work with them as your job.

Speaker 1: Do you think you're getting the right preparation for that so you have that understanding?

E- b airy: No.

T– nml dper: No.

B– fst acc: Again, [crosstalk 00:23:12].

Speaker 1: So you think that there's a bunch of stuff that you will need to know, but you're not learning it?

B– fst acc: Yeah, it doesn't feel like we're learning enough to me. I don't know.

Ja–: We're not learning the right stuff. We're learning about binary, which we're probably not going to need to know about.

E- b airy: That's just because your brain's like a [inaudible 00:23:19]. I've got forms like ...

Speaker 1: Okay. How do you think you'll use computers when you're older or in the future? Do you think you'll use them at work or at home or for hobbies or sport or playing games?

T– nml dper: Playing games.

Ja–: Bit of all of it, maybe.

Speaker 1: Okay.

E- b airy: When I'm older I want to play more games.

Speaker 1: Have any of you heard the term internet of things at all?

T– nml dper: No.

Ja–: No.

Speaker 1: That's the term used for when your fridge is a computer, a computer in that, and it can send you message if you're out of milk. Have any of you have heard of that sort of stuff?

T– nml dper: Yeah. [inaudible 00:24:04]

E- b airy: That'd be cool.

Ja–: Like an online shopping list.

Speaker 1: Yeah. Or sometimes your fridge might have a camera in it so it will tell you what to put on your shopping list.

boy: Watchdogs experiments, I hear recently.

Ja–: Whoa.

E- b airy: Funny, [inaudible 00:24:15].

B– fst acc: Yeah, but at the same time, your fridge could also ...

E- b airy: Because me and my mum have different milk. She has the red one and I have the green one and she keeps on drinking all mine.

Speaker 1: She keeps using all of yours.

E- b airy: It's ridiculous. [crosstalk 00:24:24].

B– fst acc: At the same time, the problem with having a computer in your fridge is it could be listening to you or it could be watching you and that's like ...

Speaker 1: Have any of you heard of the Amazon Alexa thing?

Group: Yeah.

B– fst acc: That's weird. I don't know why you'd buy one of those things. Don't think I'd ever use it.

Speaker 1: In five years time, what do you think you'll remember or use from your computing lessons?

E- b airy: Absolutely nothing.

B– fst acc: I think I'm using a lot.

J– slw yng: Nothing.

T– nml dper: Probably word and that's it.

Speaker 1: Word and that's it? Are you spending a lot of time on Word?

B– fst acc: [crosstalk 00:24:54] nuclear engineering, that's a lot of computers.

T– nml dper: Not really.

E- b airy: When we have supplies, that's all we ... [crosstalk 00:24:55]

J– slw yng: When we learn stuff, we go on there and then we write about it and stuff like that.

boy: Yeah. Say you had to write something. You just go on Word to write it up.

E- b airy: And I know how to use PowerPoint because when I get bored in that lesson, I just click on it.

Speaker 1: You just make Power Points.

E- b airy: And I know how to work a computer because I'm always online [inaudible 00:25:10].

Speaker 1: Okay. What about you, Ja–?

Ja–: I don't know.

Speaker 1: You don't know. Okay. That's fine. Can you tell me about how you feel your computer work is assessed? What's good work and not good work when you're doing your computing work? Is it better to make mistakes and fix them or is it better to just get it right the first time?

B– fst acc: It's probably better to make mistakes, really, because you learn a bit better.

J– slw yng: I don't know how to explain it, but ...

Speaker 1: Okay. What do you think your teacher thinks?

E- b airy: He's just shouting, "You weren't listening."

J– slw yng: You have to get it right the first time.

E- b airy: "Yeah, you weren't listening." We were listening. You just didn't explain it.

boy: If you don't get it right the first time, you'll probably get a detention.

B– fst acc: He's not that bad.

E- b airy: Yeah he is. He gave me a detention just in [inaudible 00:25:54].

Speaker 1: Even if you don't know why, if you've got it right the first time, that's the most important thing [inaudible 00:25:59]?

E- b airy: [inaudible 00:26:02]

Speaker 1: Some of you guys have said you've got a computing. Some of you who have said your not, you don't think you are. A few of you are in between. If you don't think you're very good at computing, what do you think you need to do to improve? Will that change you as a person at all?

J– slw yng: We learn more about computers and how to work them.

Speaker 1: Spend more of your own time?

J– slw yng: Mm-hmm (affirmative).

Speaker 1: Any other thoughts on that? Okay. In what way would you say that learning about computing has changed your choices and decisions about the future if at all?

E- b airy: Pardon?

Speaker 1: Were you listening, possibly?

E- b airy: Sorry, [inaudible 00:26:49] what time it was.

Speaker 1: How has learning about computing and computer science instead of just ICT, has that changed your decisions and choices about the future at all?

E- b airy: No.

Speaker 1: No?

Ja–: No.

J– slw yng: Not really.

E- b airy: I've wanted to be a vet since I was like, two, and not [inaudible 00:27:08].

Speaker 1: Has it changed your vision of the future? Has it changed what you think is possible in the future?

B– fst acc: A little bit.

Speaker 1: A little bit. In what way?

T– nml dper: Yeah, I suppose.

E- b airy: B–, get off your phone.

Speaker 1: Off your phone. In what way? Are there jobs that you now think-

T– nml dper: Yeah. In the jobs that maybe I wanna do, [inaudible 00:27:30].

Speaker 1: So it's made you think the jobs you wanna do, you'll probably need more computer ...

T– nml dper: You need ICT in at lot of things. [inaudible 00:27:36]

Speaker 1: Okay. Is there anything that you think you should be learning about computing or computers but isn't apparently covered in your computer lesson? What do you wish you were learning in your computing lesson?

B– fst acc: More programming stuff where they [inaudible 00:28:00]. I guess these guys probably wouldn't agree, but I would prefer to learn a lot more along the lines of writing code and compliant [crosstalk 00:28:06].

E- b airy: We already have and it's just boring.

B– fst acc: Yeah, but we haven't though. We literally, all we've done is learn the print command and a couple of commands that let us ask questions and stuff. That's all we ever have done in terms of computing.

Speaker 1: Okay. You're saying you'd like to learn more coding, that you want to learn how to use code more to solve problems.

B– fst acc: Right now, we're doing bar codes, and it's just not my ..

Speaker 1: Anybody else? Is there anything that you can think of that you're like, actually ...

J– slw yng: I'd like to learn more about the other options in computing because there's so much other things on the computers, so many things you can do, and we don't know about lots of them.

Ja–: Yeah.

Speaker 1: Any examples?

T– nml dper: [crosstalk 00:28:39] like using two fingers? [inaudible 00:28:41]

J– slw yng: And there's like Microsoft office and there's PowerPoint and there's these other ones, and I don't know.

E- b airy: He could actually show us how to view stuff we don't understand, hopefully.

B– fst acc: That's more for the IT IC's rather than a computing lesson.

E- b airy: It's the same thing.

Speaker 1: ICT and computing are the same lessons now. They're covered in the same lessons. So you're saying learning to use the software you've never used before. Any examples, anything you've specifically seen in these that I'd really like to know how to use them?

E- b airy: I don't know.

B– fst acc: Can't think of any.

Speaker 1: You can't think of any but you feel like there's a whole bunch of stuff the computer can do and you don't know how to do it.

B– fst acc: I know there's loads of ... but I just can't think of any [crosstalk 00:29:19].

E- b airy: Because of the sort of like Microsoft stuff where you click on it and you have no idea how to work it, and he could help us do it.

Speaker 1: Any ones specifically or ...

E- b airy: [inaudible 00:29:33].

Speaker 1: Okay. Anything else that you wish was covered, isn't covered in computing, but you'd really like to be covered or you'd really like to learn more about computers?

T– nml dper: Video game development. I'd like to know more about ...

J– slw yng: Yeah, maybe about what you can do with ICT.

Speaker 1: Okay. You mean in the future, so not the skill.

J– slw yng: Yeah. What ICT can give you.

Speaker 1: What's ICT for. Okay. Anything else? Ja–? You can't think of anything?

Ja–: No.

Speaker 1: Okay. Brilliant. Those are all the questions. Is there any other answers you have or anything else you want to ask or say?

E- b airy: Can we just stay here for another 20 minutes?

Speaker 1: Another 20 minutes? I don't have any other questions. You just didn't talk enough.

B– fst acc: We could play with our phones for the next 20 minutes.

Speaker 1: You could keep talking?

E- b airy: Yeah.

Speaker 1: Yeah? It has to be about computers though.

E- b airy: Do you guys want to go back to the lesson?

B– fst acc: It's a good subject, actually. Let's continue to talk about this then.

E- b airy: You can go.

B– fst acc: I honestly don't because we're doing a really boring topic at the moment.

E- b airy: [inaudible 00:30:38] we are. Good answers.

Speaker 1: Do you really think it's the topics that make it boring, or do you think how they're delivered?

E- b airy: Both.

Group: A bit of both.

B– fst acc: A bit of both, but at the moment there it is just really just running around.

E- b airy: Because the ITTT is just all boring.

T– nml dper: We're doing the same things mostly [crosstalk 00:30:50].

B– fst acc: We're running around scanning [inaudible 00:30:50] bar codes.

E- b airy: Miss [inaudible 00:30:50].

T– nml dper: We're just changing how you do codes. We're not really changing what the [inaudible 00:30:57] and what we're doing.

B– fst acc: What you can actually do with the codes. It's just like, "Here, use the print command." [inaudible 00:31:02].

Speaker 1: Was it the same last year, when you were in year eight?

E- b airy: Yeah, it was so many [inaudible 00:31:09], so I've never liked it.

B– fst acc: [inaudible 00:31:09] seven.

Speaker 1: You've never liked it.

T– nml dper: I think in primary school you learnt more because you learnt what the apps actually did.

J– slw yng: I like [inaudible 00:31:15] and stuff.

Speaker 1: For you, it'd be learning what the apps do would be more interesting rather than how to make apps.

T– nml dper: What you can do on the computer is ...

E- b airy: Do you know what? I hate maths and I'd rather sit in maths all day than going to an ICT. That's it.

Ja–: Yeah.

Speaker 1: What about it makes it so boring?

E- b airy: The teacher. The class.

Group: The teacher.

Speaker 1: You've had three different teachers over the last three years I would've thought.

E- b airy: Yeah ...

B– fst acc: Two.

T– nml dper: [crosstalk 00:31:36]

Ja–: I had two teachers.

E- b airy: No, about three. I had Miss [P– 00:31:38].

B– fst acc: I like Miss P–.

E- b airy: Mr. [Kyr 00:31:39] and now I've got [crosstalk 00:31:41].

T– nml dper: Sometimes it's all right. It just depends what we're doing.

B– fst acc: I didn't have Mr. K but I like Miss Powell. Miss Powell is pretty good.

Speaker 1: Depending on what you're doing. What's the best ICT lesson you've had, or computing lesson you've had, and what's the worst?

T– nml dper: One where we've made a game before or something that was [inaudible 00:31:55].

E- b airy: No. I think the best one was when we had to supply [inaudible 00:31:58] and play music.

Ja–: My favourite was when it was activities week and we just didn't do much on it.

B– fst acc: I like it when we have a bit of fun on the computer when we can actually do stuff that [crosstalk 00:32:10].

E- b airy: Yeah because we have a funny class [crosstalk 00:32:11] so she's too strict.

B– fst acc: I quite enjoyed making programmes and stuff really.

Speaker 1: You're saying have a bit of fun. Do you mean making games or playing games?

B– fst acc: Making games and finding out about stuff.

E- b airy: I've got a negative point for clicking on Pivot.

Speaker 1: What is Pivot?

E- b airy: It's a globe game [crosstalk 00:32:33].

B– fst acc: It's ... Oh no. Not that.

E- b airy: You get to move it.

B– fst acc: You can make stick men and you can animate them and make frames so they all do ...

E- b airy: I made them [inaudible 00:32:40] and stuff and so I wasn't too impressed.

Speaker 1: What do you think of those [inaudible 00:32:45] skills? Do you think you're being taught to do bits of animation?

E- b airy: I did it in primary school. That's what I learned.

Speaker 1: That's where you learned Pivot?

E- b airy: Yeah.

Speaker 1: Is it the type of thing you'd like to learn more about?

T– nml dper: No.

Speaker 1: No.

B– fst acc: It's a pretty simple programme. There's not much ...

J– slw yng: We already know how to work it. It's not that hard.

E- b airy: It's easy. Yeah.

B– fst acc: [crosstalk 00:33:02]

Speaker 1: Do you think it's a relevant skill more than say Word?

E- b airy: Yeah. I think it's cool.

J– slw yng: Not really no. Unless you want to make stuff [crosstalk 00:33:08].

B– fst acc: Unless you're doing it properly, it is pretty simple to use.

E- b airy: All you have to do is move it.

Speaker 1: What jobs do you think are going to be available in the future that aren't available now?

B– fst acc: I don't know. I'm guessing [inaudible 00:33:20] to get into video games but that's ...

E- b airy: [inaudible 00:33:22].

Speaker 1: Okay. Any other things that you think are going to change significantly in the future?

T– nml dper: There's things like YouTube that are massive now and ...

Speaker 1: You have to go.

E- b airy: She's got to [inaudible 00:33:31].

B– fst acc: I think Vimeo and stuff is going to be changed.

Speaker 1: Thank you very much for your time.

Ja–: [inaudible 00:33:35]

T– nml dper: The things like YouTube and these days ...

B– fst acc: YouTube is changing way too much at the moment.

Speaker 1: The internet is changing.

T– nml dper: These days, there's stuff like YouTube and you have to edit and everything and it's a lot of computing.

boy: YouTube's really gone downhill recently.

Speaker 1: Are you learning that? Do you think you should be learning that?

B– fst acc: We should be learning that but we don't know yet.

E- b airy: YouTube's popped?

T– nml dper: Yeah. Like maybe how to edit and stuff like that. I don't know.

B– fst acc: The algorithms are just so mental.

Speaker 1: Have you guys learned any media editing?

E- b airy: Nope because it's all locked at school.

B– fst acc: Oh yeah. It's everybody's blocked. It's really hard to get onto anything.

E- b airy: See, look. I'll show you.

Speaker 1: No. It's all right. I believe you.

E- b airy: All you click on is YouTube and ...

Speaker 1: I've worked in enough schools to know that there's [crosstalk 00:34:13].

E- b airy: It's like [inaudible 00:34:14]. This is blocked.

T– nml dper: Sometimes it's for stupid things. I've gone into a site looking for computing things that just got blocked for jokes and humour. That's just not ...

E- b airy: [inaudible 00:34:25].

Speaker 1: Are there any jobs that you think won't exist in the future? We talked a little bit about ones that ...

E- b airy: Bin men.

B– fst acc: I think a lot of factories will be quite automated in the future.

Speaker 1: What skills do you think you guys will need to work with more automation. Do you have any idea to make sense of that, working with robots? Or what do you think about working with ...

T– nml dper: [inaudible 00:34:53] understand the day to day [inaudible 00:34:57]. How they're used and how they work and stuff.

J– slw yng: Make sure you know how they work.

Speaker 1: What do you mean by know how they work?

J– slw yng: Say the programmes were ... You needed to know how to get it to boot and how to get it to make a certain thing, how to understand it.

Speaker 1: Do you think you'll be doing the main programming part or do you think you'll just be telling a robot how to do basic things?

J– slw yng: Main programming.

Speaker 1: Okay, so you need to ...

J– slw yng: It needs to be like a human being if it's a robot.

Speaker 1: Do you think that you need to know how to programme robots or just you work with robots?

J– slw yng: You need to learn how to programme it. Say a robot came to me. I probably wouldn't know how to control it or something like that.

E- b airy: I'd feel it out. [inaudible 00:35:51]

Speaker 1: Do you think learning things like Python actually probably helps?

J– slw yng: They can.

T– nml dper: It would if we actually learned Python.

J– slw yng: I don't really know what Python we used for. It's like algebra, when we use algebra in life.

T– nml dper: Something like Java Script would be nice.

Speaker 1: The concept of algebra is pretty useful in that if you have a bit of an equation and you don't know all the numbers, sometimes you use algebra to figure out what bits you're missing. Right?

T– nml dper: Yeah, I know, but x and h and all that. Why is there letters in the equation [inaudible 00:36:27].

Speaker 1: Because sometimes you don't know everything about what you're trying to work out. Sometimes you're missing a bit of information. Algebra is just the logic of using the information you do have to figure out the information you don't have. Right? That's really what algebra is all about, solving for x or y or whatever. So what do we think. If that's the underlying idea for algebra, what do you think the underlying idea for computing is?

B– fst acc: To make things easier I guess.

Speaker 1: Make things easier. Okay. In what way do you mean?

T– nml dper: In maths, if you want to work something out, if you did it on a computer, [inaudible 00:37:07] just be done straight away. You don't have to go through all the thinking. It's already done there.

B– fst acc: Yeah. Like writing things down, instead of using a pen or a pencil, you can type it.

Speaker 1: So you think the point of computers is to make things easier. Do you think you're learning how to make things easier?

T– nml dper: [inaudible 00:37:22]

Speaker 1: In your computing lessons or in general?

T– nml dper: No. It's just doing it for you.

J– slw yng: Sometimes but other times it's not.

Speaker 1: Okay. Is there anything else because I think we're running out of things to talk about.

B– fst acc: Yeah. We appear to.

Speaker 1: I mean, it's all interesting and if there's anything else you want to talk about, that's fine but I think where we're at, we'll have about 15 minutes left of lessons. Not that much. Is that all right? Should we head back?

B– fst acc: We probably should honestly if we have nothing else to talk about.

T– nml dper: I think ICT, it is quite important but I think it's just going to get more important as the future goes on.

Speaker 1: Do you see the difference between ICT and computing?

E- b airy: No.

Speaker 1: [crosstalk 00:38:09]

B– fst acc: There's a huge difference.

E- b airy: [inaudible 00:38:12]

Speaker 1: B– says there's a huge difference. Do people agree or disagree with that?

E- b airy: Don't know.

T– nml dper: Don't know.

J– slw yng: Don't really know. I didn't do IT or computing in seventh and eighth.

Speaker 1: You didn't do IT. Were you at a different school?

J– slw yng: No. I was here but I just didn't do it.

Speaker 1: You just didn't.

J– slw yng: No.

Speaker 1: Okay.

T– nml dper: I think more things these days are getting run by this kind of databases and stuff like that and not everything is the same now [inaudible 00:38:38] technology.

J– slw yng: Yeah.

Speaker 1: What do you mean no everything is the same in terms of technology?

T– nml dper: You can get stuff made and it just moves itself now. You don't have to do things with it to make it go or stuff like that. You can just push something, it'll do it itself.

Speaker 1: Press a button and it'll just do it.

T– nml dper: Yeah.

Speaker 1: Do you feel like it'd be good to know how that worked or it works fine without it?

J– slw yng: It would be good to know.

T– nml dper: Yeah.

Speaker 1: It'd be good. Yeah.

J– slw yng: It'd probably be difficult to know.

Speaker 1: Do you think what you've learned so far about computer science helps you or do you think it's just so far beyond it that it just ...

J– slw yng: I don't know that it helps us.

B– fst acc: I feel I guess outdated because Python isn't really that used as much. I'm not aware of it being used that much anyway. Something like Java Script or something along those lines.

Speaker 1: B–, you know a lot about computers already. Have you learned any other languages or done any programming on your own?

B– fst acc: I always try to. I just find it hard to focus on it and just continue to do it.

Speaker 1: It is a hard thing to teach yourself usually.

B– fst acc: Yeah. It makes it easier in school and stuff to learn things like Python.

J– slw yng: The teachers definitely make it easier to understand it [crosstalk 00:40:04].

Speaker 1: They do make it easier to understand it than if you're learning it on your own. Are you guys being taught about things like how to do internet searches really effectively or how to stay safe online? Any stuff like that?

B– fst acc: We were in year seven but ...

T– nml dper: We were. That was year seven and stuff. We were told about how to report abuse and stuff like that. Just [crosstalk 00:40:26].

Speaker 1: Did you find that useful?

E- b airy: That's what our parents cover anyway.

T– nml dper: Yeah. We were taught how to [crosstalk 00:40:33].

Speaker 1: Of the four of you, how many feel that your parents help you with that stuff anyway?

T– nml dper: Yeah.

B– fst acc: My dad does quite a bit.

Speaker 1: You said your dad uses computers a lot so he's quite informed.

B– fst acc: Yeah.

Speaker 1: On a scale of 1 - 10 ... I'm assuming B–'s dad would be sort of a 10 of knowledge about computers.

B– fst acc: You're like a 9.

Speaker 1: On a scale, where would you put your parents?

T– nml dper: Mine, 4, 5.

E- b airy: I'd put my mom and my stepdad at about a 3 and I'd put my dad on a [inaudible 00:41:04] maybe about a 7 or an 8.

Speaker 1: Okay. They know quite a bit. Maybe not everything.

E- b airy: My stepmom's a bit younger.

Speaker 1: A bit what?

E- b airy: A bit younger. She knows a bit more about Instagram and what not.

J– slw yng: My mom and dad know a lot more than me.

Speaker 1: They know a lot more. Where would you put them on that scale?

J– slw yng: Maybe a 6, 7.

B– fst acc: I'd put my dad as a 10.

Speaker 1: Your dad knows a lot then.

B– fst acc: Yeah because when my Xbox [inaudible 00:41:27] broke, but my dad managed to fix it and get it working again.

Speaker 1: Do you have any idea how he did that?

B– fst acc: No.

E- b airy: My step just got a hammer and smashed mine. He was sick of it. Said he'd bought me a new one.

Speaker 1: Have any of you used Raspberry Pie or anything like that before?

B– fst acc: Got one. I short circuited it very quickly.

Speaker 1: Anybody else?

E- b airy: Raspberry Pie?

B– fst acc: Have you not heard of a Raspberry Pie? It's like a ...

Speaker 1: Little tiny computer.

B– fst acc: Yeah. It's great.

J– slw yng: Oh yeah. My sister had one.

Speaker 1: Your sister had one. Does your sister do a lot of computing stuff?

J– slw yng: No. Not really.

Speaker 1: Okay. Right. I think we really should head back.

B– fst acc: Probably a good idea.

Speaker 1: Thank you very much for your time.