

A presentation of the critical evaluation of how Assessment for Learning can be utilised in a learning episode to aid progression across a chosen area of learning and experience.

By Stella Griffiths



What the PowerPoint includes?

- Information about the class I taught.
- The role of assessment for learning (AFL) in a classroom environment.
- The positive and negatives of several AFL strategies.
- How AFL enhances student progression in the classroom.
- The lesson I will be teaching with my chosen area of learning.

Recalling the seven timetables.

The year 4 class were grouped into 5 tables of ability levels from lower ability to higher ability. 7 MAT students.

The children had a previous lesson to introduce the use of seven timetables. This lesson is based on recalling and building of their knowledge to develop their understanding and use of the seven timetables.

The focus of the lesson is around mathematics and numeracy. The focus in the area of learning is to develop fluency to recall multiplication facts up to 10×10 .

The learner's progression is the focal point of the lesson.

What is assessment for learning (AFL)?



BLACK, AND WILIAM (1998) IDENTIFY THAT ASSESSMENT OR LEARNING (AFL) IS AN APPROACH TO TEACHING THE BASED AROUND THE USE OF ASSESSMENTS ON AN INDIVIDUALS LEARNING TO GET AN UNDERSTANDING OF THEIR KNOWLEDGE AND WHERE THE INDIVIDUAL NEEDS TO PROGRESS TO DEVELOP.



ACCORDING TO THE WELSH GOVERNMENT (2024), IN THE CURRICULUM FOR WALES AFL IS AN ESSENTIAL WAY TO PROVIDE FEEDBACK TOO AID PROGRESSION BY IDENTIFYING STRENGTHS AND WEAKNESSES IN ORDER TOO UNDERSTAND WHERE THE CHILD NEEDS TO DEVELOP.



AFL CAN BE BENEFICIAL IN SERVAL WAYS IN A CLASSROOM ENVIRONMENT. HOWEVER, SADLER (1989) IMPLIES THAT ASSESSMENT CAN CREATE ANXIETY FOR STUDENTS. THROUGHOUT THE ASSESSMENT CHILDREN CAN BECOME FIXATED ON THE ASSESSMENT ITSELF RATHER THAN THE CONTENT. THIS WOULD AFFECT THE OUTCOME OF THE ASSESSMENT.



PROGRESSION IS A CRITICAL PART OF THE CURRICULUM FOR WALES. BY MEASURING PROGRESSION THROUGH PROGRESSION STEPS AND WHAT MATTERS STATEMENTS ALLOWS THE TEACHER TO IDENTIFY EXACTLY WHERE THE CHILD IS AT AND THE SPECIFIC AREA THEY NEED TO DEVELOP TO REACH THE NEXT PROGRESSION STEP. (WELSH GOVERNMENT, 2024).

Assessment for Learning principles

1. Effective planning of teaching and learning.
2. How students learn
3. Central to the classroom practice
4. Professional skill for teachers
5. Sensitive and constructive, emotional impact.
6. Learner motivation
7. Learning goals and understanding of criteria.
8. Constructive guidance, how to improve.
9. Self-assessment, reflective and self-managing
10. Full range of achievements.

Principles of Progression



Conceptual understanding- developing connects and increasing mathematical ideas.



Communication using symbols- understanding symbols, abstract representations and increasing range.



Fluency- understand concepts and relationships by remembering facts and techniques.



Logical reasoning- understand the relationships between logical justifying and justifications.



Strategic competence- applying mathematical structures and ideas into a problem.

Pedagogical approaches

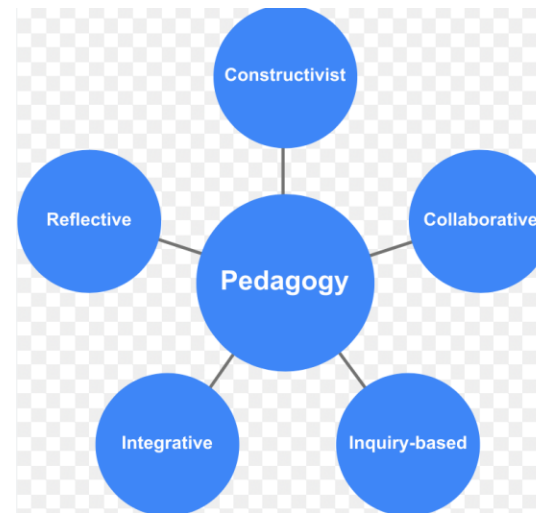
The pedagogical approaches play an important role in AFL by shaping assessment to be implemented into the classroom environment.

Reflective approach- looking back on a lesson or teaching strategies and critically analysing what the strengths and weaknesses are and what can be done to improve.

Example- reflection on their work. What went well and even better if.

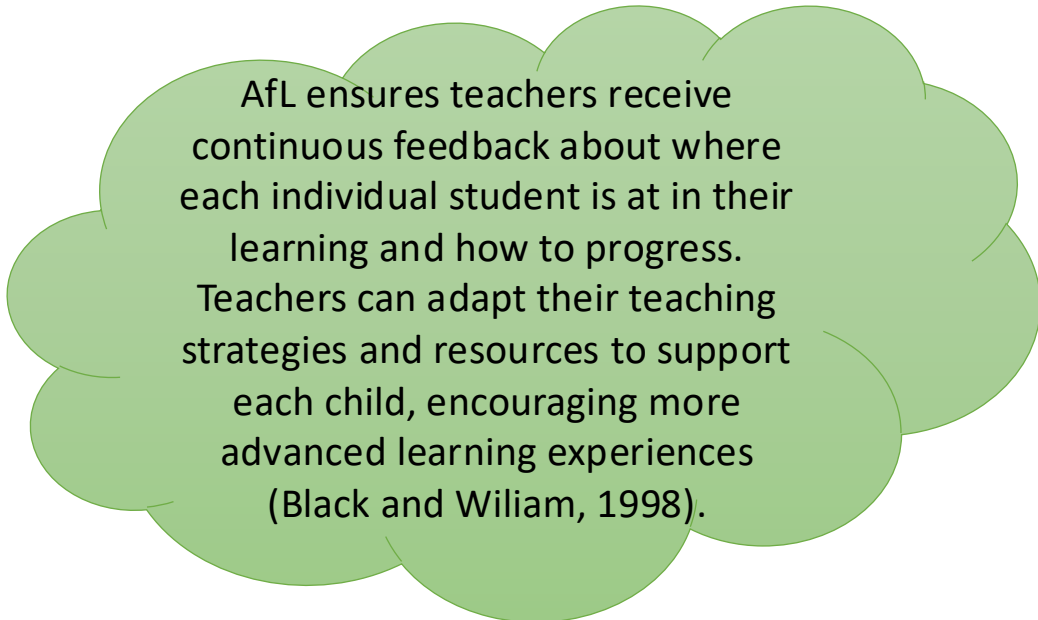
Integrative approach- combination of prior knowledge to support new knowledge. Making connections through subjects. **Example-** creating writing based on past and future events in history.

Constructivism approach – individuals develop their understanding through assessment that involves active participation and reflection of their work. **Example-** feedback that includes critical thinking through feedback.

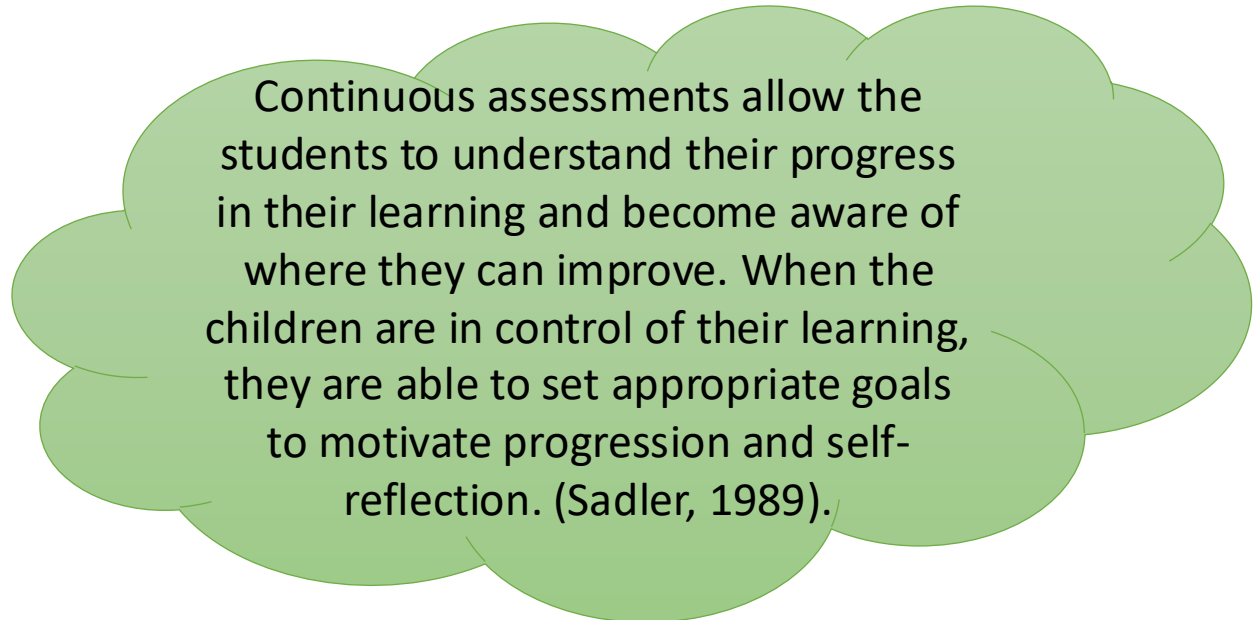


Collaborative – children work together in groups or pairs to solve questions by combining ideas. **Example-** creating a group presentation.

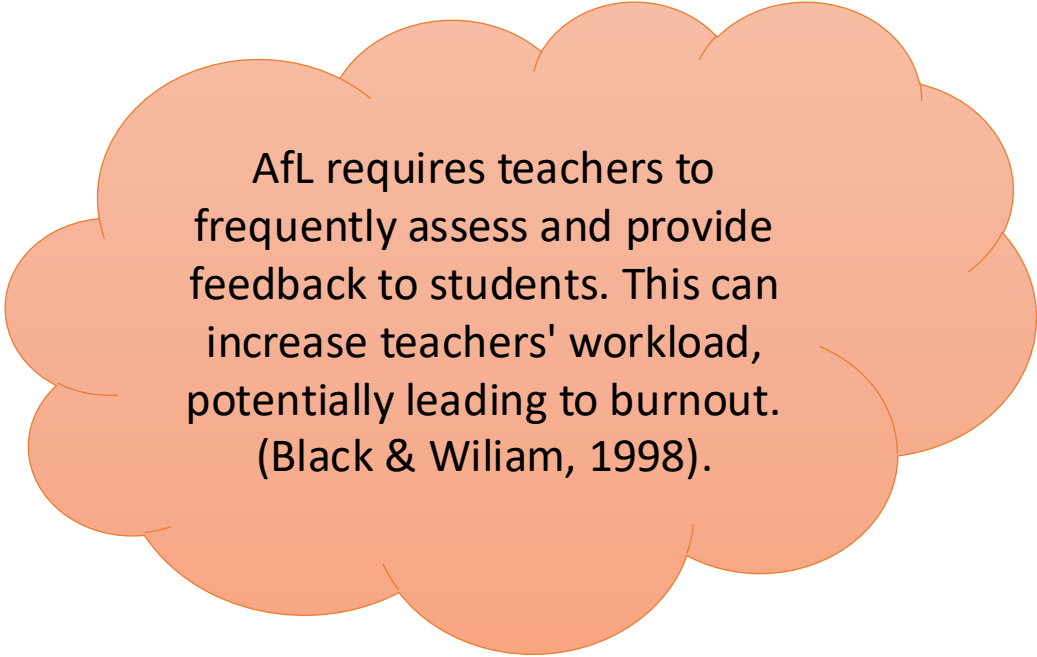
Inquiry-based learning- focuses on children analysing questions. Supporting children on how to get to the answer rather than the answer specifically. **Example-** classroom discussions.

A green cloud-shaped bubble with a black outline, containing text about AfL benefits for teachers.

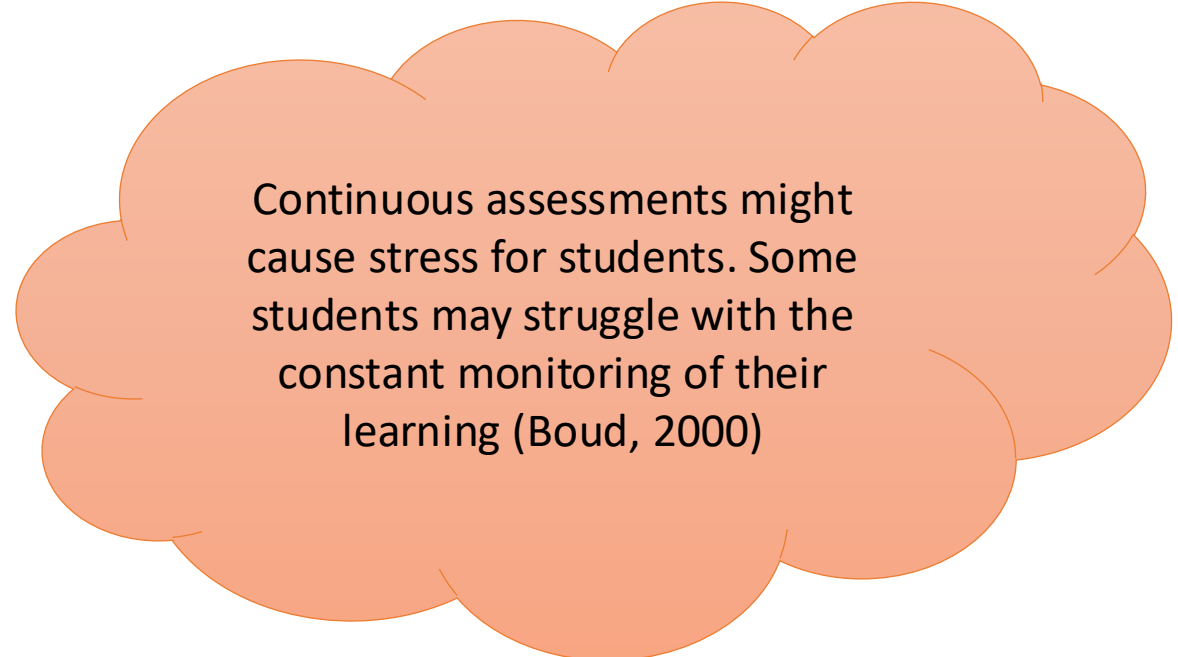
AfL ensures teachers receive continuous feedback about where each individual student is at in their learning and how to progress. Teachers can adapt their teaching strategies and resources to support each child, encouraging more advanced learning experiences (Black and Wiliam, 1998).

A green cloud-shaped bubble with a black outline, containing text about student benefits of AfL.

Continuous assessments allow the students to understand their progress in their learning and become aware of where they can improve. When the children are in control of their learning, they are able to set appropriate goals to motivate progression and self-reflection. (Sadler, 1989).

An orange cloud-shaped bubble with a black outline, containing text about teacher workload concerns.

AfL requires teachers to frequently assess and provide feedback to students. This can increase teachers' workload, potentially leading to burnout. (Black & Wiliam, 1998).

An orange cloud-shaped bubble with a black outline, containing text about student stress concerns.

Continuous assessments might cause stress for students. Some students may struggle with the constant monitoring of their learning (Boud, 2000)

Assessment for learning influences progression.

Assessment for learning allows teachers to provide feedback on a child's knowledge to influence progression in their learning and performance (Cambridge University, 2025).



Receiving feedback from an assessment can have a positive impact on the learner's progression because the teacher can identify their strengths and weakness to enable the child to understand where they need to improve to develop further (Black and Wiliam, 1998).



AFL is important to implement into a teachers planning because by pinpointing the areas a child needs to develop to progress, allows the child to take on their feedback and be in control of their learning (Nicol and Macfarlane-Dick, 2006).

Mathematics and Numeracy

In my lesson plan, I have planned a lesson based on developing the children's use of the seven timetables by recalling prior knowledge.

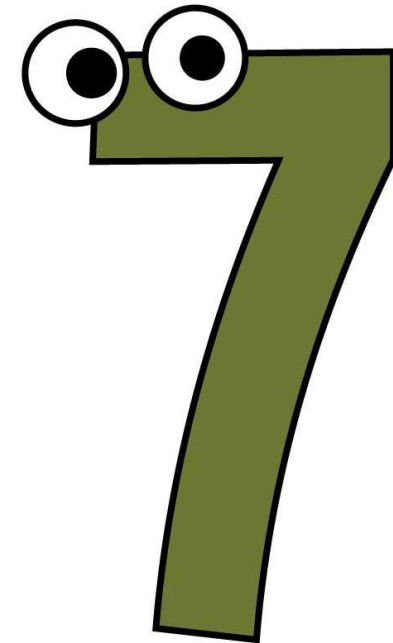
The focus of this lesson is through the area of learning **mathematics and numeracy**. I have chosen this AoLE because the topic the children were beginning to learn about, involved the use of mathematics and numeracy through multiplication and dividing. This lesson helped develop their multiplication and dividing skills in preparation for the topic.

The what matters statement- **The number system is used to represent and compare relationships between numbers and quantities.**

Progression step 2- I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays.

Progression step 3-. I can fluently recall multiplication facts up to at least 10×10 and use these to derive related facts.

I am teaching this lesson through the use of mini white boards. Myself and the children go through the PowerPoint together using white boards. The children will attempt the questions on the whiteboards with myself on the main whiteboard as active participation.
- **Wenger implies that 'knowing is a matter of participating through active engagement' (Wenger-Trayner,, 2023).**



Student-teacher:	Stella Griffiths	Class / Group:	Year 4
AoLE or Subject:	Mathematics and Numeracy	Date (please note that this may be a continuous session):	28/11/24
Meaningful links to Curriculum (What Matters Statements, Descriptions of learning, 'previous' curriculum...)	What Matters Statement- The number system is used to represent and compare relationships between numbers and quantities. Progression step 2- I have explored and can use my understanding of multiplicative relationships to multiply and divide whole numbers, using a range of representations, including sharing, grouping and arrays. Progression step 3- I can verify calculations and statements about number by inverse reasoning and approximation methods and I can fluently recall multiplication facts up to at least 10 x 10 and use these to derive related facts.		
Meaningful links across the curriculum Links to other AoLEs or the Cross-curricular skills frameworks	Languages, literacy, and communication is also part of the lesson because the children are developing their reading skills when reading the longer questions on the work sheet and the children are using communication skills when discussing their answers with their partner.		
Personal Targets (targets and consequent impact on learning - refer to any targets that have been identified in learning journal or weekly reflection meeting and describe the desired impact on learning)			
Personal targets: • I would like to work on my whole classroom management. • To develop the use of differentiation when teaching children grouped in their ability level. • To develop my use of incidental Welsh during lessons.			
Learning Intention <i>'This should focus on the pupils' learning during the lesson, rather than what they will be doing, and should be short, achievable and measurable.'</i> (Crichton, H., and Mcdaid A. 2016 p. 196)			
Learning intention: To recall seven times tables and division facts.			



The children are developing their multiplication and division skills using inverse reasoning.



The lesson is based on the development of the use of the seven timetables.

Success Criteria <i>What the pupils need to demonstrate to successfully meet the Learning Intention.</i>
Success Criteria -To write each number in a box. -To count in sevens accurately. -To write the number formations correctly. -To use the 7 timetables to reverse a multiplication into a division.
Planning for misconceptions: <i>Use this section to anticipate pupil errors and misunderstandings and your planned responses to them.</i>
The children may have forgotten how to use their seven times table in multiplication and division. If the teacher can see the children are struggling with the work sheet, the teacher can put the children struggling into a group and go through the questions together to get a better understanding. The teacher can also support the children by giving multiplication squares for the children to use to support them while completing the worksheet. The children may have forgotten how to use the seven timetables in multiplication and division. To prevent this from happening, there are a set of starter questions using the seven timetables for the children to complete before starting the lesson on their whiteboards. This allows the teacher to get an understanding of whether the children need to go through the seven timetables before completing the worksheet. If there are children that are evidently struggling the teacher can spend more time, going through the PowerPoint and practice questions as a whole class or a smaller group to ensure everyone has a good understanding before attempting the worksheet.
Strategies to support learners' Welsh language development
Throughout the lesson the teacher can use regular Welsh commands which can include 'dim siarad', 'dwyllo I fyny' and 'edrych ar y bwrdd gwyn'. By repeating different commands in the classroom, the children will begin to get a good understanding of the meaning of each command and can possibly use. The teacher can use the sandwich technique of saying the Welsh word the in English and then again in Welsh. This strategy allows the children to use the English meaning to understand the Welsh by using repetition.



The children can use resources such as formation sheets, multiplication grids.



The starter questions require the children to use their prior knowledge to aid progressing using their seven timetables.



Sandwich techniques allows children to understand different Welsh phrases through repetition.

SEQUENCE OF TEACHING & LEARNING
(Add or remove rows below as appropriate)

Timing: <i>Break down timings into groups if appropriate. ensure pupils are 'doing' quickly and that transitions are taken into account</i>	Role of the teacher & support staff: <i>e.g., key questions, retrieval of prior learning, modelling, and explanations, checking understanding, planned use of additional adults.</i> <i>Choice of pedagogical model or of the 12 pedagogical principles</i>	Pupils' learning and activities: <i>What will the pupils be learning to do and what activities / resources will facilitate this?</i> <i>Please refer to Foundation Learning planning document for details of continuous provision.</i>	Inclusive Strategies (including differentiation): <i>Reasons for and details of scaffolding.</i> <i>Types of representation in tasks.</i>	Check what pupils know, understand, and can do: <i>Key questions, types of retrieval practices, self and peer assessment opportunities, purposeful AfL strategies, live marking opportunities, planned feedback.</i>
15 Minutes	The teacher will go through the PowerPoint with the children. The PowerPoint is used to recall multiplication and division by 7. Firstly, go through the starter with the children as practice questions to see whether the children understand how to use the seven timetables to multiply and divide. Before starting the worksheet. Throughout the PowerPoint allow the children to use white boards to answer the questions (secret squirrel). Key questions: what can you do to correct that answer? What is a multiple of 7? Can you count in sevens? How can you check that is a multiple of 7? What can you remember from yesterday's lesson?	The children are building on prior knowledge of multiplication and division from yesterday's lesson. The children are using trial and error by writing their answer on a white board and getting the teachers approval on whether it is correct or incorrect. If it is wrong the children get the opportunity to correct their answer. The children are continuously answering questions from the PowerPoint either on a whiteboard or cold calling.	The teacher can use the strategy think, pair, and share when asking questions to the class. The teacher must allow time for the children to think individually about the question, then talk to a partner about their ideas and then share to the class. This allows the children to all have an answer for each question by combining each other's ideas to develop the correct answer.	The teacher can use the secret squirrel strategy using mini whiteboards. The children can use the whiteboards to answer the starter questions and questions throughout the PowerPoint.



Starter questions ensure the children have a good understanding before entering the main task.



Developing problem solving skills through trial and error.



Combine and adjust their answers together.



Secret squirrel allows active participation and each child is engaged. Whiteboards support the children to have a go and can correct their answer.

Mini whiteboards

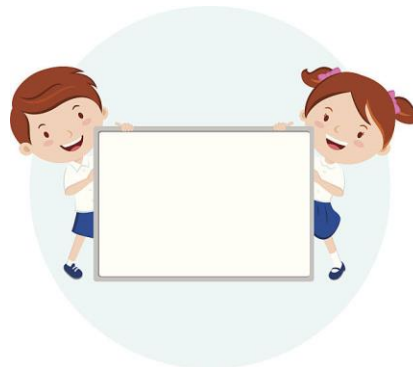
Students can answer question on a mini whiteboard to enhance active participation. The children have the opportunity to correct their answer if they make a mistake (Wiliam, 2011).

Wiliam (2011) indicated that Mini whiteboards is an essential AFL strategy because it increase active participation. The children answer simultaneously creating an inclusive environment.



Sweller (2011) cogitative theory argues white boards are cognitive demanding because whiteboards do not allow time to reflect and are used for fast-pace.

Purdie, Hattie and Douglas (2004) also agree with **Wiliam** because they believe whiteboards create an inclusive environment. Whiteboards remove the children's anxiety when answering a question and the children can learn at their own pace.



Scriven (1991) agrees with Sweller because effective questioning requires inclusivity which does not include fast speed assessment.

Tharp and Gallimore (1988) agrees that mini whiteboards can provide quick feedback so teachers can see if the children understand.

Wiliam (2011) agrees that whiteboards can provide faster feedback creating a more responsive classroom for progression of children's knowledge.

However, according to **Mckeown (2013)** disagrees that the feedback is affective because he believes there is low quality of answers when using a whiteboards.

Dillion (1988) suggests that whiteboards can create higher engagement levels but can be time consuming when waiting for each child to write their answer. He also highlights that more distractions occur with children drawing on the whiteboards.

30 minutes	The teacher can support the children during the main task by answering any questions when the children are struggling and have regular pit stops to ensure the children understand the task and are completing the work correctly. During the pitstop, the teacher can go through questions that evidently a lot of children are struggling with or to check the children understand the worksheet. Key questions: what can you do to correct that answer? What is a multiple of 9? Can you count in nine? How can you check that is a multiple of 9? What resources are available to help you if you are struggling? What resource can you use to check your number formations are correct?	The children are working independently using worksheets. They are developing their use of the seven times table when dividing and multiplication. The children are recalling the use of seven times tables and how to use them for division. The children are using number formation sheets to ensure their number formations are correct throughout their work. The children can also use the strategy three before me. The children can ask three pupils before asking the teacher if they are stuck.	To differentiate the children, the lower ability children would have a worksheet with questions that would be significantly easier. Then the higher ability children would have a worksheet with more difficult questions on. The middle ability group would then have a worksheet with question that are in-between the levels. There is a worksheet that has advanced questions for the more able and talented students to be challenged further. If the children find the worksheet easy, they will be given the next	The teacher can live mark the children's work and give feedback on their workings out throughout the task to ensure the children are completing the work correctly. By doing this the teacher will be able to identify what questions the children are struggling on and then can go through the harder questions as a class or in a group (pitstop).	Live marking the children's books throughout the worksheet to identify if the children are meeting the success criteria and to support the children with their wrong answers.
Pitstops- go through questions as a class and see if the children have a good understanding of the work sheet.	Problem-solving skills- where the children have gone wring and where they can correct their answers. Meeting the success criteria. Using helpful resources.	level of worksheets. This is identified through the teachers live marking or the student identifying that they need to be challenged.	More advanced work sheets are available to challenge the children further to aid progression.		

Live marking

- Live marking identifies mistakes early in their work to prevent repetition of those mistakes.
- Marking the books throughout the lesson allowed me to recognise errors in their work that may be the same for several students. Then I could go over the parts the children were struggling with.

Mathematical targets – letter formations, add using a 3-digit number, and to use division to support multiplication.



Positives:

- Adjust teaching accordingly based on the children's mistakes.
- Talk to students one to one and find out how their learning is going and how they are finding the lesson.
- Spot mistakes early in their work, give feedback and prevent the mistake from happening the whole way through their work.

Negatives:

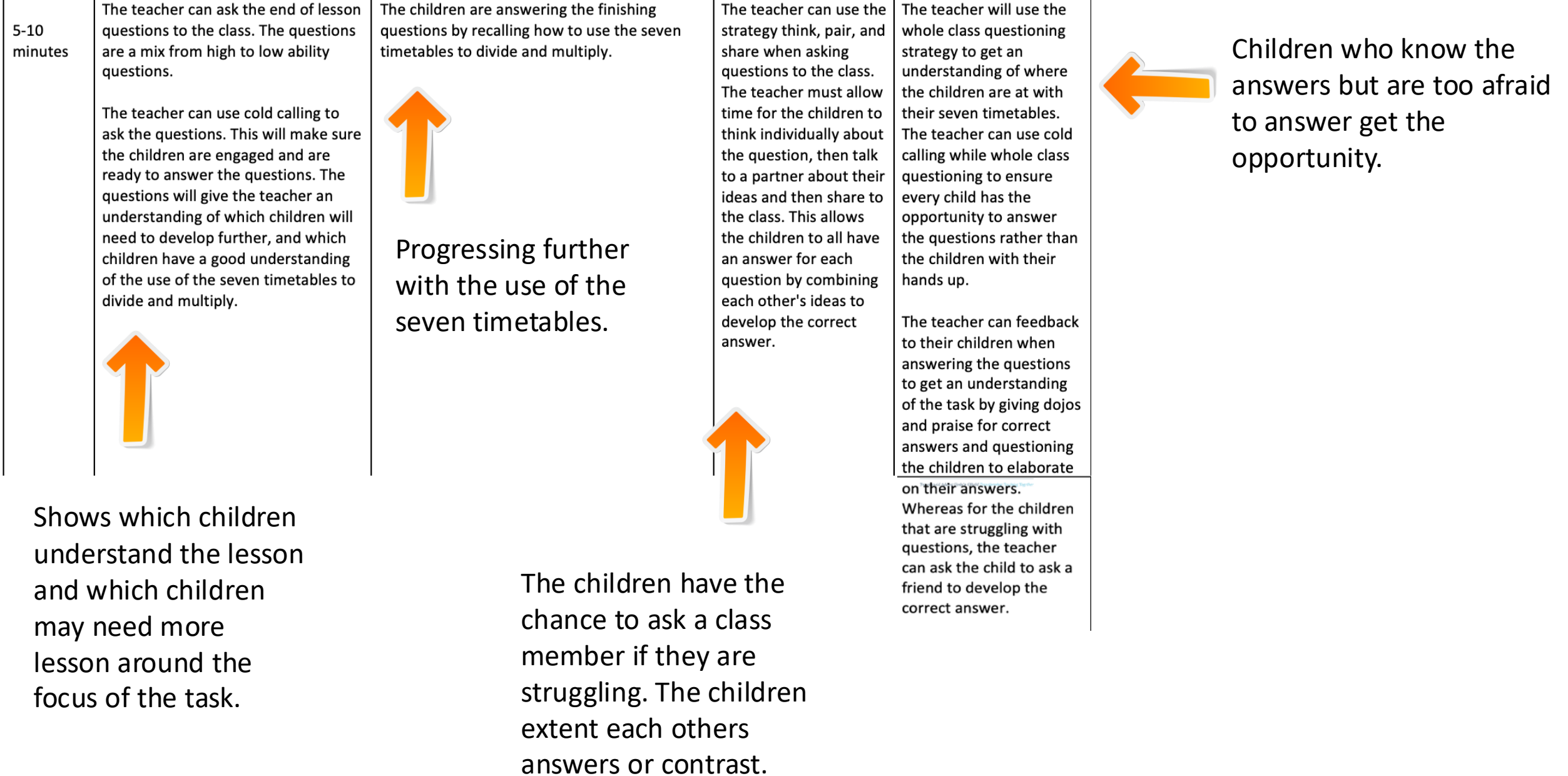
- Not all children get the opportunity to correct their mistakes. More likely to have fewer mistakes throughout their work.
- Challenging to get around a whole class within the lesson.

(Black and Wiliam 1998)

According to Nicol and **Macfarlane-Dick (2006)** **live marking** improves student engagement and motivation with affective feedback through correcting.

Contrastingly, as **stated by Carless (2015)** live marking can lead to surface-level feedback.

Agreeing with **Carless (2015), Guskey (2007)** implies that live marking can be rushed, and the children can receive brief feedback.



Whole class questioning

Whole class questioning shows the pupils' understanding of the topic. Questioning the class before the main task can show the teacher where the common misconceptions may happen.

Cold calling promotes active thinking during whole-class questioning. Rather than asking for a child with their hand up. **Cambridge University (2025)**

- I had a set of questions in my planning that related to the specific learning objective.
- I cold called the class by randomly picking.
- After the introduction to the lesson, I asked these questions to the class to see what their knowledge on the topic was before the main task.
- At the end of the lesson, I cold called these questions again to the class after the main task to compare their prior knowledge to their current knowledge.

This identified whether the children had a benefit from this lesson or whether they did not quite understand.

Positives:

- Increased thinking and participation from the children .
- Improved momentum and pace.
- A greater inclusion of the children's understanding.

Negatives:

- Possibility of a slower answer.
- Increased feeling of fear.
- Selective pupils understanding.



(Nicol and Macfarlane-Dick, 2006)



Whole class questioning allows student progression through active participation. Active participation ensure all children are involved and engaged in their learning. This is essential for student progression (Black and Wiliam, 1998).

Vygotsky (1978) agrees because whole class questioning is a scaffolding approach, influencing engagement increasing the students' progressions.

What is next?



Throughout my practice in schools, I will continue to develop these strategies in the classroom because they were beneficial for understanding of where the learners are at and for the learners to develop their confidence in answering questions and correcting their mistakes throughout their work.



I would like to develop my use of other assessment strategies in the classroom to be able compare how each strategies helped the learners, and which strategies work better for me.



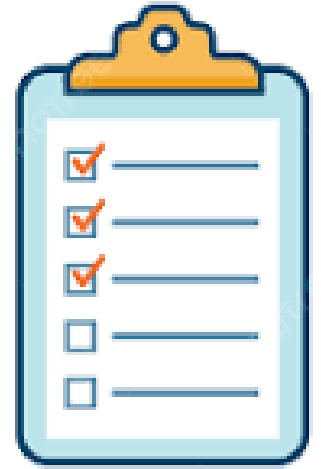
To develop the use of whole class questioning, I will use randomized lollipop sticks to choose a student to answer a question to prevent asking the same children.

Conclusion

To conclude, it has become evident by numerous literature that assessment for learning plays a ginormous role in a learner's progression by providing each individual child with feedback specific to their learning.

The AFL strategies I have use would be beneficial to continue to use in a classroom environment. However, after numerous research it has become evident that most AFL strategies will also have negative points. In my own opinion, I believe that the effectiveness of an AFL strategy relies on the way the students within the classroom learn.

To develop my use of assessment strategies I would like to develop further research in other strategies that include a success criteria check list and peer-assessment. The use of a success criteria check list may be beneficial to my teaching practice and the children's progression because the children are aware of what they need to do to complete the work correctly and then they are able to go back through their work to identify what they need to add or include next time to progress.



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