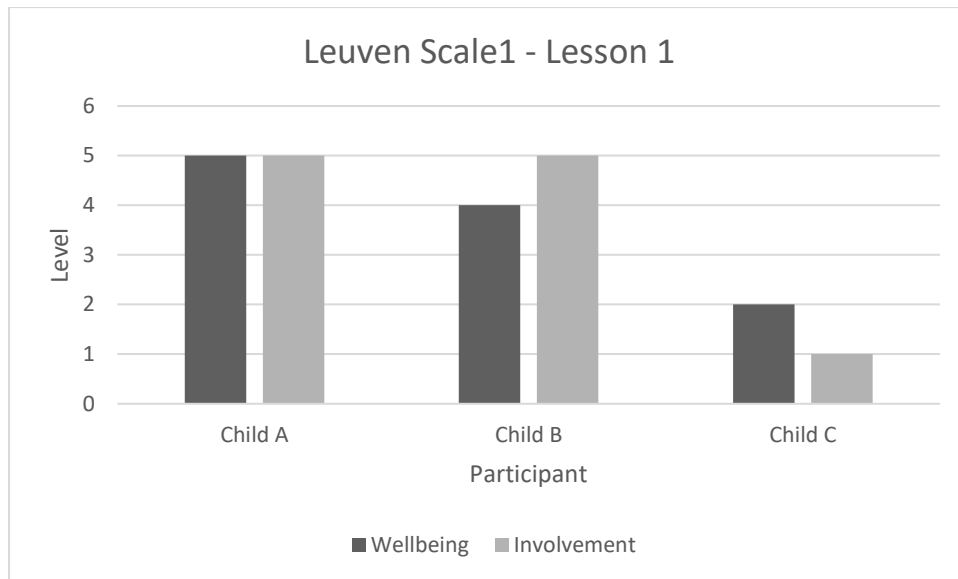


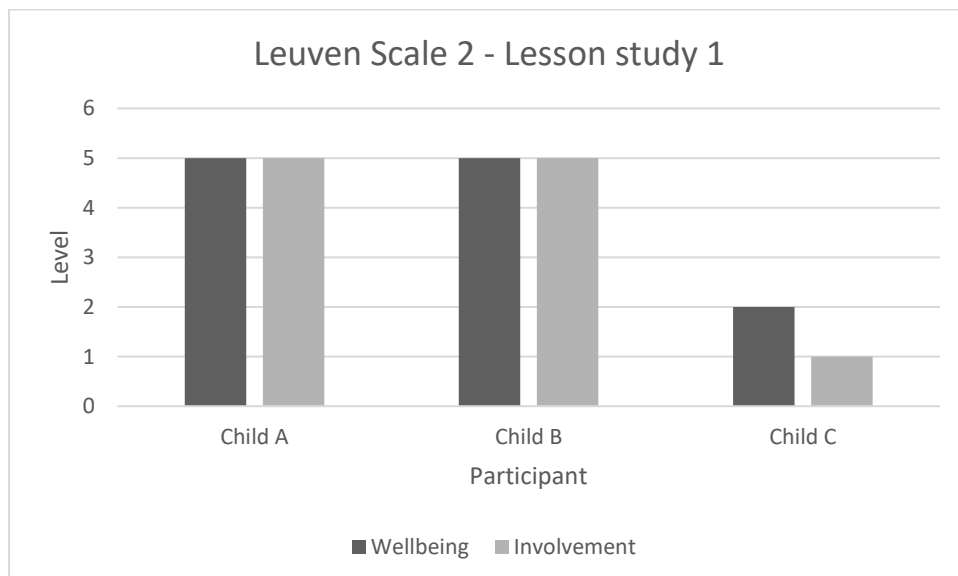
Appendix 1

Leuven Scale 1 - Lesson Study 1 - Results



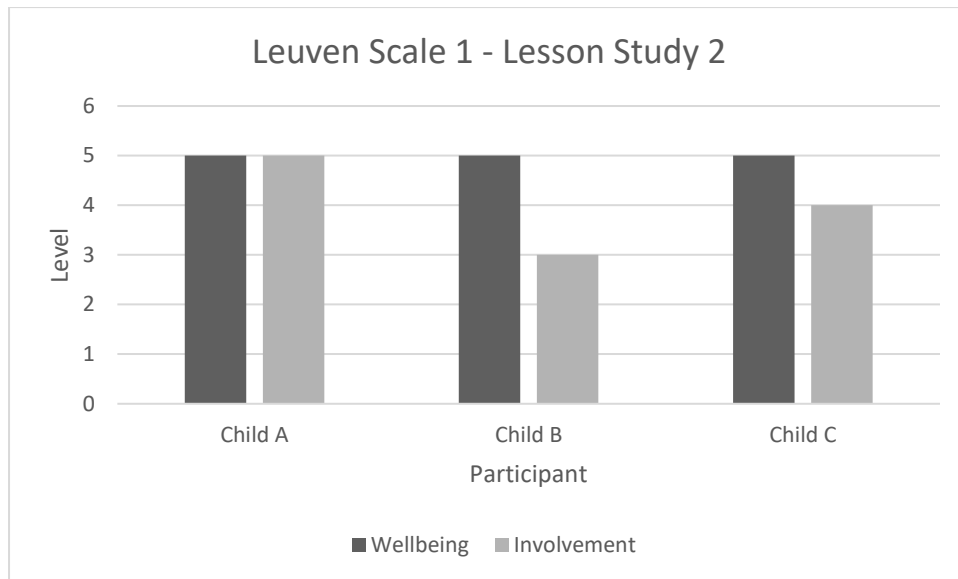
Appendix 2

Leuven Scale 2 – Lesson Study 1



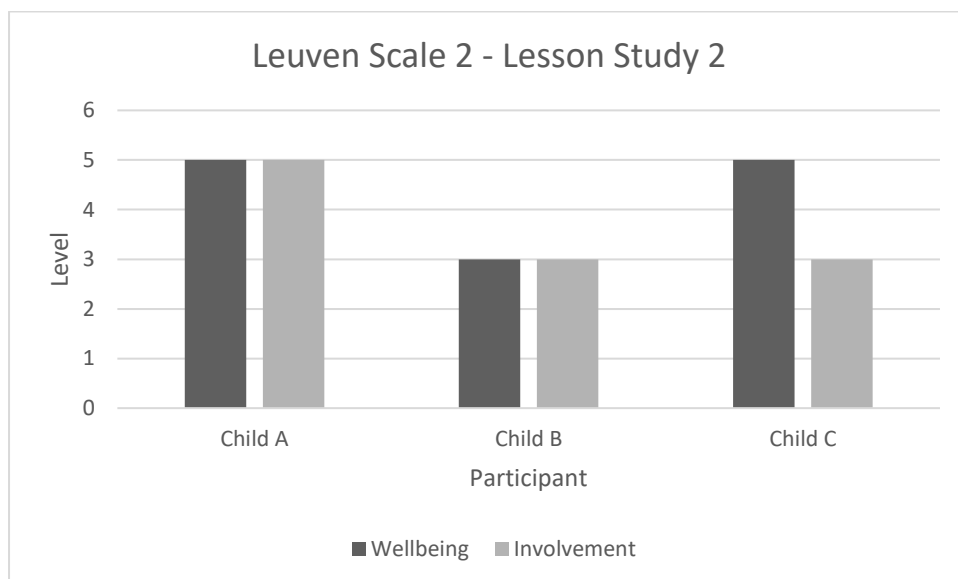
Appendix 3

Leuven Scale 1 - Lesson Study 2



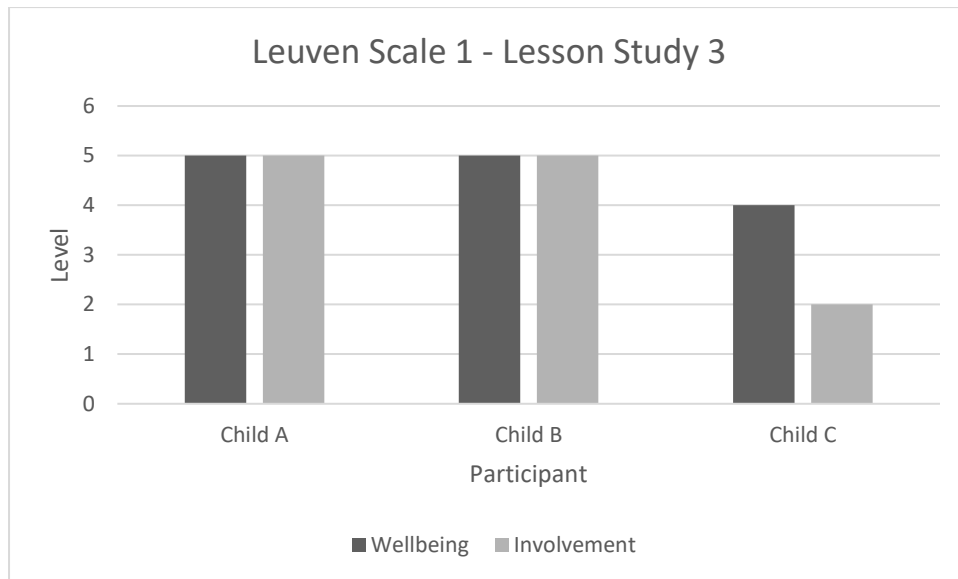
Appendix 4

Leuven Scale 2 – Lesson Study 2



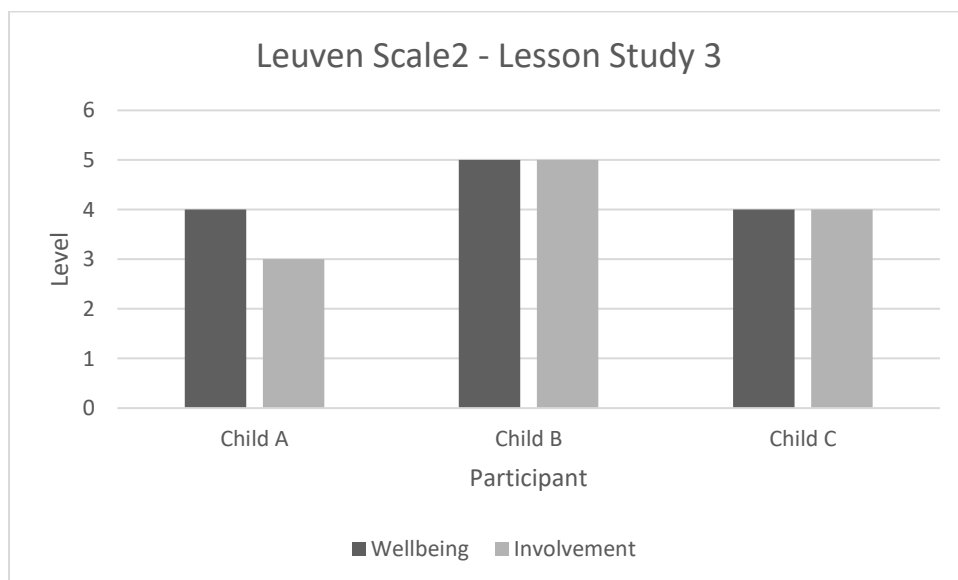
Appendix 5

Leuven Scale 1 - Lesson Study 3



Appendix 6

Leuven Scale 2 – Lesson Study 3



Appendix 7 – ARC Sheet for Lesson Study 1

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Yr Athrofa
Addysg a'r Dyniaethau
Education and Humanities

**Model Beirniad Wedi Adfyfyrio (BWA)
Assisted Reflective Conclusions (ARC) Model**

Dyddiad/Date: 03/02/2020

Digwyddiad critigol (Ffocws)/Critical incident (focus): Lesson Study 1

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	I thought this lesson study was a good method of testing out the lollipop stick strategy of assessment for learning. The children seemed a little excited when a new stick was drawn out of the pot.
Cofio a Deall/ Remember and Understand "Allwch chi restru elfennau'r achos yng nghyd-destun y dysgu?" "Can you list the aspects of the incident in the context of learning?"	At first the children were excited when a new stick was about to be chosen as they were sitting up straight, fully engaged. Some children disengaged when their name was not chosen to answer a question.
Gwerthuso a dadansoddi/ Evaluate and analyse "Beth y gellid ei gadw yr un fath i sicrhau addysgu a dysgu effeithiol yn y dyfodol?" "What could be kept the same to ensure effective teaching and learning in the future?"	The children did not notice that each stick was being put back into the pot, meaning that they could be picked another time. Although some children were displaying signs of increased engagement i.e. sitting up straight, eyes on the teacher. When their name was not chosen they would then disengage.
Casgliadau a chymau gweithredu/ Conclusions and actions "Beth yw eich atebion posibl i'r mater a nodwyd?" "Beth y gellid ei wneud nesaf?" "What are your possible solutions to the issue identified?" "What could be done next?"	In conclusion, I think that using the lollipop sticks to ask questions is effective, however putting the names back into the pot after each question meant that some children got chosen more than once, where others had not been asked at all. This was not fair on the rest of the class. Next time I would leave the chosen names out of the pot.

Y profiad newydd / Transformed experience

Appendix 8 – ARC sheet for Lesson Study 2

Model Beirniad Wedi Adfyfyrio (BWA)
Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 03/02/2020
Digwyddiad critigol (Ffocws)/Critical incident (focus): Lesson Study 2

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	I thought that this lesson study went well with the children responding well to the questions. It was a useful method to recap on previous knowledge.
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	At first the children were excited when they saw the pot of lollipop sticks, however as the lesson progressed, the children who had already had been asked a question began to disengage, although as they did not notice that I was leaving the sticks out of the pot, some children were still engaged waiting for their name to be chosen again.
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	Using the lollipop sticks to ask questions when recapping on knowledge is a good way of gauging their understanding. However I was at a disadvantage as I did not know the class well, I had asked a question to a child that was absent on the day of the previous lesson so they were unsure of how to answer.
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materiau siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	In conclusion I think that the lollipop sticks are a good method of assessment for learning, however the strategy needs to be implemented efficiently in order to have an impact on wellbeing and engagement.
Y profiad newydd / Transformed experience	

Appendix 9 – ARC sheet for Lesson study 3

Model Beirniad Wedi Adfyfyrio (BWA)
Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 03/02/2020
Digwyddiad critigol (Ffocws)/Critical incident (focus): lesson study 3.

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	I think that this lesson study was the most beneficial with the testing of the lollipop sticks as we saw an increase of engagement as the children were waiting to be asked a question.
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	Again as this lesson was primarily to recap on previous knowledge, it was a useful method of drawing information out of the children. This time children were prepared to answer a question. The whole class were much more engaged than they had been in the other lesson studies.
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	For this method of using the lollipop sticks I would like to keep using it by leaving the sticks out after asking a question. However, I would not become reliant on this way, I would introduce other elements of assessment for learning to keep children from becoming complacent.
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materiau siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	In conclusion, I think that overall the lesson studies did show us that there was an increase in engagement in the class when using the lollipop sticks to ask questions. However, it would be useful to introduce other elements of assessment for learning to gain a better picture of its effectiveness.
Y profiad newydd / Transformed experience	

Appendix 10

Leuven Scale 1 – Lesson Study 1

Lesson 1 - SR

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 11.40

What is being observed?
Numeracy - Multiplication and division

What is the child doing?
Responding to questions from lollipop sticks

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A	1 2 3 4 5	1 2 3 4 5
Child B	1 2 3 4 5	1 2 3 4 5
Child C	1 2 3 4 5	1 2 3 4 5

Comment
Child C - 'I really don't like being chosen here!' - SR - 'I'm going to pick another stick' - 'It can't be me again!' - all children sat up straight in response.

Key

1	Extremely low	2	Low	3	Moderate	4	High	5	Extremely High
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Appendix 11

Leuven Scale 2 Lesson Study 1

Lesson 1 - SR

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 11.40

What is being observed?
Numeracy - Multiplication and division

What is the child doing?
Responding to questions from lolipop sticks

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A	1 2 3 4 5	1 2 3 4 5
Child B	1 2 3 4 5	1 2 3 4 5
Child C	1 2 3 4 5	1 2 3 4 5

Comment
Child C - 'I really don't like being chosen here', 'it can't be me again'.
Other pupils disengaged when the same person was being picked.

Key

1	2	3	4	5
Extremely low	Low	Moderate	High	Extremely High

Appendix 12

Leuven Scale 1 – Lesson Study 2

Lesson 2 - SL

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 1.20 pm

What is being observed?
Religious Education - Shabbat

What is the child doing?
Answering questions from previous and new knowledge

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A		
Child B		
Child C		

Comment

Key

Appendix 13

Leuven Scale 2 – Lesson Study 2

Lesson 2 - SL

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 1.20 pm

What is being observed?
Shabbat, RF

What is the child doing?
Answering questions - Previous and new knowledge

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A	1 2 3 4 5	1 2 3 4 5
Child B	1 2 3 4 5	1 2 3 4 5
Child C	1 2 3 4 5	1 2 3 4 5

Comment

Key

1 Extremely low 2 Low 3 Moderate 4 High 5 Extremely High

Appendix 14

Leuven Scale 1 – Lesson Study 3

Lesson 3 - Aw

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 2.40pm

What is being observed?

Volcanoes lesson

What is the child doing?

Answering questions on previous knowledge

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A	1 2 3 4 5	1 2 3 4 5
Child B	1 2 3 4 5	1 2 3 4 5
Child C	1 2 3 4 5	1 2 3 4 5

Comment

Child 'Now this is getting ridiculous, I've been asked every lesson'.

Key

1 Extremely low 2 Low 3 Moderate 4 High 5 Extremely High

Appendix 15

Leuven Scale 1 – Lesson Study 3

Lesson 3 - Aw

Two minute Leuven Scale Observation

Date: 03/02/2020 Time: 2.40

What is being observed?
Recapping on Volcanoes

What is the child doing?
Answering questions when name is chosen from lollipop sticks.

Child being observed	Wellbeing (circle appropriate level)	Involvement (circle appropriate level)
Child A	1 2 3 4 5	1 2 3 4 5
Child B	1 2 3 4 5	1 2 3 4 5
Child C	1 2 3 4 5	1 2 3 4 5

Comment
Other child in class "Other children are getting bored because they aren't getting picked."

Key

1	Extremely low	2	Low	3	Moderate	4	High	5	Extremely High
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Appendix 16

Transcript interview 1

Child A

AW- What did you enjoy in your lesson today?

Child A – The bubble method

AW – What did you use the bubble method for

Child A – To times big numbers

AW – Was there anything you didn't like about the lesson?

Child A – The pot thing, picking the same people all the time

AW – Anything else you didn't like?

Child A - No.

AW – How does your teacher normally ask questions and how to you normally answer?

Child A – Just says it,

AW – does he say your name or something else?

Child A – Don't know

AW- Once your name was picked out of the pot, we put the stick back in, meaning that you got chose more than once, how did that make you feel?

Child A – Happy

AW – you were happy that you got picked out?

Child A – Yeah.

AW – Do you think it's fair that you got picked out lots of times?

Child A – Yeah, I don't mind

Child B

SL – What did you enjoy about that lesson?

Child B – Well, it's hard to explain, I really like maths, but some people might say they don't like it by I really like it.

AW – So you enjoy maths?

Child B– Yes, I enjoy it.

SL – Was there anything that you didn't like about the lesson?

Child B – No

SL – How does your teacher normally ask questions in your class and how to you answer them?

Child B – Well, That's a tricky one

SL – Do you remember what MR C does in class?

Child B – Mr C would put it in a way that makes it easier. Like where would you put this punctuation in this sentence, or maybe could you put this picture into a sentence.

SL – Did you notice that Miss Richards used something different to ask lots of questions?

Child B – No not really.

SL – What was she using? Did you notice she was using a pot with lollipop sticks in?

Child B – Oh yeah, to make decisions of people instead of them not joining in

SL – How did it make you feel when you picked out of the lollipop sticks?

Child B – Well I was picked a few times and I was pretty happy because I like answering questions.

SL – Do you think it was fair that you were picked lots of times?

Child B– If you were asking somebody else, I think they would say no, but I'd say it's quite fair because it's out of the pot so nobody actually what is going on.

Child C

AW- What did you enjoy about that lesson?

Child C– This is pretty much harder to answer because I was doing my book, but the questions were getting harder so basically I got harder questions when my stick was pulled out.

AW – Was there anything that you didn't like about the lesson?

Child C – That they kept choosing me three times. I just want to get on with my work

AW – Is there anything else that you didn't like?

Child C– Nothing else.

AW – How does your teacher normally ask questions?

Child C – Pretty simple, well I don't usually need to answer but since I'm on to my other book I don't need to answer them all, I just get on with my book

AW – What about in other lessons? How does Mr C ask you questions in other lessons?

Child C– Pretty simple, I just struggle to answer them. It's so hard for me.

AW – You said you've noticed that we use lollipop sticks in the lesson today, so when we picked your name out of the pot, we put your stick back in which meant you got chosen lots of times

Child C - Yeah

AW – How did this make you feel?

Child C– A little angry because I just want to get on with my work. I just don't want to keep answering different questions.

AW – Do you think it's fair that you got picked out lots of times?

Child C– It is fair, some other people had to do what I had to deal with. Shall I tell you the most frustrating bit, I thought it was stopped and when I started thinking that, it started choosing me again. Like how did this even happen? why am I getting chosen three times like everyone else? Not everyone but how is this possible?

AW – So you do think it's fair?

Child C– Yes. it's pretty fair.

Transcript of interview 2

Child A

SR – What did you enjoy about that lesson?

Child A- I enjoyed well recapping on the Jewish holiday Shabbat and how it started

SR – Was there anything you didn't like about the lesson?

Child A – No not really

SR- You enjoyed it all.

Child A – I enjoy lessons at school

SR – Do you like the lollipop sticks being used in the lesson?

Child A – *child nodded*

SR – Yes? Why?

Child A – Well it's because its fair because if you aren't joining, with the lollipop sticks you have to join in because all of your names are in there.

SR – How do you feel that your name could be picked at any time?

Child A – A little excited because I don't know whether I am going to be asked a question

SR – Does it make you listen more in lessons then? Because you could be picked at any time?

Child A – Yeah.

SR – In my lesson, I put the sticks back in but in Miss L's lesson when she chose a name, she left the stick out so you wouldn't get asked a question again, do you think that is fair?

Child A – Yes, that's fair

SR – Why?

Child A – Well because then you don't have to go again but, in your lesson, me Child B and C kept going over and over again.

SR – So this way is fair?

Child A – Yes.

Child B

AW – What did you enjoy about the lesson?

Child B – I enjoyed writing I guess

AW – Was there anything you didn't like about the lesson?

Child B – People not telling what it was or giving me the cards

AW – Anything else you didn't like?

Child B – Yes, my whole group

AW – Do you like the lollipop sticks being used in lessons?

Child B – Yeah

AW – Why?

Child B – Because they are funny

AW – How do you feel knowing that your name can be picked at any time?

Child B – Nervous

AW – Any other feelings?

Child B - *shakes head *

AW – No, okay. So, in Miss Rs lesson, they were getting put back into the pot. This time when Miss L picked them out of the pot, she left them on the side so you couldn't be picked again. Is this fair?

Child B – I didn't know that was happening, no it's not fair because I want to have another go.

AW – Okay, What about other people? Should they have another chance to have another turn?

Child B – Yeah.

SR – What if your name was put back into the pot all of the time, you might get picked all the time

Child B – Maybe

AW – Do you not mind being asked lots of questions?

Child B – No

AW – Does it make you listen more in lessons, knowing that you could be picked?

Child B – Yes.

Child C

AW – What did you enjoy about the lesson today?

Child C – We learnt about the actual day of Shabbat, but we didn't know the actual order of what God actually did to make this world. So, it was nice to actually see the order of how it actually went like.

AW – Was there anything you didn't like about the lesson?

Child C – The amount of writing, she tried to make me do. But failed, mission failed.

SR – Did you like the lollipop sticks being used in the lesson?

Child C – Yes because it didn't choose me, I got to say the easiest thing which no one said for some reason. It's one of the simplest things to remember.

SR – How do you feel knowing that your name can be chosen at any time?

Child C – A little nervous, at least I didn't have to do anything with Maths. Because I'm quite worried with Maths I struggle with it all. Out of all lessons, Maths is the hardest for me anyways.

SR – Does it make you feel any other feelings?

Child C – Not much, just is it going to choose me or not? It made feel curious of who it was going to choose but it made me the same for Maths, it made me a little curious who is going to be chosen and who is not. I don't why it makes me really curious to know about this.

AW – So in this lesson with Miss L, when your name was picked out if the pot, we left it on the side so your name couldn't be chosen again, do you think this is fair?

Child C – More fair because If you do it to everyone, that means they are not going to be chosen again. Therefore, they won't be annoyed. Therefore, they don't have to answer, 3 or 4 or 49 times or two thousand times.

AW – Do you think this lesson with leaving the sticks on the side was better?

Child C – Yeah because you can't get chosen again, therefore you can't get chosen so many times that you feel like you are going to explode.

Transcript of interview 3

Child A

SL – What did you enjoy about the lesson with Miss W?

Child A – Well when we watched the video about volcanoes, I learnt a bit more from last Christmas because I can't remember not many things from last Christmas.

SL – Was there anything that you didn't like about the lesson?

Child A – There was nothing I didn't like, I just liked it.

SL – Do you still feel the same about Miss W using the lollipop sticks, we said earlier it was fair that we were using the lollipop sticks and leaving them out, do you still think the same?

Child A – Yeah

SL – Or should we put them back into the pot?

Child A – No we should leave them out

SL – Why?

Child A – Because in the maths lesson me, Child B and C kept getting picked over and over again

SR – Is it fair then, or not fair?

Child A – I don't think it's really fair for other people

SL – So what other ways could your teachers ask you questions, what other things in the classroom could we use to ask you?

Child A – Well, you use the screens, writing a question and we write the answer down on the whiteboard.

SL – That's a good way, how else could we use them? We've used the lollipop sticks. How else could we ask questions?

Child A – you could use Class Dojo or tell a table they are going to be asked and then chose one person at random.

Child B

SR – What did you enjoy about that lesson with Miss W?

Child B – I liked learning about Mount Vesuvius

SR – Was there anything you didn't like about the lesson?

Child B - *shakes head*

SR – Did you like everything?

Child B – Yeah

SR – Do you still feel the same about using the lollipop sticks, did you like the way Miss W used the lollipop sticks in the lesson? Was it good or bad that she left your name out of the pot?

Child B – It was good this time

SR – Why?

Child B – Because everyone had a go

SR – Can you think of any other ways that teachers can ask questions, for example when we use question cubes or hands up, what other ways could we use to ask questions that you'd like?

Child B – You could have a number and do the random number thing

SR – Do you think that random is good? so we don't know who we are going to choose?

Child B – Yeah.

SR – Why?

Child B – I don't know.

Child C

SL – What did you enjoy about that lesson?

Child C – It's hard one to answer, I like that we never really actually we've been learning about volcanoes for ages, but we haven't. it's like we've just dropped it. I liked that we got to learn a bit more about it again.

SL – Was there anything you didn't like about that lesson?

Child C – It's going to hard to say this one because you know, I didn't do much.

SL – So there wasn't anything you didn't like?

Child C – there is nothing I didn't like technically but also; we haven't really finished the lesson like we did with the other two so this is a hard one to answer. Can I tell you something that I've been hating about all three?

SL – yes

Child C – I keep getting chosen. I've got chosen in your one, and in the other one! Why am I getting chosen for all three of them? How is this possible? I know because it's all about magic.

SL – Do you still feel the same about the teacher using the lollipop sticks, you said earlier that you thought it was fair. Do you still think it is fair?

Child C – Yes, it's still fair

SR – Is it fair to leave the lollipop sticks out of the cup?

Child C – Yes, taking them out when they've been chosen because same reason, because if you keep putting them in people might get picked a thousand times or two trillion or infinity and beyond.

SL – Would you say to the teacher any other ways we could ask questions? How else can we ask questions?

SR – Like us using lollipop sticks, or white boards, what else could we use?

Child C – The random button on Dojo would work better this time you'd know it would be you, it makes it more random than the rest. So, we should use the random button for the questions because it's better than using lollipop sticks and that all that. As this time, you know it could be you or not, you just don't never know.

SR – Why is more random to use Dojo? Because I'm not choosing it?

Child C – Because no one really chooses it, it's just the computer but the computer does not have a brain so that means that the computer is not choosing it nobody is choosing it. Because with the hands up you already know who you are going to choose, with the lollipop sticks you could just choose the name to ask a question. This stuff could happen so using random dojo none of that stuff would happen. Unless you decide to call the wrong name, but we will know what you are doing so there is no point in doing that.

Appendix 17

Lesson Plan

Lesson Plan Phase 1

Lesson Plan – Step 1 Cynllun Gwers – Cam 1

Student-teacher	Shauna Lewis	Class:	Year 4/5
AoLE or Subject	Religious Education	Date:	03/02/2020
Lesson Focus:	The Jewish creation story		
Meaningful links to Curriculum	make links between the religious beliefs, teachings and practices studied, describing the impact on believers' lives and identify the similarities and differences within and across religion.		
Meaningful links to: Cross Curricular Responsibilities	LNF – Comprehension		
Personal Targets (Linked to QTS and identified in weekly review)			
Behaviour mangement – to continue to use and develop strategies.			
Test out lollipop sticks for research project.			

Learning Objectives (focus on Learning- use accessible vocabulary):
The pupils will learn to:
The children will listen to and remember the order of the creation story

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
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I can tell you what Jews believe about the creation story. I can remember what happened on each day of the story.	Children will have to listen carefully to the story and remember what happened on each day.
---	--

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	Teacher is to question children on what they can recall from the previous RE lesson on Shabbat. Teacher to use lollipop sticks to ask children questions at random. Teacher is to start a whole class discussion by using a powerpoint of picture to prompt. The first picture is of the world. Teacher to ask the children how they think the world was created. Children are to talk to their talking partners and then three children will share their ideas to the rest of the class. Class teacher to use lollipop sticks at random to choose three children to share their ideas. Teacher to then steer the discussion of how the world	Children are to recall information from a previous lesson about Shabbat in Judaism. Chosen children are to answer questions recapping on knowledge of Shabbat. Children are to participate in a whole class discussion and sharing their ideas with their talk partners. Three children will be chosen at random to share their ideas with the rest of the class. Children are to look at the pictures and discuss what they see in each picture, regarding to the	IWB Powepoint Lollipop sticks

	was created to the Jewish creation story. After each slide of the powerpoint, teacher to question children to see what information they can remember. i.e what happened on the first day? What happened on the 3rd day? Teacher to use lollipop sticks to ask at random to encourage children to recall what happened on each day of the story	creation of the world. Children are to listen and dicuss the slides of the powerpoint explaining the Jewish creation story Children are to remember what happened on each consecutive day of the creation story in order to complete the task of the lesson later on. Children are to answer questions when their lollipop stick is chosen at random.	
Teaching & Core Learning	Teacher is to explain to the children what their task for the lesson is; Children are to put a story board of the Creation story in order, and then write each section down in the correct order. There is only one story board per table so each table will have a nominated	Children are to listen to the teachers instructions and complete the task set. Children are to recall the story and put the 'jumbled'	Jumbled up story boards x 6

	person who will read out the section of the story board out loud for the children to write in sequence.	story board in order. When the children have ordered the sentences, they are to then write them down in the correct order.	
Plenary	Teacher will ask the children to explain why Shabbat is known as the day of rest. Teacher will randomly select children using the lollipop sticks to answer questions on the creation story and why Shabbat is known as the day of rest.	Children will be able to explain why Shabbat is also known as the day of rest.	