

Appendices

(i) Observation schedule

Lesson study 1

	Child D (intro)	Child D (main body)	Child D (plenary)	Child E (intro)	Child E (main body)	Child E (plenary)	Child F (intro)	Child F (main body)	Child F (plenary)
1 (Extremely low)									
2 (Low)				X		X	X		
3 (Moderate)					X				X
4 (High)		X						X	
5 (Extremely high)	X		X						

Additional comments

Child D

- Engaged prior to lollipop sticks (introduction).
- Likes to talk when his name isn't called out (introduction).
- When the question is passed on, he is eager to have it passed to him (introduction).
- Outspoken so would the class benefit from lollipop sticks rather than child D? (Introduction).
- Showing some intense moments (main body).
- Appears to be fairly independent (main body).
- Remained on task for large parts of the lesson (main body).

- Little conversation with peers but this conversation seems to largely involve the work (main body).
- Enjoys responsibility (took on the role of collecting in the pens during tidy-up time) (main body).
- Plenary similar to starter (plenary).

Child E

- Engaged more when lollipop sticks are used (introduction).
- Liked to talk when his name isn't called out (introduction).
- Not very outspoken (introduction).
- Once they were sent to their tables, when LS weren't used, he engaged in casual conversation with a neighbour again (main body).
- Seems to be easily distracted (main body).
- Very little involvement after writing two sentences – either talks or stares into a space (main body).
- Engaged in vocal conversation which distracted the class but spoke quietly – it was his neighbour who was loud (main body).
- Remained in conversations for long period of the lesson (main body).
- Engagement remained really low – about 35 minutes into the lesson he had only written four sentences and would rather play with a ruler or talk to a friend (main body).
- Messed around but paid attention to which names were being called out – fear of getting picked? How can this contribute? Is this negative or positive as opposed to messing about? Is it best to learn in fear? (Plenary).
- When his name was called out, he behaved and joined in (plenary).

Child F

- Nervous appearance when she is called out (introduction).
- Answered the question well (introduction).
- Fairly quick (not outspoken) so would child F benefit from randomised questioning? (Introduction)

- Went on to show real eagerness once sent to tables (main body).
- However, showed some involvement in casual conversation (main body).
- Involvement in work started to decrease (main body).
- Carried on with the content of the lesson after the teacher said she would be listening (main body).
- Independent in looking for resources which might help (main body).
 - Such as displays on the walls.
- Very quiet (plenary).
- When her name was called out, she knew the answer straight away (plenary).

Lesson study 2

	Child A (intro)	Child A (main body)	Child A (plenary)	Child B (intro)	Child B (main body)	Child B (plenary)	Child C (intro)	Child C (main body)	Child C (plenary)
1 (Extremely low)									
2 (Low)									
3 (Moderate)		X					X		X
4 (High)			X	X				X	
5 (Extremely high)	X				X	X			

Additional comments

Child A

- During the starter, her group are the first to shout out when asked a question. Child A likes to lead her group (introduction).
- When **non-randomised questions** are asked, child A is less likely to place their hand up (introduction).
- Focused on the task, however, takes ages to sit down and start, distracted and wandering around the class (main body).
- Not easily distracted. Willing to participate (plenary).

Child B

- Very interested in other groups' answers (introduction).
- Participates a lot and answers the questions within her group (introduction).
- Less likely to put her hand up when asked non-randomised questions (introduction).
- Very focused on task (main body).
- Sits down, writes the date and L.I and begins work (main body).
- Engages in conversation about the work (main body).
- Listens to other responses well (plenary).
- Deeply engaged (plenary).

Child C

- Appearing to switch off when their group isn't chosen (introduction).
- Places their hands up when the whole class is being asked a question (introduction).
- Reacts better to non-randomised questions as he is eager to put his hand up (introduction).
- On task. Engages in discussion about the work (main body).
- Continuously asks the T.A for reassurance (main body).
- First to raise hand when answering as a group (plenary).

- Switches off when other groups are answering (plenary).

(ii) Interview questions

Child A

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Who is going to come out? What will that person say?

Q: How do you feel when you are selected?

A: Happy because I can answer

Q: How do you feel when you are not selected?

A: Happy because I can hear other answers

Q: Do you think other pupils within the class pay more attention once they are being used?

A: Everyone pays attention

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: Sometimes when I don't fully understand the question or topic.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: Yes because they don't know who it might be.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: More often.

Q: Why do you think teachers use them?

A: So that the students do not shout out.

Q: Do you think the process is fair?

A: Fair.

Q: Is it better answering questions in a group or as an individual?

A: In a group. We can discuss ideas and check answers before answering.

Q: How could I have made their use/the lesson better?

A: Use different colour lollipop sticks

Child B

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Happy. It's fun and we think about who's next.

Q: How do you feel when you are selected?

A: Happy. We can discuss in groups.

Q: How do you feel when you are not selected?

A: Okay because other groups get to discuss.

Q: Do you think other pupils within the class pay more attention once they are being used?

A: Yes, everyone pays attention.

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: No, it's fun as it might be you next.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: You might get used to it after a while.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: More often.

Q: Why do you think teachers use them?

A: So that students don't shout out.

Q: Do you think the process is fair?

A: Fair.

Q: Is it better answering questions in a group or as an individual?

A: Group.

Q: How could I have made their use/the lesson better?

A: Decorate your own sticks and have the names of each person from that group on the stick.

Child C

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Who is going to come out? Happy.

Q: How do you feel when you are selected?

A: Excited because myself and my friends can answer.

Q: How do you feel when you are not selected?

A: They get to have a turn.

Q: Do you think other pupils within the class pay more attention once they are being used?

A: They pay more attention.

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: Don't get nervous when I'm in a group.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: Maybe if they don't have anything to say.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: More often than hands up.

Q: Why do you think teachers use them?

A: In case of shouting out and the teacher doesn't want to.

Q: Do you think the process is fair?

A: Fair – hand aches during hands up and the teacher doesn't want shouting.

Q: Is it better answering questions in a group or as an individual?

A: Group – in case you don't know the answer.

Q: How could I have made their use/the lesson better?

A: Should also have independent ones too.

Child D

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Sometimes I want to get picked but don't want to get picked if I wasn't thinking about the answer.

Q: How do you feel when you are selected?

A: Depends on the question and the subject (i.e. not comfortable with Welsh but ok with English).

Q: How do you feel when you are not selected?

A: Really down if I know the answer. Very relieved if I don't know the answer.

Q: Do you think other pupils within the class pay more attention once they are being used?

A: Some people. They try to get away with not answering the question with other strategies.

Q: Do you pay more attention when they are being used?

A: A bit less attention – out of all the times we've used lollipop sticks in my class, that was only the third time I've ever been picked. It always seems to be other students getting picked rather than me.

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: When I don't know the answer, I just pass it on.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: Yes – because of the pressure.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: A mixture. Maybe less because people like myself would get picked more often but maybe more because it does get people thinking.

Q: Why do you think teachers use them?

A: So engagement levels increase and students think more.

Q: Do you think the process is fair?

A: Not really – it would be fair if the work is okay but the work should be differentiated.

Q: How could I have made their use/the lesson better?

A: More able work as partners with LA.

Child E

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Sometimes I want to get picked. Sometimes I don't.

Q: How do you feel when you are selected?

A: Depends on the question and the subject – comfortable with English but not with Welsh.

Q: How do you feel when you are not selected?

A: Very happy because I will have time to think. Gutted if I do know the answer.

Q: Do you think other pupils within the class pay more attention once they are being used?

A: Maybe.

Q: Do you pay more attention when they are being used?

A: The same.

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: Depends on the topic. If I do then it is because of the pressure.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: Some maybe due to pressure.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: More often – maybe 3 times a week.

Q: Why do you think teachers use them?

A: It gets all of the pupils thinking and answering.

Q: Do you think the process is fair?

A: 50/50. Probably swayed more towards not fair.

Q: How could I have made their use/the lesson better?

A: Put 2 names on one stick (1 on each side).

Child F

Q: What is the first thing which enters your mind when lollipop sticks are being used?

A: Depends on the questions. Can enter a state of shock and freeze up or worry.

Q: How do you feel when you are selected?

A: Some subjects I really want to get picked. Nervous when I am not sure.

Q: How do you feel when you are not selected?

A: Quite gutted because I want to shock people. However, if I don't know the answer then I can be relieved.

Q: Do you think other pupils within the class pay more attention once they are being used?

A: Longer thinking time. Paralysis.

Q: Do you pay more attention when they are being used?

A: Can be more, sometimes less.

Q: Do you ever feel nervous or uncomfortable in any way when these strategies are being used?

A: Most of the time, yes.

Q: Do you think they make anybody else feel nervous or uncomfortable in any way when they are being used?

A: Nervous as it can be embarrassing.

Q: Do you think they should be used more often, less often or do you think there shouldn't be any change?

A: It can be a waste of time – less often.

Q: Why do you think teachers use them?

A: Reusing items and to get children thinking.

Q: Do you think the process is fair?

A: Not fair as it can result in embarrassment. However, it's not completely unfair because some prefer not to answer.

Q: How could I have made their use/the lesson better?

A: Group answers would be better as you can work together and help each other.

(iii) Reflection pro-forma

Lesson 1

Concrete Experience (experiencing something)	○ What is the experience you plan to deliver?	We had planned to use lollipop sticks as a form of randomised questioning. Each learner had their name on one lollipop stick. Whichever name was pulled out had to answer the question asked.
Reflective Observation of the New Experience (Thinking about the experience)	○ How do you feel the lesson went? ○ Did any issues arise during the lesson? ○ Did everyone complete the aim of the lesson?	The learners showed a good understanding and this method was fluent. A lot of the outcomes did not correlate with the literature on this topic. The already-engaged learners were found to be frustrated, which did correlate with existing literature. The learners who weren't already fully engaged still often found themselves excluded from classroom activity.

Abstract Conceptualising (learning from the experience)	○ What changes could you make to better the lesson and the child's experience? ○ What could be kept the same to ensure effective teaching?	Some of the learners suggested that using group responses would be better because the class would be able to discuss ideas and gain confidence before answering. The basis of this method could be kept the same.
Active Experimentation (putting into practice what you have learned)	○ What is the new experience you plan to deliver having reflected on the previous experience?	Split the next group into four groups. Allow thinking time and time for discussion before answering.

Lesson 2

Concrete Experience (experiencing something)	○ What is the experience you plan to deliver?	We had planned to use lollipop sticks as a form of randomised questioning, but with groups. The class were split into 4 groups. Once a group had been picked at random, that group are expected to share concepts with one another prior to giving answers.
Reflective Observation of the New Experience (Thinking about the experience)	○ How do you feel the lesson went? ○ Did any issues arise during the lesson? ○ Did everyone complete the aim of the lesson?	The learners showed a good understanding and there was a general consensus amongst the learners that this method was better. A lot of the outcomes still contradicted the literature on this topic. The already-engaged learners were still found to be frustrated, which did correlate with existing literature.

		The learners who weren't already fully engaged still often found themselves excluded from classroom activity.
Abstract Conceptualising (learning from the experience)	○ What changes could you make to better the lesson and the child's experience? ○ What could be kept the same to ensure effective teaching?	The learners explained how they found it better using group responses. Next time, it could be better to gradually reduce the number of people in each group. Eventually, the learners could work in pairs so that more work is being contributed.
Active Experimentation (putting into practice what you have learned)	○ What is the new experience you plan to deliver having reflected on the previous experience?	Split the next group into eight groups. Allow thinking time and time for discussion before answering.