

Q Catherine Bannister (researcher)  
A Shula K (teacher)

Q So, for the purposes of the recording this is an interview with Shula K, who is a teacher at Beaconsfield Primary School.

A Infants School, yes.

Q Beaconsfield Infants School, I'm sorry. And you teach two of the case-study children in the research project. So, I'd like to start off by asking some questions about technology featuring in your teaching style, and in the curriculum more generally. So, how do technologies, by which we mean things like digital devices, things like iPads, computers, and consoles, also media, like apps, websites, and games, things like that, how much do they feature in your planned curriculum?

A Well, we cover the curriculum basics, and they cover the units of work for computing, and we follow a scheme, the computing subject that you'd have bought into. But then we also have an iPad in the class and the children use that to take photos and videos of models, we always have an animation topic one half term and teach the children how to do that.

We have the Chromebooks in school, but we only got those, oh, I don't know when it was, maybe the end of September/ beginning of October, so they're not really embedded in teaching very much yet. And we've only got six of those, so they have to work as a group. And then the interactive whiteboard which we use, and the children use, and we do have some laptops in the classroom that the children can use whenever they want to.

But I will be honest, when we let them use it whenever they want to, with this particular class we've had problems with them going on games that weren't age-appropriate that somehow had passed our firewall, so we had to start turning the laptops off. We used to have them switched on in the morning and the children could use them whenever they wanted, but we had some children complaining, and going home and telling their parents that they'd been on some games that weren't appropriate. So, we've had to switch them off.

Q What kind of games were they, can I ask?

A I'm trying to think what it's called, because my son's only six and he's not quite got into gaming like that yet, he likes to go on FIFA. Oh, what is it, it's some game where you're a person in a world, but you can meet other people. It is aimed at younger children, but there are a lot of concerns around safety and older people logging on and creating characters and talking. I can't remember what it's called.

Q Right, so it's an online game.

A Yes, and I don't know how it got past our firewall. To be honest, it was the children who'd complained about it, and I'd said, oh right, I'll look into it. And I had a student in the class at the time, and he said, no, that really shouldn't have

got past your firewall, so we just turned everything off. Like, right, turn all that off then. So, generally we used to use the laptops a lot more than we did this year, but like I said, that's just because of what's happened, and the IT men are looking into it for us. I don't know, there's not much other technology that we use in class, really.

Q When you do use technology in class, is it related to the national curriculum, related to their guidance regarding those types of learning?

A Yes, generally that's what we stick to is doing all the online safety, teaching the algorithms, we do branching databases, using the internet as a research tool, how you present yourself on the internet. So, we follow the scheme that's been made, and we do also use the laptops for typing up stories and using Purple Mash and things. And for some children who find it easier to work on an electronic item like the Chromebook or the laptop, than handwriting, we use those as well sometimes.

Q Do you use it when you're doing project-based learning, and things like that?

A Sometimes, it depends what we're doing. We've done shoe [?] designs, we use photographs, and aerial views. We use Google Maps a lot, we look at aerial views in creating maps, and position and direction, and the children go on Google Maps and find their own house, and it's really good for geography, in covering most of the geography curriculum. So, it tends to be we use technology a lot if it suits the topic, and if it doesn't naturally fit in we just provide opportunities as and when, like with the iPad and the laptops being in the classroom for the children to use.

Q And do you do Google Classroom, I wonder? I've seen when the Chromebooks have been used the children have a profile, is that right? What provides that, is that an [unclear] school thing?

A No, it's Purple Mash, which is a learning platform that we buy into. So, the Chromebooks, we use mostly Purple Mash on the Chromebooks, which we've used before and then we stopped using. But then Purple Mash got a lot better and it's much more up to date, which is why we've gone back with that as a learning platform, so the children can do things at school which then when they log in at home will still be there.

The only problem is you can't print from the Chromebooks, so the children aren't able to print their own things at school, we've got to log in as the teacher and do that afterwards. But no, Purple Mash would be where they've got their identification, their own password and log-in details.

Q I've also noticed when you've been doing the Elves and the Shoemaker topic, the use of images and the website, is that Purple Mash as well? What sort of websites would you use in teaching?

A Oh, I don't know. The ones that we've used... For storytelling, I don't know what website it was.

Q Is that from online, or is it...?

A No, we used a book, and then we turned the book into an oral story, because we do oral storytelling which is like a Pie Corbett model, so the children learn to tell the story with actions. And then we support that with Makaton, or images on the computer, and they're just ones that we've found, or we've scanned the book in.

And if we do book study, which we tend to start after Christmas, we always have the text on the board, but sometimes it's a text online, and sometimes it's just that we've had to scan the book in because it's not available online. But Twinkl, the resources website, they have e-books, and we use those if they're suitable for the topic as well, and they're like a book, but just obviously online.

Q I think I saw Harvey using one of the Chromebooks, there were various educational games on the screen that he could have chosen from, do they come from Purple Mash as well?

A Yes, it's all part of Purple Mash.

Q And do you use any sort of films in the classroom at all?

A We'd use a film as a stimulus for literacy. I'm trying to think, sometimes we use clips from films, we've done Toy Story before to look at giving instructions, we sometimes use the opening from film sequences to talk about settings, things like that, really. We listen to music, and try and match music to a story setting. It's just what's appropriate for the topic.

Q Would you ever use YouTube, and things like that?

A We use YouTube to access, what's it called, the Music 360, which is part of the music service that we buy into. So, just to learn the songs and the videos, they're on YouTube, and we use YouTube just to play music in the morning when the children come in, and also to do things like Cosmic Yoga. They like a bit of Cosmic Yoga. So, we access all of that through YouTube, but generally that is led by the adult in the class. Even if the children are choosing what they want, which Cosmic Yoga they want to do, we do it through the whiteboard so that we can navigate everything safely.

Q Would you say that in the school there's an ethos of use of media and technology as a way of teaching and learning?

A There is. There's the acknowledgement that we know it's all there and that we use it, but I don't think we use it as much as primary schools, because our children are four to seven and some of it they're not able to do. And also some of it comes down to funding, like we've got six Chromebooks because that was all that we were able to get, and I know sometimes bigger schools, they're able to get more technology and to tap into different things.

We've got a good relationship with the secondary schools, and generally once a year the Year 2 children go to [school name, secondary], and we go into the science labs. So, we've used the microscopes and things before, but not laptops and things like that, we've never done that, but the microscopes we've used.

So, we try and tap into some of the technology that the bigger schools have got,

but we use it, and we use it as much as we can, but I think we're definitely not the most technologically advanced school there is. We're an old building, with an old system, and you can come in sometimes and the internet won't be working, usual things.

Q So, what would you want to use in the classroom, or in your teaching, if you had the funding available?

A I think more Chromebooks would be better, and things that the children are just able to use independently, and things that are really good for doing animations and things like that, just little sequences that they can do and put together. It's the kind of thing you used to be able to do with digital cameras, but technology's moved on, you can do it a lot more with just laptops with flip screens and different things. They'd just have more handheld things that they're able to use, and recording devices, they can record stories and add sound effects, things like that.

Q And in your own practice, have you got any comments or examples related to how you might use technology, or you might use apps or games, in relation to collaborative learning, or enquiry-based learning, or problem-based learning, or project-based learning? Any of those that you can think of, an example perhaps, that you might have used.

A The children research on Google Maps and they make their own aerial views in large groups. Also, when we're looking at countries around the world, we use that as a base for teaching research skills, which they do in small groups, and make booklets. And also if it's appropriate, several times before we've focused on a story, and then the children have written their own version of that.

We've sometimes contacted the author, and sent emails and things like that, just to let them know that we've recreated their story in our own way. And sometimes they reply, sometimes they don't, sometimes we send a copy to the publishers.

Q Can you think of anybody who's replied? I'm just curious, really.

A The one that we did get a reply, but from the publisher because the author's dead, but we didn't tell the children, was, oh, what's she called, Jill Tomlinson, the lady who wrote The Owl Who Was Afraid of the Dark, that series of books. That was a couple of years ago we did that. We just made a class book, and we emailed the publishers and sent them a copy, and they posted us back a reply and a card, which was quite nice. And we did most of that as a class.

But yes, I wouldn't say it's something we did every half term, but just when we think it's appropriate, or when the children have really engaged with something, we tend to do it then.

Q Are there any other uses you can think of, of tech in schools, maybe for staff use, for assessments or things like that? Do you have your own apps that you use as staff, or [overtalking]?

A We just have things on the school system. We follow the tracker, which I think a

lot of schools in Sheffield use, and we use SIMS for the register, and we input all the assessment data on there. And then we've got a shared drive where people can put planning, and photos, and things. But yes, that's it, really.

I suppose one thing we do with the children is that we do quite a lot of freeze-framing as drama activities. And because we take photos, and we put that onto the staff share, the children sometimes use those photos if they're doing story-writing on the computers, to make PowerPoints, and to tell stories that way.

But it's quite basic when they're six and seven. They're able to do very simple stop-go animations, and things like that, and with Purple Mash sometimes you can add little sound effects and things, but they're not old enough, they don't have the skills to do very detailed, I don't know, technology projects, I suppose.

Q Do you have a website, or a Twitter account, or a Facebook, or anything like that at the school?

A We've got a school website, and we've got a Facebook page, but that's it. I don't think we've got Twitter.

Q Okay. Right, I'm going to ask a few questions about your own perspective on technology. So, do you think there are any types of devices or types of media that are particularly negative for the children of the age that you teach, and which ones?

A They're so young, I don't think there's anything that's very negative. I think the amount of time they spend on technology is an issue, but generally they're not on Facebook, they're not on Instagram, they're not old enough to do things like that. And I think a lot of the parents are generally quite good with whether or not the games are appropriate.

Every year there are children, generally with older siblings, who play games that are inappropriate, we had a lot of issues last year over... Oh, [unclear] I can never remember what they're called, it's that funny man that everybody was going on about, I can't remember his name. Some of the children in our class with much older siblings had shown them videos on YouTube.

Q Was it a fictional character, or was it a...?

A Yes, but it's gone into this cult thing where people expected it to be a real person.

Q Was it the Slender Man thing?

A That's it, yes.

Q Yes, I remember.

A There've been a lot of issues with that last year, and children telling other children in the class that they'd watched videos on YouTube of people being burnt alive, and these horror films, and really, really not age-appropriate things. So, that generally is the only issue we have, and it tends to be when the child has much older siblings and they're watching things that are possibly just too old for them, which are really much too old for our children and very, very inappropriate.

And we did have some complaints from parents last year that their children had gone home being quite upset, and it was one child in particular. But that's just passed on, the children aren't on Facebook, they're not on Instagram, they're not old enough for things like that, but some of them play quite inappropriate games.

Q So, it's shared around the playground, or things like that, is it?

A Yes.

Q Okay, that's really interesting. But do you have any other concerns about data privacy or anything like that in relation to the children, or is it again it's an age thing?

A No, because they're just a little bit too young, so I don't have any concerns about that. So no, data, not at all actually, because they're so young. Like I said, it's this passing on of stories that tends to be a problem, and the amount of time they spend playing on games.

Q Right. So, do you think that their use of things like this at home can impact on their lives in any way? Positive or negative, I suppose.

A In some way I think it's good because I think, children today, technology's a very natural thing for them, so they naturally deal with touch-screen devices, they're very, very competent using phones, laptops, iPads, and I think that's good. And I think children do need that exposure, so children who absolutely don't have computers, and aren't allowed to go on them, I think are behind with some things.

But I think a lot of children spend too much time indoors, on devices, and their gross motor skills can be affected sometimes, because they never go to the park, they don't as a family go out for a walk, do exercise, spend time outdoors, things like that.

Q Do you think that that comes into school, is either brought in through the children's knowledge of technology at home, or affects their relationships with their peers?

A It doesn't really affect the relationships with their peers, I think it's just something that as a class teacher you notice. Generally when you're chit-chatting about what people have done at the weekend, and what they've done in the holidays, there are an increasing number of children who have just stayed in, just played on games, been on their iPad, been on the PlayStation, and not done anything else. And we can sometimes find, when we go to the seaside, children don't have experiences of just sitting on a beach all day, going in the sea, making sandcastles.

A few years ago I went on a school trip, and one girl was just frightened of going on... We went to Diggerland actually, and she was just frightened of going on anything, because she'd just never experienced playing games, going to a fairground, and going on a ride. Just going on a fairground ride, she'd just never done it, and she was quite anxious and quite upset, and in the end, had to go on my knee. And that was at seven.



It's the amount of time they just spend in the house, because either their parents are studying, or they don't particularly want to go out in the park, and especially in winter I think it's worse, because they don't want to go out and get cold and get wet. And you find sometimes that they've spent just a lot of time at the weekend indoors, and actually when they come back to school sometimes they're tired because they stayed up late, watching films and playing games. Or, they've got a lot of energy and actually need to have time outside, running around.

Q Okay, just a couple more questions about safety. Does the school address any issues about children's internet safety, do you think the school has a role in that? And is any safety advice given to the children, say in lessons, or anything like that?

A Yes, definitely. I think schools are actually key to teaching children how to stay safe on the internet. I think parents are as well, but we go on social media and things so much now, and people share photos and videos of their children, and things like that, that I think the school needs to, I don't know, hopefully help to teach the balance of that. And again, because they're only Key Stage 1, we don't really go into too much, like Facebook and Instagram, and things like that, but we talk about internet safety.

And also the idea that the things you read on the internet aren't always true, somebody posted that on there, you can trace everything back, and just because it's been posted on there doesn't mean that it's the truth. You have to be suspicious of everything you read, and not in a negative way, but just don't accept whatever you've read on the internet, and when you're researching things. And also that everything that you put about yourself on the internet is just there for everybody to see.

So, it's more about an understanding and awareness of how big the internet is, rather than very, very specifically looking at, I don't know, taking selfies, or whatever else, because they're only Key Stage 1.

Q Do you have any concerns about toys which can be connected to the internet? Either things like internet-enabled toys, I think they're called, so things like Furbies, or things like that, which actually respond when you use them, or robotics, and things like that.

A I've never really thought about it, actually. I don't know. I don't think so. No, I don't know, I suppose as long as it's safe. And I don't know, how safe is something you don't know. I've actually never really thought about that.

Q Okay, thank you. So, moving onto looking at new technology with play and creativity and learning in schools, one thing we're looking at is when young people are using, or you're introducing technology or media in the classroom, do you guide the children to take a particular approach? Things like games where there are specific rules or prompts, or things like that. Or are they encouraged, is your approach more open-ended and they have the say or the choice in what they do?

A I think it depends what you're using it for. Things like Google Earth, and doing

internet research, where you know you're on the internet and really the only thing protecting you is the school firewall, kind of thing, then we'd slightly guide what we wanted them to do. And we talk a lot particularly about research, about how you word questions, and again looking at what you think is safe to click on, and not just clicking on the first thing, or everything.

But then other things that they do, like Purple Mash, another learning platform we have is MyMaths, where the children can do homework that we've set for them, and there are games and things on there, that's very much up to them. We would guide them when we set the homework, but then other than that, and the same on Purple Mash, the games, and anything that they go on, it's entirely up to them. We would just encourage them to get to know the learning platform, and spend some time doing different games, and trying out all the different things they can do.

Q Okay. And now there are a few questions about what kind of things you may have noticed when the children are using technology or media in the classroom, about how they're feeling, and how they appear to be learning. So, do you see when they're using technology in the classroom, are they actively engaged with it, is it something that they really latch onto and like to do as an activity?

A Some children. I think at this age you really notice a difference between the children who naturally gravitate towards technology and really love to play games, like on Purple Mash, or MyMaths, and like all of that, and just like to faff around, just like to be on the computer. And the children who never go on, you really have to actively encourage them to have a turn on the laptop.

Like, if we had the laptops on, you could name probably eight or ten children and it would be the same children that go to access it each time. And some of it's confidence, so for some children they're very comfortable using a laptop and navigating round. Other children would love to go on, but aren't very sure how to use it, because they don't have the opportunities at home. And other children might have an iPad at home, and they're just not bothered, it's not something that they're interested in.

So, they fall into those three categories, but some children would spend all day on the laptops, playing games, if they could, and some children wouldn't go on at all in a day.

Q And are they mostly six and seven years old in your class?

A Yes, they're all six and seven.

Q So, what kind of emotions do you see them expressing when they're involved in play, do you see them expressing excitement, or enjoyment, or any other kind of feelings?

A Yes, if they're playing games they're always very excited, they're enjoying it, they're happy. They generally, even though one of them's... Obviously, you can only get one of them on the laptop, there'll be three or four children standing around, watching, giving them advice, telling them what to do. It can get a bit



competitive, and there tends to be a little bit of falling out over who's been on it the longest and who's turn is it next, and people pushing, and saying, I'll show you how to do this, press this button.

But if they went over to the laptops and saw that there were four children sat there, they wouldn't wander off and think, I'll come back in a bit, they'd go and watch, and try and join in. It's very loud when they're on the laptop, it's not a quiet activity, playing games. It's almost like a community activity, they'd always stand there in groups.

Q And when they play, or they use technology, are they building on their previous use of technology in the play that they do, do you ever see any evidence or examples of that?

A No, they tend to just go on the same games, and I suppose it improves in that it'll be the 27<sup>th</sup> time they've been on the game, and they've beat the score that they got last time. But if left just to go on whatever they wanted, nine times out of ten they would go on the same games or apps that they did at home, if they can get on them on the laptop.

Q Can you ever discern, when certain children may use, say the laptops, or the Chromebooks, or they're going on particular games, anything related to their own life, or background, or special interests, for example?

A Yes, some children quite like to go on some of the CBeebies things, there are really good information pages, and they have videos. And some of the children, I don't think it was this class, I think it was last year, really liked just watching the nature video clips on CBeebies, and they used to put those on and watch those. Other children quite like reading and listening to the little stories that are on there, but mainly it is just playing games that they play at home.

Q Okay. And I think we've talked about how they make film, or they do their own filming, and things like that. Do they do any coding at Beaconsfield Infants?

A A little bit, but only very basically. We've got the Beebots, and the programmable toys, and there is, on Purple Mash, this is what I mean about being updated, there's some coding software, and we always do branching databases, but they're very kind of taught things that we teach. So, the programmable toys they'd be introduced to in Reception, and they tend to pick those up really quickly, and that's something that by the time we get to Year 2, that's just part of continuous provision.

So, if your topic was around position and direction, or we were doing coding for computing, then we just wouldn't need to teach them how to use the programmable toys, because they can already do it. So, that would be part of the continuous provision, with just questions for them to have a go, to use them, and then we'd be teaching branching databases, and using the very basic coding programmes on Purple Mash.

Q And how is LEGO used in the classroom, say with problem-solving?

A It's part of continuous provision. Sometimes we put set activities on the LEGO,

so when we have an art focus and we do things like go to Yorkshire Sculpture Park, we'll always think about recreating shapes, and structure, and height, with the LEGO models. When we were building the train station, we used the LEGO to build stairs and look at how you make stable structures, before we then moved on to making that with the modelling equipment.

Yes, generally just bits like that, it is something they go to and they're very keen on, but they tend to build the Death Star, and things like that, from Star Wars, unless they're guided.

Q So, you see the media influence.

A Oh yes, definitely, unless they're guided to make something. So, we just have it in as an early step in design and technology, or for art and design it's a representation of shape and structure, that tends to be how we use it the most.

Q Do you ever use anything motorised, or things that can be programmed to move, other than, I think you mentioned the Beebots, with the robots, things like that?

A Not really. We have done Christmas cards with flashing lights, and we tend to do electricity and make circuits, but in school we'd only have a couple of motors that we could have things that move.

But after Christmas we do have the STEM group coming in, and they're going to run an after-school club for the young engineers, and a few weeks of that is around programmable toys that you can then make move. And that's something that then we want to develop in school, and buy in, so that we can start planning it into our topic work a little bit better.

Q Oh, that's really interesting. So, thinking about how technology or media might develop holistic skills, thinking about the whole child, would you have any observations on how tech or media might assist with a child developing their physical skills?

A There's a lot of evidence, isn't there, that children that use iPads for some time have much better fine motor skills earlier on. There's quite a bit of research, I think, going into that at the moment, but I think you'd weigh it up, wouldn't you, with how much time they spend on it. So, I think it can probably be helpful for fine motor skills if it's done for a short amount of time, a few times a week, but as I said, I think if you just sat there all day and you're very still, on the iPad, then actually I think it can negatively impact your gross motor skills.

But it can help you develop an understanding of the world, and improve your subject knowledge, definitely. And I think that in some ways it's good that when the children ask a question at school, we can say, oh actually, we know how we're going to find the answer to that. And lots of them love the Horrible Histories programme, but then also the things that you find on the websites, and again through CBeebies, and the National Geographic Kids websites. So, I'd say generally the way we would use it, because the children are so young, is just to develop their general knowledge.

Q What about their emotional skills, can you think of examples for how it might be

used in the classroom to help children learn things about empathy or seeing different points of view, through games or animation, things like that?

A I was going to say only if we used specific animations. So, either short stories that we'd found on learning platforms, or sometimes we use film for English, and as part of the characters you'd be looking at the music that's played, or how the animation's been done, and how it makes the character feel. But yes, only in ways like that, really.

Q Okay. And finally, what about social skills, such as maybe imaginative play, or online communication, or digital storytelling, things like that, can you think of ways in which it might develop the social skills at all?

A I don't know, really. I suppose if they were typing up stories and using pictures that we'd done as a class, for some children it is a form of communication, so I suppose that develops their social skills. But other than that, I don't know really, I don't think I'd say it does massively, at this age.

Q And in your view, what is the role of technology or media, or media apps, or games, things like that, in school settings, in relation to creativity and learning? And would you make any changes, if you could, to the way that it's currently presented or used in schools?

A I think at Key Stage 1 it would just be making sure that children are aware what technology is, how to use it as safely as possible, and using it as a tool to gain more information and improve their own knowledge and understanding of the world. And for us, it would be just having a bit more technology available, so more Chromebooks, or more iPads, and just things like that, so that rather than only being able to do things in small groups, some things could be more freely available for everybody.

Q Okay. Now, just a few questions about Zander, and about Harvey, if that's okay? So, if we look at them both. To start with, how does Zander use digital tools or technology in the classroom? Do you notice anything in the way that he uses it, or in the way that he might play with the technology, or maybe things like LEGO, and things like that? Does anything stand out to you in the way that you observe him as a teacher.

A He uses LEGO a lot, and BRIO is the other thing that he tends to go to quite a lot. He uses them just to represent, to build things that he's seen, pictures, or things that he's heard about, so it's Zander that always builds the Death Star, that's what he likes to build. And he can spend quite a lot of time building something, and he likes to keep it, and then he likes to use the iPad to photograph it.

He doesn't particularly gravitate to the laptops. I think maybe he'd go on them if his friends were on them, but he wouldn't go on them all the time, he tends to be much more into building, so I'd say more creative. Harvey would spend all day on the laptop, if he could, just all day, playing games, and being quite competitive about things. And he likes the LEGO, and he likes the BRIO as well, but given the choice, he'd pick to play games on the laptop.

Q Right, okay. So, if Harvey's being creative, would he gravitate towards the physical rather than the...?

A Yes.

Q And does he tend to play on his own, or with a group?

A Harvey would lead play, he's very dominant, likes to be in charge, and he does like to work with others. He tends to be working on his own if he's fallen out with somebody, but in the group he doesn't take direction very well at all. So, he likes to be in a group, but he has to be in charge of that group and controlling what they're building, who's doing what, and he can quite often have disagreements with people.

It's interesting, if there are some children who stand up to him he just accepts what they've said, but other children he really then butts heads with and argues with them, they can have quite a loud falling out. But he wouldn't sit and build something on his own through choice, I would say, I don't think he ever does that, but if he was sulking.

I think if he'd fallen out with somebody, he'd gone off in a huff because it hadn't gone his way, but even then, I don't think I'd say, oh yes, he'll go and build on his own now. I think what he'd do is sulk for a little bit, and then try and get back into that group; I think he much prefers to work in a group.

Q And if you're using these digital devices, or apps, or things for creativity in class, how would Zander get involved in that kind of work? Is he quite a creative person with technology, does he like to work on his own, or does he like to work with a group?

A He likes to have people around him, I would say, but he's quite happy to be working on his own model. But while he's doing that, he'd need to talk to other people, and maybe they'd build a little bit of something that he'd put on his model, or he'd help them do something, but he would be okay to work on his own. On the laptop, I'm not sure he'd be as confident, and things like using the Chromebooks, I think he'd need support from either adults or peers just to get him going.

But then I think once he was going, he wouldn't really want them to interfere, he'd want to have a go on his own. But he's not as confident with computer technology than using other types of technology, I'd say he's much more into building than playing games on the laptops and things.

Q So, how do you think he draws on his experiences from home in his use of technology in school, can you divine anything or see anything from what he might be doing at home, what he might bring into school? This is Zander.

A I'd say just recreating stories, so he's really into Beast Quest, at the minute, and Star Wars. Although to be honest, his mum says that he's never watched Star Wars, but he really obsessively builds the Death Star with LEGO very often. So actually, I don't know where that's come from, if it's come from images, or friends talking about it, if he's just seen a picture somewhere. But he tends to

build vehicles, or animals, or things that he's seen, so it tends to be stories and films that he's either seen at home, or we've talked about at school, that he tries to then recreate.

But he wouldn't take something... Like, we're doing the Elves and the Shoemaker, and if he went to the LEGO, he wouldn't go and build a shoe shop, he'd go and build something from Star Wars, so it tends to be his own interest that he builds. Even if it's a school topic, he wouldn't naturally go off and continue working by himself and carrying on his own learning, it would just be more Star Wars, or Beast Quest.

Q Right. And what about Harvey, how do you think Harvey draws on his experiences from home in his play with technology or media content?

A He is quite similar in that he tends to build things that he's seen or done at home and try and recreate them, but he also can be quite eager to please.

So, if he wants to get recognition, then he would choose to build something like a shoe shop from the Elves and the Shoemaker, if he thought that that would please other people and that he'd get some recognition for that. So, I think he's quite careful about choosing what he'd like to build.

Q And what about when he's going on games, and things like that?

A He'd just go on things that he likes to go on, things like, Purple Mash, MyMaths, some of the online games that he can get on that he does at home, he tends to just play on those.

Q And so, when he's playing with or using technology, or media, or responding to it, do you ever play with Harvey? And if you do get involved in his play, or what activity he's doing, what kind of role do you take in the play, do you co-play, or co-work, or guide, or prompt?

A I think what we do is look at it. Games on the laptop, if they're just having free time, generally it would just be a conversation about what you're playing now, what might you need to do next, that kind of thing. And when it's with the LEGO, we tend to look at explaining what things are, and how they work, and how you got to that, and if you tried something else.

So, it generally is very verbal, it tends to just be to develop their thinking skills through discussion, in how we'd play along with them really, we don't play alongside them. It tends to be, yes, what skills we're developing, and developing almost their critical thinking, and about how they got to, and recognising problems that they've overcome to get to the point they're at, and how they can move it forward.

Q I see. Is there any sort of technology that works well for working with Zander, for example? Are there things that he seems naturally through experience to work well with, such as things like the robots, or making films, and things like that?

A I'd say it's more construction. So, the Beebots and things he really likes, LEGO, BRIO, so building structures and then putting things on would be what he prefers

to do. He likes to take photos of everything that he's made, but I don't think I'd say that he naturally really wants to go towards animations, and things like that. I think it's something that he'd do as a group, with an adult guiding, but it'd be much more the easier thing, programmable toys, and just using the iPad to take photographs, tends to be what he'd be really confident doing.

Q And what about Harvey, what's he particularly confident...?

A I think he's probably a bit more computer-savvy, and he's quite happy just to give everything a go. He's very confident just to have a go, and I think if we said we were doing animation, he'd just say, yes, that's fine, I'll do it, I can do that, I'll make that work, I'll figure it out. He's much better at trial and error, he's not bothered if he gets things wrong, he'll just try it again a different way. So, he's much more resilient in that way.

Q Okay. So, earlier on in the interview, and this is the last question that I'm going to ask really, but it's a sort of composite of questions, we looked at how play, using media things such as apps and websites, and also using digital devices, might help the whole child learn.

These questions are specifically about Harvey and Zander. So, I wondered whether you could think of any examples or observations of how these types of technologies, or games, or media, could help Harvey or Zander's physical, social, cognitive, creative, or emotional skills? If you could think of any observations related to either child really, it'd be interesting to know.

A I think Zander would probably benefit from doing a whole project, but in a very small group. So, things like making an animation, where you could watch some animations, and then make either little characters on lollipop sticks and different things, and make settings, and backgrounds. And then slowly build up, taking repeated photos, moving them on a bit, and taking the photos, and creating an animation with an end product. It's things that would boost his confidence, I think, and develop some of his own resilience, and his confidence.

Because he's very young in the Year, and I don't know, because he's quite switched on with learning, but he's not particularly confident at just having a go, he's not that resilient. I think if he could work with somebody in a small group, on quite a lengthy project, where they had an end result and he was achieving something, but working quite hard towards something that kept his concentration going, built his resilience, built his problem-solving, helped his concentration. I think that would really help.

And Harvey, to help his motor skills, he can be quite disorganised on a page, and I think anything that would help with that. So, Harvey sometimes types stories, the problem is they're still quite slow at typing at this age, but actually he organises his thoughts much better if he can see it on a page in front of him. His handwriting can be quite tricky to read, and his spelling's quite poor, so being able to work on a laptop really helps him.

And I think, just to support his emotional skills as well, probably in terms of maybe a project where you'd be looking at how other people were feeling, how



other people perceived us, using animation, short films, and video clips, and things like that. But for Harvey, I think that him developing things like touch-typing, and those kind of slightly more advanced laptop skills, in the long run, would really help, because he's very, very intelligent, but struggles to get things down on paper.

So, I think having a way of sharing and communicating his storytelling, and all his ideas, would be really helpful for him. So, probably recording stories, voice-recorders, being able to type them up, things like that would probably help.

Q Okay. All right, well, that's everything, so thank you ever so much for your time.

A That's all right.

Q And thank you so much for letting me come and observe the class, it's been brilliant.

A That's okay. Lovely. All right, well, let us know if you need anything else.

Q I'll let you go. Thanks, Shula. Bye.

A Thank you. Bye.