[00:00:00.170] - Speaker 1

That's us. That's the included team. We're absolutely delighted to be here today and contribute to this, in my view, very important event. But just a quick thing about LGfL. We're a charitable trust, not for profit. And we've got some core principles and aims that are really, really important to us. And they're here, you know, okay, saving schools for money. We are a procurement vehicle, let's say. We do lots of safeguard. Safeguarding work, keeping children safe. Really important that we tackle inequality in all forms. There's some really interesting stuff about people redefining what they think. Digital Divide is about energizing teaching and learning. Like to think that's my line of business and I'll be talking about that this afternoon. But also we place great importance on enhancing mental health and well being out in schools and the whole communities. So that was the team. That's our values. And what are the areas that we're working in? But who do we work with? Well, we've got a large community of schools. In fact, there are over 3000 schools on our service. And it is an utter privilege to work with the different schools in all sorts of different ways.

[00:01:14.870] - Speaker 1

And there's just a selection here. But I mean, here's some of the lead schools and institutions that we're working with at the moment. And the reason I would just want to flag this is because they feed into what we call our Edtech Hubs Program. And as a takeaway before I even got going, I want to offer this to you in terms of sorry, far too small here, but it's Edtechhubs LGfL Net. This is a program where we work with fantastic lead practitioners and inspirational senior leaders, of which, I have to say, we have some fantastic examples of that in the room this afternoon. Thank you as always, for your support. But the Edtech Hubs program comes out of a program that we did with the DfE on the Edtech Demonstrator program where we were helping schools in that very difficult period during remote learning. But here are some of the themes that we capture. Good practice across different schools in all sorts of different contexts, in all sorts of geographical reasons. Supporting inclusive practice. Should start there, shouldn't I, this afternoon? But look at some of these others. We look at the key role of SLT supporting school and vision, ed tech and assessment consolidating on the gains made during remote learning.

[00:02:35.760] - Speaker 1

Yeah, that's an area of work, isn't it? In many contexts. But there's the Edtech Hubs program and we do study tours where we invite anyone to come along that's interested into some of our lead schools. Had a fantastic one with the Leo Academy Trust, with a focus on maths and the role of technology across all those themes as well. The role of senior leadership and assessment and inclusion. Amazing study tour case studies, for example, with the Woodland Trust. We're going to see some of that this afternoon. And also we have live online events. You are all welcome. It is free. Come and be part of it. But it's really significant, this, because it also feeds into something else which we call pedtech. And I don't know if any of you are familiar with Dr. Aubrey Smith, but she's an absolute lead person in the country on really bringing to the fore the importance and the significance of placing pedagogy first, thinking about what

we're doing with our teaching and learning, and then the role of technology. And here is my first video for you this afternoon.

[00:03:51.360] - Speaker 2

The digital divide is no longer just about access to devices and connectivity. It's now also about the choices that we all make in our roles supporting teaching and learning. Either directly or indirectly. We all act as pedagogical gatekeepers through the decisions that we make in our everyday roles and activities. Now, the UN Convention on the Rights of a Child reminds us to think about the aspirations and the wishes, the views, opinions, ideas and thoughts of every child that we work with and to take tangible actions to make those into a reality. And the United Nations Sustainable Development Goal Four also reminds us about the role of quality education for all, making sure that education and learning experiences are accessible and are inclusive. And we can all do that with the support of technology. Technology gives us the solutions that are happening in classrooms around the world already and enable us to make learning more inclusive, more equitable, more accessible, more aspirational for every single child in every single classroom.

[00:04:59.250] - Speaker 1

And I felt that was quite an appropriate clip to start us off with. If you think of the keynotes that we've had this morning, the inspirational input that we've had from the students, for example, just on the session before, it's about the high expectations and helping each learner achieve their full potential. But hang on, Bob. This is supposed to be Universal Design for Learning, isn't it, this afternoon? That's what's on the title. Well, yes, absolutely. And so what I want to share with you now for the rest of the presentation is some of the experiences that we've had in this academic year where we've been working with some of our lead schools on this concept of universal Design for learning. But one of the findings that I had very, very early on, and it was with Daniel on the Woodland Trust, is that if I talked about Universal Design for Learning, not everyone in the room knew what I was talking about. If I talked about removing barriers to learning, suddenly everyone went, oh yeah, oh yeah, we do that. And then the conversation flowed from there. But we shouldn't forget the Universal Design for Learning title because actually it's an internationally recognized term.

[00:06:16.430] - Speaker 1

And if you're interested, and I reckon you are, because you're in the room this afternoon, this organization here we use as a foundation for our own understanding as part of the included service here. Cast, excellent website. All sorts of different activities going on there. Inspirational, but also practical, helpful. And I believe, John, that they are American based. Yeah. But if we just think about structuring our thoughts this afternoon and this is from the Cast website here, three different pillars of UDL engagement. How do we engage the learner in what we seek to teach them and what we hope they will learn? How do we represent the information? They're not quite the same thing. There's some overlap. They're not quite the same thing. And there's some important distinctions there. And the third one, which is particularly

interesting for me, is how do the learners respond? Or rather, as a practitioner. I mean, I'm a secondary school teacher. I taught in two London secondary schools. What do we accept? How about that as a word? Accept from learners in terms of them showing their learning? And the reason I wanted to show you the Fiona clip just beforehand is this idea of gatekeeping.

[00:07:47.100] - Speaker 1

We are all gatekeepers. The decisions that we make can offer opportunity to our learners and actually can close down opportunities as well. That's a really, really brief theoretical overview there. Should we go a bit more practical? Here we go. Now, quite like this resource may have something to do with the fact that I created it. I'd watched too many Sci-Fi films. The Martian iron man interstellar. Fantastic. But anyway, we came up with Space Adventures and we commissioned an author to write us an exciting Sci-Fi story, which is basically, in summary, astronaut goes to the moon to mine some rare minerals and the mission goes wrong. Okay. That's the kind of summary of it. Anyway. The reason I just want to flag it with you is that we spend a bit of time on this. So here's my Iron Man video inspired headshot. The whole story is done just on the video headshot here with nice graphics and what have you. Yeah. Got nice web design and what have you. But if we think about engagement, does it look all right as a resource for young people? I think it's looking okay there. And representation of information.

[00:09:06.110] - Speaker 1

Okay, let's just dig into that a little bit here. So, on the engagement side of life, we've got a video talking head, we've got an audio book as well. And did you spot on that side, we've got virtual reality. Yeah. Quite engaging. That, I would hope. In fact, I know because I've talked to the schools that have used this representation, though interesting, we thought quite hard about this and thought, yes, we've got a story and it's very rich. The author, award winning author Kath Howe that wrote this for us and got all sorts of linguistic techniques to make engage the reader. But we put easy reader versions in as well. We've got subtitling here. And then we've also got symbolized representation of the story. Yeah, nice and universal design for learning principles that we've injected into all of this. Just as an aside, I took the main story, a chapter, and I chucked it into Google Bard. Has anyone had a go on that recently? Whenever I've tried Chat GBT, it says that our servers are busy. Google Bard's. Fine. It's always happy to help out. So I pasted a chapter in and I said, Give me an easy reader version.

[00:10:27.570] - Speaker 1

Oh, my life. 10 seconds later, I got an easy read version of the story, which, if I remember, John, took us a bit of time to craft the easy read versions previously. And we talk about workload management. Well, action and expression. Just moving on now, away from Space Adventures, this idea of what do we accept from our learners? That word accept, I'm not sure about my use of it there. What do we encourage our learners to say? Is it about saying or do in response to the work that we set? All this language, it's interesting, isn't it, the dynamic behind it? Would you accept on certain pieces of work if they handed in some audio? I've got some nods in the room. I reckon you would, because you're interested in UDL and

you're in the room this afternoon, but think of the teachers in the room next to you, in the school next to you. Speech to text conversion, speech to animation. Would you accept an animation from a learner to showcase what they've been learning? Would you be happy for them to create for you as a teacher and an immersive experience for you to demonstrate their own?

[00:11:48.120] - Speaker 1

Oh, don't be ridiculous, Bob. How can you do that kind of thing? You can't expect learners to do that. Oh, yeah, sit tight on that one. And multimedia publications. We've just seen that, have we not, in the previous seminar? So let's have a look at immersion, shall we? What's our first one? I think it's going to be someone talking to us. Or is it a video? This is St Giles School in Croydon. Special School, although that particular context isn't particularly relevant. Although you can see there's a bit of technology in the corridor there. Are you looking closely as to what's going on in that corridor? How about that as a literacy stimulus? The polar bear. That's right there. By the way, if this was video, the polar bear is animated and it's kind of slightly moving on the spot. So you come round the corner, looking through your window here and you got a polar bear in the corridor. That's quite interesting, isn't it? Is that engaging representation of information? Okay, how about this one? This is Anson Primary School in Brent. Simon Pyle did this. He's now the head teacher of the school. Augmented reality.

[00:13:07.170] - Speaker 1

You may be familiar with augmented reality, but what we've been exploring on our pilot is not just the technology, but the application of it and thinking carefully about how does it really make a difference? Yes, we can get engagement, but does it help us deliver the concepts? Does it help us progress with the learners? Say you're studying ratio in maths, okay. Do you normally think, oh, I know, I'll just put a giraffe in the school hall and we'll teach ratio that way? Don't be ridiculous. How are we going to get that fitted? Where we're going to get it from, how we're going to manage? Technology can help us. And look at that, it's just a screenshot there. Look at him, he's engaged. Amazing, though. And actually when we saw this, we thought, God, that's clever, isn't it? But it's not complicated, it's just imaginative. How do we engage, how do we represent? And how do we let the learners express their understanding? Now, get ready. This is Poppy in year one on the audio. She does squeal a little bit and I don't want to spoil it for you, but just watch the virtual flower pick, okay?

[00:14:25.460] - Speaker 1

She has got Red Riding Hood built in augmented reality and see which parts of that narrative you can spot a short clip.

[00:14:35.770] - Speaker 2

I'm on the way to my grandma's house and I see some lovely flowers. I'm going to pick.

[00:14:56.970] - Speaker 1

Up.

[00:15:01.550] - Speaker 2

lt.

[00:15:02.340] - Speaker 1

And who's in that room? It's supposed to be in that room. That isn't, is it? The grandmother? Yeah, sorry, that wasn't built that bit, but did you see the big bad wolf? Okay, it was a I know it was a blue donkey, but that's an interesting concept that one, in terms of okay, representation, but this is action and expression. So this is another school not too far from here, actually, in Black Heath, if I recall, and I turned up and Year six had been studying Ancient is it Benin or Benin? Don't know, but anyway, I haven't been. Have you? No. It's a little bit tricky that, isn't it? Places that don't exist anymore, where there's no photographic or video anything, and yet you've got to teach it. Yeah, I do believe it's on the national curriculum. Well, just get the learners to build it then. Yeah, that'd be ridiculous. They're Year Six, they can't do that kind of thing. Must be joking. I was literally not dragged. But the Year six boy that built his Ancient Benin was desperate for me to go into the playground. And here it is, the council flats behind school playground.

[00:16:19.100] - Speaker 1

What's this container? I don't know what that's about, but this is his Ancient Benin. And I've taken the audio off because it was quite difficult with the wind. But what the point of this is he was talking to me whilst we were looking at all of that, about his understanding of Ancient Benin, and he was talking about trade, for example, that was represented. The blue donkeys made another appearance because that's what was available in the platform. And that's quite interesting about how we represent information. And for example, on this particular platform, which is Sandbox from Discovery Education, by the way, that's free to use. It only works on an iPad. But an amazing platform. But learners can build their own immersive environments to showcase their understanding. Now, this is another really, really quick video here. This is on a school field in North Essex. And I went and spent a tiny bit of time, and I mean, literally, I had a group of five year sixes for half an hour. I taught them how to use that platform to link in with their World War II topic. And they'd been building their own Anderson shelters.

[00:17:33.200] - Speaker 1

You know, that classic cardboard homework with brilliant what they'd done. But I said, Why don't we have a go doing in an immersive platform? And I don't think that looks too bad as a photograph. Is it a photograph, though? No, it's full size. Real immersive augmented reality. I know there's cement there. They're supposed to be sandbags. Do you think the children worried about that?

[00:17:58.470] - Speaker 3

[00:17:59.350] - Speaker 1

And again, I've taken the sound off because the wind was quite bad, but I kind of likes the fact that the audio was difficult because we were out outside on the field. But it's quite amazing. That really action and expression. Is it food for thought about what we expect from learners. They're building their own three dimensional immersive environments to showcase their understanding and think about the engagement level and issues surrounding representation of understanding. Who can we learn from? Well, I learn from the community that we are blessed to have at LGfL. I learn every single day. And on this next clip, I'm going to go to a headteacher who I really, really admire for what goes on in his school. It's Neil Oldham from High Furlong in Blackpool. Amazing school. But there's an interesting thing for us on the included team about who do we learn from? Do we look to specialists in send schools only to talk about inclusion? Or do we look to mainstream or vice versa? Or does it matter? No, not really. It's about the caliber of the insights, the leadership and the exemplification. Let's hear from Neil on this.

[00:19:22.640] - Speaker 4

A lot of people think, oh, as a special school, what you do is really unique or it's really limited into your type of setting, but actually it's quite the opposite. Technology works for a wide range of learners. And through our supportive network. Over the last two years, we've really been able to help lots and lots of mainstream colleagues gain a better understanding of the profile of need of their children, really use what they've already got. To unlock the learning and create greater independence for their children just by showcasing them some of the accessibility and immersive features of the programs that they already use. And they can then see that actually the specialism in our setting is totally transferable back into mainstream and makes a huge difference in unlocking that curriculum and finding the true potential of those children.

[00:20:17.090] - Speaker 1

So, just moving on, I mean, that first question here. I would hope there's not a major debate about that this afternoon. I think we've seen some pretty exceptional examples in presentations today, and you only have to have a wander around to see some really inspirational products. But the second one, I think, is a more challenging question there. And the findings that we had from the Otech Demonstrator program was that in most cases, the lead schools, during that really difficult time of remote learning, the lead schools found that the biggest advice they could give was to help schools make the most of what they already had. And we talk about digisafe divide and deficit budgets and the challenges surrounding all of that. Are we really making use of what we have? And I'm sure some of you may have gone to the Aaron Smith presentation this morning, so apologies if there's a bit of overlap. I just want to bring in Aaron here. PowerPoint. I'm using PowerPoint, and at this precise moment, I've realized I didn't switch subtitling on the start of this. That is a annoying, b embarrassing, doesn't really model what I'm talking about.

[00:21:27.420] - Speaker 1

And it actually says in my notes, don't start without putting the subtitles on. Not good. Forgive me. Let's hear from Aaron.

[00:21:35.830] - Speaker 5

In your classroom, you've got many students that may have English as additional language. How can we support them? Well, we can use a feature called PowerPoint Live. Let's go to PowerPoint in the Web by going to Office.com on your web browser. Open up PowerPoint. As you can see, I've opened up a PowerPoint I've already made. If we go now to the Slideshow tab and click on Present Live, this gives us two options. We can either select this to anyone or to people in our organization. I'm going to do anyone. This will then open up a QR code, which anyone can scan. You can also have a web link as well that you can share with people. And this enables them to see live captions personally. As you can see, they are coming up and appearing. What you can also do now is change either the language. You can also send a reaction, like an emoji to your presenter. And at the end of the session, it will give you feedback on how well you've either presented or how well the presenter has presented. Depend on which view you're in. One of the features you can see there in the bottom right hand corner is of course, the language translation.

[00:22:42.950] - Speaker 5

You can pick from over 70 languages that will translate here. So this is really useful for those students with EAL and of course, Neurodiversity, because what you're able to do is you'll be able to speak in English and then it translates to that individual's language, therefore having engagement within the lesson.

[00:22:59.690] - Speaker 1

Did you know that? It's amazing, isn't it? But do any of you have or use PowerPoint. Yeah. So there's a really important point there and just one example of it. A couple of observations I've had in schools is I was at Ribblesdale, north of Preston last year, and they had two Ukrainian students that had come into the Year Ten class. And I went in and I was filming and they pointed them out to me because they had to point them out to me, who were the Ukrainian students, because they were just completely getting on with their work along with the rest of the class. But the teacher had their phone on for the microphone and it was all one to one and they were just having Ukrainian translations straight in. Straight in, accessing the curriculum. In contrast, in contrast, I went to another school, I won't name the school. And I suggested to a teacher, have you thought about subtitling? And I got a really fast reaction back, which was, I'm not sure about that. I don't want to overload them cognitively whilst I'm talking. And I thought, Right, leave it, Bob, don't get into it with that teacher.

[00:24:10.420] - Speaker 1

But what was quite interesting about that is I should actually have said in a one to one environment, you can personalize it, as Aaron has explained there, with a QR code, they can bring in subtitling if they want in their own language. And I think that's quite inclusive. This is a key slide this afternoon, as far as I'm concerned. What barriers do we raise or lower every day when we're teaching? Sometimes consciously, a lot of the times unconsciously. So when you create a task, are you raising barriers or lowering them just by the task that you're setting? How do you communicate a task? Are you making it easy to understand how it's all that UDL aspect of engagement and representation. How do you help the learner to understand the assessment criteria? What techniques are you using and what difference does that make? Choice in the format of how the learner can express themselves. There's all the action and expression bit. And what technology are you making available or not? You might not have it. If you have it, are you allowing it? And you've got different technologies here, and I reckon on a sliding scale, bit of a prediction here.

[00:25:42.070] - Speaker 1

Probably will be quite comfortable with. Oh, switch. Yeah, that's fine. To use this piece of technology. Garage Band, do you know how to use it? Garage Band? Probably a bit mixed in the room on that, but fantastic tool. There's a whole issue about do you need to understand how to use something to allow your learners to use it or not? Let's not get into that now. But how about Snapchat? My AI? Have you seen that on Snapchat? Which I believe the younger generation are quite used to using. They're already looking there and they've put AI to help you with your homework. Do we like that? Are we feeling comfortable about that the way I tend to meet the needs of my learners is by giving them as many options as I can. Because with universal design for learning, you want to take away all those restrictive barriers that become a block for them and prevent them from the learning in general.

[00:26:38.120] - Speaker 2

What's really important is when you set the task is that you know what the endpoint is. You need to be able to clearly explain that to the children so that their freedom in how they get there. They still have that choice, but they know exactly what is expected of them.

[00:26:56.210] - Speaker 3

The choices that I give the children have changed and grown over our use of digital because I want to embed those skills that they're choosing. At the start of the year and at the start of using this, we would select different tools for them to access and guide them and teach them how to use those individual ones. But as the year has gone on, the children have picked those skills up quite quickly. So now we're at a point we don't guide them towards those different tools that they can access. They're given an activity and they can select from the different functions which they prefer. Some prefer to use a text box for dictation and speaking to the iPad. Some use a text box to type because that's what they prefer to do. Some choose a simple drawing tool to annotate. Some choose to record their voice. That's a very popular one, is to record their voice, which is great, which shows this use of digisafe. It's enabled the children to grow

in confidence. They want to hear their voice back, which is actually, as adults who have not gone through this, quite a scary thing that we don't like to do, we don't like to hear our voices, but the children love to do it and it really helps them succeed because they're hearing their own individual self.

[00:28:27.620] - Speaker 1

The posts that are made in this video are from this screenshot which I took in Daniel's school, Pearswood Primary. And I came in and it was a lesson, it was a summary lesson, end of topic to showcase learning. And it was, I know what a balanced diet is, but it was up to the learner to convey that in a format that they wanted to in year four. Look at that. Look at that high expectation if you're involved in multimedia work, you know, as soon as you start talking about podcasts or films, you go, oh, hang on, what's the script? And now you're into literacy and et cetera. So I really enjoyed that. But this one was in the same classroom at the time, couldn't work out what this boy was doing. And then I realized he was using Siri. But it says K-A-B-A. It's like, what are you doing? Because eventually I saw that his partner next to him leaned over and just typed the word carbohydrate, which he couldn't spell. So he thought, and I like his problem solving, he thought I'll speak it into my iPad and it will give me the spelling.

[00:29:49.650] - Speaker 1

Nice. Unfortunately, it didn't help because it was coming back with K-A-B-A. Wasn't that's not close enough, is it, to spell carbohydrate? But it's interesting because technology is not always the right answer. It just depends, doesn't it? And just as a bit of a plea this afternoon, I never ever see quality use of technology without a quality relationship between the teacher and the learner. Technology can't really do that, can it? Maybe in different ways. But these teachers, this is pairswood primary again, these teachers, they're absolutely part of the learning experience with the children. This haven't got time to go into, but this is learning by questions. Look at these teachers, they are likes hawks walking around the classroom monitoring exactly what's going on in real time, real time interventions. That is pretty significant when we talk about accelerating the pace of learning. And this here, how about that for a piece of tech? Yeah? Are you concentrating on the football more than the one to one laptops? Everywhere, learning by questions. It's the blend of different approaches, which is the whole Pedtech aspect driven by high quality Pedagogy. I got a bit of cold feet earlier in the week about this presentation thinking I really should be talking about Al throughout.

[00:31:20.850] - Speaker 1

Unfortunately, I'm just simply not qualified to do that. But I reckon we all need to get our heads around it and fast. And I would love to be invited back to do a presentation about AI in relation to UDL because I think it's a really interesting area, but maybe I would say that. So if you don't mind, or rather Carol, if you don't mind, I'd like to end my presentation with a video clip of someone that's already sat on the front row, which is a bit weird. Sorry everyone, but I love this clip from you, Carol. And for me, there's some incredibly important core principles contained within.

[00:31:58.450] - Speaker 6

So to me, universal design for learning is the thing that we're not it's kind of an unsaid nobody disagrees with it when you explain it, but they're not doing it. We go into classroom after classroom. You see in classroom a child is allowed to use a Chromebook and use accessibility features classroom B and you ask me, says, oh, so doesn't like it, or this doesn't like and that's hard. Universal design for learning. We don't take wheelchairs off a child when they move from one lesson to another. We shouldn't take the tech away. It needs to be everywhere.

[00:32:33.230] - Speaker 1

We're gatekeepers, aren't we? The decisions that we make ultimately probably influence the progress of a child more than anything. And that's us. That's within our power. So, in summary, we're all send teachers, aren't we? 2015 code of practice. Seriously, we're all send teachers. We all have a. Positive role to play. Of course, technology plays a massive role in effective, inclusive practice with the right pedagogy connect with your learners present so they can understand and give opportunities. Does that resonate? Seems okay, doesn't it?

[00:33:12.110] - Speaker 1

But it's not quite so straightforward to put into practice, sometimes for all sorts of reasons that we well know. If you found this interesting and you want to hear myself, John, Carol and Belinda talking to absolute inclusion experts in their field, we're running a new brand new podcast channel here with a very, very interesting people. We've got first episode is with Fiona Aubrey Smith. Then we've got Dr. Sarah Mosley, got Caroline Wright from Beezer Dame, professor Alison Peacock. And then we interview practitioners. If you think you'd like to be involved in that, if you'd likes to be included in an episode, just let us know. And with the included services open available to you all, whether you're in an LGfL school or not.

[00:33:59.020] - Speaker 1

I hope you found that interesting and useful this afternoon and I'd love to come back next year and talk about the role of AI and UDL.

[00:34:07.530] - Speaker 1

Thanks everyone.