

Appendices

	School B					
Child	1		2		3	
	Engagement	Well-being	Engagement	Well-being	Engagement	Well-being
Pre choice	3	3	3	4	3	3
Post choice	3	3	3	4	2	3
10 minutes	4	4	4	4	2	3
20 minutes	4	3	3	3	3	3
30 minutes	3	3	4	4	2	2
Range	1	1	1	1	1	1

Table 1

	School A					
Child	1		2		3	
	Engagement	Well-being	Engagement	Well-being	Engagement	Well-being
Pre choice	2	3	4	3	2	2
Post choice	3	4	3	4	4	4
10 minutes	2	3	4	4	4	4
20 minutes	4	3	3	4	2	4
30 minutes	4	3	2	3	3	4
Range	2	1	2	1	2	2

Table 2

Participant Information Sheet

What are we doing?

We are looking to find out if children are more engaged in their school work if they can choose how hard the task they are completing is. We will use this method today and will then observe how this affects how you work.

We will be looking at how you enjoy having the option to choose your level of task and if this helps you feel better about learning.

After the lesson, 3 children will be asked to share their ideas in an informal interview with myself and Mr Wakeling. This chat will be recorded for our research purposes but will not be shared with anyone except the research partners. We may write parts of the interview down in our research paper, but no one will be able to tell who has said it.

Who is doing the research?

This research will be carried out by myself and Mr Wakeling who is a trainee teacher in a different University of Wales Trinity Saint David partnership school.

Will anyone know what I've said?

You and the school will not be named in the research. Any information given to us will be kept by myself in password protected files in online University of Wales Trinity Saint David One Drive networks.

The results of this research will not be shared and will be used to improve our own teaching practice. Results will only be seen by university staff.

Who can take part?

We will choose 3 children in the class to talk to that we feel represent the class.

What if I don't want to take part?

You do not have to take part in the research, but it would be really helpful to us if you do. You will still be in the lesson if you say you don't want to take part, but we will not involve you in our observations or chat after the lesson. To stop taking part, please let us know or change your card to red.

Will this help me?

We are trying to see if our research shows that this way of teaching helps children learn. This may not help you right away but may help us with our teaching in the future.

If you have any questions about the research, please ask us.

Observation Schedule

School A						
	Child 1		Child 2		Child 3	
Pre-Choice	E	WB	E	WB	E	WB
Comments						
Post-Choice	E	WB	E	WB	E	WB
Comments						
10 minutes after choice	E	WB	E	WB	E	WB
Comments						
20 minutes after choice	E	WB	E	WB	E	WB
Comments						
30 minutes after choice	E	WB	E	WB	E	WB
Comments						

Range	E	WB	E	WB	E	WB
Comments						

School B						
	Child 1		Child 2		Child 3	
Pre-Choice	E	WB	E	WB	E	WB
Comments						
Post-Choice	E	WB	E	WB	E	WB
Comments						
10 minutes after choice	E	WB	E	WB	E	WB
Comments						
20 minutes after choice	E	WB	E	WB	E	WB
Comments						
30 minutes after choice	E	WB	E	WB	E	WB
Comments						
Range	E	WB	E	WB	E	WB

Comments			
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Appendix 1

The Leuven Scale for Well-being

level	Well being	Signals
1	Extremely low	The child clearly shows signs of discomfort such as crying or screaming. They may look dejected, sad, frightened or angry. The child does not respond to the environment, avoids contact and is withdrawn. The child may behave aggressively, hurting him/herself or others.
2	Low	The posture, facial expression and actions indicate that the child does not feel at ease. However, the signals are less explicit than under level 1 or the sense of discomfort is not expressed the whole time.
3	Moderate	The child has a neutral posture. Facial expression and posture show little or no emotion. There are no signs indicating sadness or pleasure, comfort or discomfort.
4	High	The child shows obvious signs of satisfaction (as listed under level 5). However, these signals are not constantly present with the same intensity.
5	Extremely high	The child looks happy and cheerful, smiles, cries out with pleasure. They may be lively and full of energy. Actions can be spontaneous and expressive. The child may talk to him/herself, play with sounds, hum, sing. The child appears relaxed and does not show any signs of stress or tension. He/she is open and accessible to the environment. The child expresses self-confidence and self-assurance.

Appendix 2

The Leuven Scale for Involvement

level	Involvement	Signals
1	Extremely low	Activity is simple, repetitive and passive. The child seems absent and displays no energy. They may stare into space or look around to see what others are doing.
2	Low	Frequently interrupted activity. The child will be engaged in the activity for some of the time they are observed, but there will be moments of non-activity when they will stare into space, or be distracted by what is going on around.
3	Moderate	Mainly continuous activity. The child is busy with the activity but at a fairly routine level and there are few signs of real involvement. They make some progress with what they are doing but don't show much energy and concentration and can be easily distracted.
4	High	Continuous activity with intense moments. The child's activity has intense moments and at all times they seem involved. They are not easily distracted.
5	Extremely high	The child shows continuous and intense activity revealing the greatest involvement. They are concentrated, creative, energetic and persistent throughout nearly all the observed period.

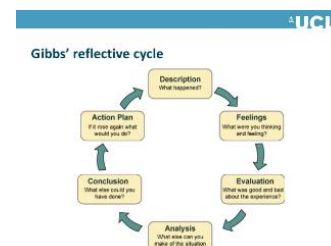
Leuven Scale value descriptors

Reflection technique

Brookfield 4 Lenses – autobiographical, child view, peer view and Theoretical Literature

Within autobiographical, using the Gibbs model (reflective cycle) to reflect.

School A



Autobiographical (Teacher)		Child view		Peer review (Observer)		Theoretical literature
Gibbs reflective cycle • Description ↓ • Feelings ↓ • Evaluation ↓ • Analysis ↓ • Conclusion ↓ • Action Plan		Focus group Interview		Observer Leuven scores		Links to relevant literature.

School B							
	Child 1 J		Child 2 O		Child 3 I / K		
Pre-Choice	3 E	3 WB	3 E	4 WB	3 E	3 WB	
Comments	Yellow		Pink		Pink chosen		
Post-Choice	3 E	3 WB	3 E	4 WB	2 E	3 WB	
Comments	looking around at other work		more to yellow		Looking around at others' work. Unsure if he can understand the work more on the 4		
10 minutes after choice	4 E	4 WB	4 E	4 WB	2/3 E	3 WB	
Comments	no stress Continuous activity	No stress or tension shown		lively and energetic	~~back to pink~~		
20 minutes after choice	4 E	3 WB	3 E	3 WB	3 E	3 WB	
Comments							
30 minutes after choice	3 E	3 WB	4 E	4 WB	2 E	2 WB	
Comments					lots of moments of no activity, "distorted" encoding	slightly withdrawn avoiding talking to others.	
Range	1 E	1 WB	1 E	1 WB	1 E	1 WB	

School B observation field notes (1)

J

Comments	Not a very emotive person. Seemingly engaged throughout and seemed happy with the work, just didn't show the criteria within the Leven Scale		
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School B observation field notes (2)

Observation Schedule

School A												
	Child 1 ~~H~~ (3)		Child 2 A (2)		Child 3 (1) (1)							
Pre-Choice	2/3	E	3	WB	4	E	3	WB	2	E	2	WB
Comments	Generally non-committed. Did not engage with thumbs activity.		Chatty but neutral.		High level of engagement - hands up lots & willing to engage.		Neutral.		During input, regularly stared into space - copied work off WBs.		Generally appears a little uncomfortable. No sign of pleasure or excitement & neutral.	
Post-Choice	3/4	E	4	WB	3	E	4	WB	4	E	4	WB
Comments	More engaged, marginally. Did not hesitate in choice.		Very chatty & smily. Engaging with D over table.		Activity level picked fast. Didn't have to move. Chatting off topic w/ partners.		Seems happier than during input. Quite emotive movement & expression.		Keen to work with another child in the class - showed engagement w/ activity.		FAR happier, skipped around class to grab resources.	
10 minutes after choice	2/3	E	3	WB	4	E	4	WB	4/5	E	4	WB
Comments	Needed help with work & didn't ask. Stalled. A little more focused.		Back to being neutral. Less chatty, fussing more.		Seemed to get activity done really fast whilst chatting.		Pleased to have completed work.		Some help & guidance from SJ. REALLY FOCUSED & ENGAGED.		Really happy with task. Happy to ask for help.	
20 minutes after choice	4	E	3	WB	3	E	4	WB	2	E	4	WB
Comments	Now asking for help & working well.		~		Standard calm engagement, nothing outstanding.		On a high from completing work.		Colouring finished. All progress stopped.		Chatting and happy still.	
30 minutes after choice	4	E	3	WB	2/3	E	3	WB	3	E	4	WB
Comments	Focused well & enjoyed challenge.		~		Reduction as seemed to begin to get bored.		Return to neutral after stagnating.		Picked up attention but did need continual help.		Chatty chatty but maintained.	
Range	1-5	E	1	WB	1-5	E	1	WB	2-5	E	2	WB

Other Copying off her!

School A Observation field notes (1)

Comments		Seemed to like the choice but was more entertained by the fact he wasn't going to have to move. Chatty but on task throughout.	P ~~She~~ came into the lesson appearing generally quite distressed. She was off task throughout input and therefore struggled to apply the techniques to the questions set. Therefore needed perpetual help until she attained an understanding.
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School A Observation field notes (2)

Interview Questions

Interview

Thank you for agreeing to answer these questions for us, it is really helpful. You do not have to answer these questions if you don't want to and can stop at any time.

We want you to be honest and tell us how you really feel so we can improve and use this skill again in the future. We would like to find out what things you liked and what things you didn't like in the lesson and will not be offended if you did not enjoy how the lesson was taught.

If you don't understand a question you can ask us to explain.

Show the worksheets/examples of the work given as choices.

Interview questions

Out of 10, how did you enjoy being able to choose your own task?

1. How do you feel you did in this lesson?
2. What did you think of having the chance to choose your own task?
3. What do you like best about choosing your activity?
4. What did you like least about choosing your activity?
5. What do you think about your teacher choosing your activity?
6. Think back to making your choice, how complicated was the decision to make?
7. Do you feel that you achieved differently in this lesson because of being able to choose your own task?
8. Do you think you chose the right level of task for yourself?
9. Would you like to see more opportunity to choose your own tasks?
10. Is there a time where this wouldn't be the right idea to use?
11. Mr will be teaching this tomorrow, how could we improve the lesson?

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education		1B	
Session Plan – Key Stage 2			
Name of trainee: Ashley Wakeling		Session ref: 2002NUM (Research Lesson)	
Personal target(s) in relation to QTS: Keep pace in a lesson and ensure all work is marked appropriately to the school marking scheme.			
Year group: 3-4	No. of learners: 28	ALN: ASD, Behavioural	
Additional Adults:	SJ – Observing and recording information. AJ – Observing KB – To assist with lowest ability group in the class and maintain them on task.		
Learning objective(s): to be able to represent data using pictograms where one symbol represents more than one unit using a key and extract and interpret information from charts, timetables, diagrams and graphs.		Success criteria:	
Links to previous learning: Recap of previous work in this subject. AJ has stated that they have all covered this topic already and therefore should have a good understanding. More able children will need extensions to make sure they are challenged and have tasks to complete for the time that the other children are working.			
Curriculum coverage (range, skills)			
Literacy(LNF)		Numeracy (LNF) to be able to represent data using pictograms where one symbol represents more than one unit using a key and extract and interpret information from charts, timetables, diagrams and graphs.	
DCF Use of IT on the board in front of the children at the beginning of the lesson.	Thinking Link to previous work carried out – Have we done anything like this before?	ESDGC	YCC
Key vocabulary(English/Welsh):			
Time	Session activities, organisation and management		
1045	Input to session – Not differentiated.		
	Children have already covered pictograms. Quick recap of times tables, 2,4,5,10s and remind the children that these will be really useful throughout this session!		
1050	Place pictograms presentation up on the board – 1 to 1 initially and then 1 to show 2,4,5,10. Talk and discuss with partner activities. Answer questions on whiteboards together		
	Ask the children how they would display a pictogram for school dinners/packed lunches for the day in the classroom.		
1055	Put it up on the whiteboard as 1 to 1 initially and work through with the children.		
1100	Address misconceptions by asking if we include the picture before the line too?		
1105	Then introduce a scale, stating that we can improve how easy the pictogram is to read by making the bars smaller. https://uk.ixl.com/math/year-4/interpret-pictograms If needed to ensure understanding.		
1110	Children are given the choice whether they pick the easiest, middle or hardest work from the front of the classroom to complete.		
Independent work to last a maximum of 35 minutes, with	1 – Gwyrdd Basic one to one pictogram work, extracting data from a pictogram and inputting other data into it using information on a sheet. Maximum of three separate questions to ensure that lowest ability are not daunted by the task. Ext – Make your own pictogram using information from people on your table using a scale you are comfortable with.		

extensions for more able and assistance for lower ability children. Finish by 1145	2 – Glas One to 2 on one sheet and then extension one to 4 and 10 pictogram work. Page 47 of Abacus 4 Textbook 1. Ext – Make your own pictogram using information from 10 people in the class. 3 – Melyn Various ratio levels of pictograms with emphasis on then representing data using a pictogram from data provided. How else could you show this data without having to draw out a picture every single time? Ext – Make your own pictogram by asking the children in the classroom their favourite colour/drink/fruit/sport – Think about the scale if you’re representing the whole class of 28 with 4 adults as well.
1145 1150 1155 1200	Bring the lesson to a conclusion as the children begin to struggle or the session comes to a natural end. Ask the children to complete a self-assessment sheet which will also be placed up on the board. How did they feel during the start of the lesson out of 10. How did they feel when they found out they could pick their own work today? Do they think they picked the correct sheets straightaway or did they have to change their level? Do they think they tried their hardest in the lesson? Would they like more opportunity to select their own work in the future? Tidy the classroom, books into a pile with self assessment sheets slipped inside to the front. Children go out to lunch.

Reflection1.

Research lesson 20th February 2019
AW – Numeracy/Year3-4/Pictograms

Description

The lesson began with an introductory PowerPoint containing a very basic introduction to pictograms as a concept, firstly by using one picture to denote one item. This was then followed by altering the scale to 1 picture to denote two items and so on. Throughout the introduction, I also demonstrated how a picture can be halved to show that an item has between two of the pictures. This was then followed by attempting to draw a pictogram of the classes' dinner choices for the day. I made a emphasis on showing that drawing out 14 sandwiches and 16 dinner ladies made the 1 to 1 scale on the pictogram really challenging and then asked the children if they could show me a better way talking to their partners and using the whiteboards.

Once I had taken the ideas, we agreed that a scale of 1 to 2 would be most effective. I then asked the children to show me how the pictogram would appear, and they again used the whiteboards to show their thoughts. The ideas were seen to be quite basic by several the children, but around a third of the class did seem to struggle with the concept of not having 1 picture per item.

I then began to introduce the children to the opportunity to choose their own worksheets to work from during the time they would have for the remainder of the lesson. I had colour coded them and place them in piles which were to be completed in order. I did not show any further examples at this stage. There were three stages of work, ranging from 'tricky' being the most basic skills worksheets, to trickiest being more appropriate for higher ability year 4s in the class. The class were not grouped or sat by ability and were free to chose where to sit once they had collected their worksheets. They were reminded that they could change their mind about a worksheet at any time, if they initialled the sheet and wrote their thoughts about it on it. The children worked for approximately 40 minutes with assistance from myself. They were stopped around five times during the session as I noticed misunderstandings which I felt would hinder their work.

I brought the lesson to a close as it seemed to be reaching a natural end around 10 minutes before their lunch break and displayed a PowerPoint slide, requesting the children to write several pieces of information, relating to a self-assessment for the session. Due to poor reading abilities in the class however, several children were unable to complete this task, and the results were therefore not collatable.

Feelings

I believe the children liked being able to choose their own level of work, and they saw the increased independence as a positive thing throughout the session. However, I did note that most of the children perpetually asked permission to change their sheets, asked what they should do next and continuously asked for support when it had been made clear to them that if they needed this help they should approach peers before coming to the teacher. I feel this was down to the children not being given the opportunity previously to work in this way, and therefore, whilst the concept seemed positive, it also came across as distinctly alien to them also. Most children chose the level which was expected of them, except for some of the highest levels of ability choosing the middle sheets. When asked about this choice, they said that the word 'trickier' to denote the sheet had led them to choose the middle group and make sure they were sure they could complete this, before moving on. The most able students in the class found even the most complex sheet a little too simple and I would therefore ensure there was an enhanced extension prepared for these.

A number of the less able children in the class felt they were unable to choose their own level and therefore relied on some pointers from myself. I felt I did not place enough emphasis on giving the lower ability children challenging work, or praise, and therefore their attainment and engagement did dwindle slightly throughout the lesson. Nonetheless, several of the middle ability children did work very effectively independently throughout the session, to my surprise, using their peers for support. One of the children focussed on in the observation and subsequent interview was particularly focussed on his activity throughout the session from my perspective, significantly more than usual, although this was not noted by my research partner as he does not know the children personally.

Analysis

I feel that the novelty of this idea was its main success during this lesson. Several children worked more independently than usual, resulting in higher levels of engagement throughout the session. However, a large number also failed to engage with the idea, relying solely (as they had done previously under a standard differentiated lesson) on the teacher for support on nearly a one to one scale. Nonetheless, I think being given the opportunity to chose helped some of the children edge towards increased independence and therefore can be seen as a success. Allowing the children free roam around the classroom and being able to chose where they would sit also was a novelty for the class, and this did result in a lot of time being wasted, especially initially when they went to collect the worksheets. Some children struggled to work independently as a nature of the class in question, and therefore, this technique may have been lost to a certain degree. More independent children worked well and produced more work than expected and they often remarked around how they felt that this way of learning empowered them more. This does bode well for the future use of the technique, particularly in a class with fewer members having additional learning needs or difficulties. The allowing of children to sit wherever they wanted in the class often meant that the children who were friends, sat next to one another, but instead of copying one another, many of them chose different sheets and worked collaboratively with one another, which was a highlight. On speaking to my partner, we discussed this in great detail, and taking feedback from the interviews with the children afterwards, we agreed that we would look at a different technique of placing the children on different tables by chosen ability, rather than wherever they wanted in order to try to increase the output from the class. The children in the interview reported that they use of 'tricky, trickier, trickiest' was misleading, and they believed that it would be far more useful just to have them numbered from 1 to 3 or have easy medium hard written on them. I chose to use the tricky scale to make the lower ability children feel that they were challenging themselves regardless of the level they chose. My attempt to maintain the wellbeing of the children therefore seemingly backfired, and they would have preferred an extended challenge also, as the highest ability in the class reported not being pushed hard enough.

Furthermore, we found that the Leuven Scale, whilst appropriate for this observation, was inherently limited in its nature, with children in key stage two very rarely dropping below a 3, and not likely to rise above a 4. Whilst we noted the reasons for the changes between these numbers, it became quite difficult to show that there had been a huge range in the numerical data as a result, and the qualitative data became increasingly important as a result. My research partner had taken very few qualitative notes however, and we noted that we must take far more for the following observation to make the research show the differences we had seen ourselves.

Conclusions

We learned that the technique of allowing the children to choose their own task level generally improved both engagement and wellbeing of the children taking part. However, we found that it was also incredibly important in the way it was delivered in the class, particularly as the children had never completed a task in this way before. Therefore, a significant amount of time was needed to scaffold the entire construct and make sure the children understood the process.

The lesson could have been significantly better if it was based around a technique that the children were familiar with, and on a topic that they had covered before, resulting in less time being set aside to stop the class and address misconceptions. I believe the self-selection of task concept would therefore work far more effectively in a sort of 'practice' or end of unit activity to gauge understanding more effectively than a test. As a result, we have decided that the lesson studied tomorrow would be on a topic the children have already been introduced to and be for practicing their understanding.

I believe that I needed to develop my ability of class control a little more effectively before trying this model again. Because of attempting to cover too much in one session, the output was a little chaotic, and misconceptions the children had were often not picked up on until it was a little too late.

Action plan

If I was to do this lesson again, I would ensure that the children had been given an outline to how they should conduct themselves prior to the lesson and leave this on the board for the duration for them to refer to should they need to. This would have prevented them having to come to me so regularly to ask basic questions. This is a reflection on the nature of the members of the class, but also a consideration that cannot be ignored. I will reflect on the feedback we have attained both from the children who were in the focus group interview, and on the feedback from the class teacher on the day to make sure that I develop better class management skills, remain calmer and less excitable during lessons, as this results

in the class rising to this level of excitement and a poorer output as a result. We found that having an extra person in the room, even as a non-participant passive observer, helped keep an eye on the children who were not achieving to their expected standards, and this made me appreciate the high value of a teaching assistant.

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainee: Stuart Jones			Session ref: 210219 maths (partner research lesson)	
Personal target(s) in relation to QTS:				
Year group: 5	No. of learners: 31	ALN: * supported group - ensure understanding. Last time they only coloured in the number of sweets given in the ratio, rather than how many that ratio represented.		
Additional Adults:		AW - observing		
Learning objective(s): WALT: Use ratio to find amounts		Success criteria: Can simplify ratio *** Can find amounts of items using ratio by finding one part and multiplying by the amount needed ** and*** Can find amounts of items using ratio by splitting the total amount in steps *		
Links to previous learning:				
Curriculum coverage (range, skills) share objects in a given ratio, e.g. red blocks and blue blocks in a ratio of 1:2				
Literacy(LNF)		Numeracy (LNF)		
DCF	Thinking	ESDGC	YCC	
Key vocabulary(English/Welsh): Ratio.				
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities	
	Introduction Demonstrate how ratio can also be calculated by adding the numbers in the ratio ($4:3 = 7$) you can then divide the total amount by the total (21) to then work out what one part is. Then, to find 4 parts, you can multiply it by 4. Children to attempt the next question on a whiteboard using this method. There are 16 apples ratio is red:green 6:2. Child chosen to talk through the question. Other children show if they agree using thumbs, if disagree, child can talk through how they worked it out. Can evaluate mistakes if there are any or show an alternative method if that is used.		There are 21 bananas, they are split into a ratio of 4 yellow, ripe bananas:3 green, unripe bananas. How many are yellow? How many are green? TTYP – tell them how you can work this out. Using a whiteboard complete the question. Lollipop stick to choose a child Peer assess of method – peer teaching if unknown.	
	Main activities Explain to children there are 3 different levels of difficulty to choose from today. Each sheet shown on visualiser so they aware of the work on each sheet. **** - Using new rule - using a range of units and 3 and 4 value ratios i.e. A:B:C:D		Children choose own difficulty Children told they can change their level at any point to raise or lower challenge.	

	*** - Apply new rule to find one part and then multiply that by each side of the ratio to work out how the total is split between the ratio. Simplify the ratio to its lowest common factor. ** - apply rule to split amount into the ratio's given (numbers up to 200) * Consolidating previous lesson, splitting amounts with a ratio by drawing/colouring	
	Plenary Children to self-assess their work using self-assessment cards (Novice/apprentice/practitioner/expert)	How do you feel you have done today?

Reflection 2

Research lesson 21/2/19 – SJ – Maths, ratio. Reflection

Description

The lesson consisted of a brief introduction showing the children how one 'part' of a ratio can be found by dividing the given total by the total of the two parts of the ratio. For example, if the question asks to 'find how many sweets each person gets in a ratio of 2:7 when there are 36 sweets', then the given total – 36 – is divided by the total of each part of the ratio 2:7, therefore $2 + 7 = 9$. Subsequently, $36 \div 9 = 4$. Therefore, one part of the ratio is 4. In this case, the children were then shown that 2 get the two parts, you multiply that 4 by 2, which is 8. Then, the seven parts are found by multiplying the 4 by 7, which is 28.

This method seemed to be grasped by most children during the introduction, which I gleaned from their answers on whiteboards during a pair question to the class. The worksheets that the children were being offered to choose from were then displayed on the visualiser and example questions explained. The children were then asked to move to a table that corresponded with the worksheet they wished to work at. There were 4 tables of 8 and 4 worksheets.

The lesson was stopped on 2 occasions to check all learners were happy with their choice and give them the opportunity to change their levelled difficulty if they so wished. They were also reminded that they could do this at any opportunity.

The lesson was finished with the children allowed time to self-assess their work from that day. They were given the option to describe their knowledge of the subject ranging from novice, apprentice, practitioner and finally expert. The children rated their knowledge using one of these categories.

Feelings

I felt the children enjoyed having the choice of difficulty work they completed today. Some children chose different levels to what I expected, some higher and some lower ability to what I would perhaps set them. This was a surprise. I would suggest that most children chose a level I would feel they were capable of though. Some children expressed their happiness throughout the lesson that they could choose their difficulty.

Some children lacked confidence to challenge themselves in my opinion. They chose a difficulty they could do comfortably, instead of challenging themselves.

The children who were normally completing the highest-level work in the class took delight in choosing the task labelled 'ultimate challenge'. They saw this as a really big challenge and felt really proud when they completed the work. This was great to see. Some children did choose tasks that were too difficult for them and this led to them requiring lots of help. This may lead to less time for other children that may not be as vocal with their struggles.

I felt the changes made to the original lesson strategy allowed the children further their progress and increase engagement and well-being.

Analysis

The method allowing the children to choose their own difficulty proved reasonably successful. The changes made to the strategy from the previous day's reflection seemed to have the desired effect. The more able children seemed more impressed with the added challenge and with the fourth option available. This ensured that all learners were challenged, regardless of their ability.

The fact that the children were shown the worksheets prior to making their choice helped the children decide what to choose more independently rather than choosing 'where they normally are', which was a limitation observed from the previous day. This made progress in eliminating children just going with the norm they are used to and considering and self-evaluating their own academic ability in this subject area.

Evaluation

I would continue to use the strategy as it is. The children gave good feedback during and post lesson. The changes made to the strategy were a success. This may lead to further planning and resourcing as an extra differentiation is added. This may help progress certain children though, so could be worthwhile. Further explanation and more examples shown in the introduction could help the children decide more independently at the start also. This was highlighted in the interview after the lesson. One of the children mentioned they would have preferred further instruction and examples of each sheet given to them. This was brief in the introduction due to time constraints of the lesson.

Conclusion

The strategy of allowing the children to make their own choice of the difficulty of the differentiated work they are to complete allows the children to consider their own ability. This means that they are putting more thought into their self-evaluation and not just 'going through the motions' of a self-evaluation which has been observed previously. This leading the children to become more independent learners and taking charge of their learning. This will hopefully continue if this strategy is used going forward.

The children will need to become accustomed to the strategy used to see the full extent of its strengths and limitations. As this was the first time this strategy has been used in the class, it may be slightly alien to the children. This may have brought about some excitement and distraction away from the learning itself. Once the children have become used to this teaching strategy, it may run more smoothly and further, and more accurate observations may become present when the children develop more autonomous tendencies in the process.

Action Plan

To progress this idea further, I would continue to allow the children to familiarise themselves with this process. As this was a first and second study lesson, it would be interesting to see if further progress was made as the strategy is continued to be utilised. This can then be rolled out to other subjects, not just mathematics. If successful, and progress is made, this could then be a suggestion to change whole school teaching. Further monitoring is required and if progress in children's academic learning does not show progress over time, then re-evaluation should occur.

When explaining and presenting the different levels of difficulty, there will need to be more examples shown. This will allow the children to make their choice more independently and give some of the more anxious students more confidence to choose a level that will challenge them appropriately.