

ECAD6010-7004-C – Researching the Learning: What, How and Why am I Teaching

Can success criteria be used by learners to create targets to improve, as part of self-assessment?

Word Count: 5492

	Target	What I have done in this assignment.
Target 1	Develop your critical thinking about your practice in order to identify what needs to change in order to make further progress.	Conclusions drawn from research and reflections, to identify what types of tools and techniques I need to adjust to progress in and out of the classroom, including why and how I can make these changes.
Target 2	Continue to develop your understanding of the pedagogical principles to improve teaching and learning.	Critical assessment of own and peer's taught lessons along with reflection of the tools and techniques used to deliver the lesson with recommendations and considerations researched relating to how I can enhance by pedagogical understanding.

How pupils help themselves to learn and develop their critical thinking skills, is an intriguing pedagogical question that has generated much discussion and debate. How can pupils be encouraged to use independence and metacognition to enhance their learning, and develop their ability to authentically adopt Donaldson's (2015) core purposes of becoming, "ambitious, capable learners who are ready to learn throughout their lives" and "enterprising, creative, contributors who are ready to play a full part in life and work"? Mayer et al (2008) explain that the benefits of independent learning can improve academic performance, motivation, confidence and social inclusion which are areas that the researcher's school and class are focused on enhancing. The researcher's placement school faces the challenge of being located in a deprived community, with many of the pupils facing social poverty issues. It is therefore vital that pupils are equipped with key skills such as the ability to analyse and critically evaluate their work, to push themselves to achieve, in order for them to reach their potential. Neu.org (2018) assert that education can make a prodigious difference to children's lives and in turn be the juncture that opens the door to a prosperous future.

Working with a research partner, the discussion arose around the opportunity of exploring whether success criteria (SC) can be used by learners to create targets to improve, as part of self-assessment, particularly as both researchers are placed in year 5 classes, in very different suburban Cardiff primary schools. For the purposes of confidentiality and data protection, the researcher's school will be referred to as 'placement school' and research partner's school will be referred to as 'research school' and all names will be withheld. The placement primary school is a single-form entry with on average, 45% of pupils eligible for free school meals, well above the Welsh average (21%) and 30% of pupils are identified as having additional learning needs (ALN) (Estyn, 2015). The research primary school is three-form entry with on average, 10% of pupils eligible for free school meals and 13% of pupils identified as having ALN, well below the national average of 22% (Estyn, 2015).

Utilising this research study to investigate how SC can be used by pupils to create personalised targets to improve their learning as part of self-assessment will enable the researchers to determine their specificity, attainability and relevance. Black and Wiliam (1998) extol the principle that when pupils take ownership of their own learning and when they are allowed to be a key part of the evaluation process, more effective learning takes place. This research will specifically look at 'more able and talented pupils' (MAT), which will allow an exploration of Estyn's (2008) view that MAT pupils thrive when they are able to adopt personalised approaches to their erudition by being given the chance to make bespoke choices about what they learn and how they learn it. How important is it for MAT

pupils to be given autonomy to drive their own development and what kind of role should the teacher play in supporting this? Eyre (2006, cited in Arthur et al, 2006) explains that for a MAT pupil to thrive, the teacher must create an environment that challenges. If the teacher fails to generate this stimulating environment, they could experience negative repercussions, as MAT pupils become disruptive and difficult. It is the role of the teacher to coach, mentor and challenge all pupils but to clearly differentiate so that MAT pupils are stretched and taken out of their comfort zone.

Gifted pupils need to be roused not only by the tasks that they are given but the way they are expected to function within the classroom, as Shore (cited in Friedman and Shore, 2000) points out, MAT pupils use metacognitive skills to exemplify their work and performance, using strategic thinking to reach a conclusion and synthesize both facts and opinions to draw conclusions. Their thinking can generally be more advanced than the actual practicality of what they do. It is this thinking time that can be key to a MAT pupil being able to express themselves appropriately, which teachers need to consider when establishing SC and targets with a class. Sadler (1989) upholds the importance of a pupil and teacher mutually understanding requirements and expectations, with the teacher providing regular checks during a task to ensure pupil is on track. Pupil's need time to engage with, and as appropriate be part of, constructing a lesson's SC, ensuring that they understand what is expected of them which in turn enables them to self-assess. Using their analytical mindset MAT pupils can review the SC and critically self assess, asking themselves the question, 'have I achieved what I set out to do'? James (1998) proclaims that pupils need to internalise the process of learning for oneself in order to progress and reach the next level, it is not something that teachers can or should do for them.

Encouraging MAT pupils to self-critique and analyse their work is akin to an extension task, which Eyre (1997) encourages as it promotes benefits including independence, reflection, creative and critical thinking as well as the development of self-knowledge and awareness. These are very specific skills, that do not come naturally to all children, and just because a child is MAT, we should not assume that they can instinctively access them. Reflection and self-analysis is a skill that takes time to master and as Black and Wiliam (1998) profess, pupils should be led through the process of self-assessment by perhaps being given a list of questions to ask themselves or by being shown how to do it through modelling, in a small peer group or 1-2-1 with their teacher. Pupils need to be equipped to be able to successfully evaluate their own performance against the agreed criteria and the teacher should play a pivotal role in developing this cognitive equipment. This links succinctly back to MAT pupils developing strong metacognitive appreciation, which Fisher (1990) explains is where pupils understand how they know things and the means by which they contemplate those things.

As Wray (2006, cited in Arthur et al, p63) concludes, children are generally able to take control of their actions when attempting a challenge as they “regulate their own attempts to solve problems”, as their self-awareness starts to take shape and ability to identify the core areas that they need to improve on, start to reach the surface.

By adopting self-assessment as an assessment for learning strategy (AFL), MAT pupils are ultimately able to set their own targets and learning goals, effectively becoming responsible for their own learning. One of the ‘standards’ laid out by ESTYN (2008, p16) expresses that in schools where MAT pupils are nurtured, those pupils are successful at leading their own learning, making “well considered, independent choices about how and what they learn.” Those pupils are adept at generating their own ‘targets for improvement’ and take ownership and accountability in achieving them. Is there a risk though that if given carte blanche to set their own targets, MAT pupils will set a target that is comfortable to them and not challenging enough? Black et al (2003) acknowledged this as an issue as pupils can lack the necessary aptitudes to identify specific problems and set realistic targets to address them. This is where teacher intervention should play a fundamental role in coaching pupils to challenge themselves and how they view their performance. Pupils’ targets need to be aspirational. As Boud (1995) explains, if pupils are responsible for setting their own learning targets then they are more likely to make swift progress in their learning journey, simply because they clearly understand the goals that they are aiming for. Gault (cited in Denby, 2015) proposes that when pupils are eventually able to set their own targets, it empowers them to learn independently without the need of feedback from the teacher, the pupil knows where they need to improve and is able to actively set about achieving it, a skill that MAT pupils should be actively encouraged to embed in their behaviour.

The key objectives of this research were to conduct a lesson study, using an observation schedule, interview and reflection to determine whether SC can act as a positive tool to support pupils in identifying key targets for them to focus on in future lessons. Using the ‘Leuven scale for Involvement’ (**Fig1**), the researchers conducted and recorded an observation to determine pupils’ engagement during the lesson, then interviewed those pupils in order to delve deeper, encouraging them to reflect upon the research lesson itself, allowing them to provide more detailed responses. Three MAT pupils per research lesson, were chosen at random to participate in a case study for this research, their work has been reviewed and assessed to see if targets are specific, attainable and relevant.

(Fig1)**The Leuven Scale for Involvement**

Level	Well-being	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. They 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.

(Laevers, F. Heylen, L. (2003), p16)

A lesson study is a formal opportunity for teachers to work collaboratively by cyclically focusing on a specific area of teaching or learning that needs improvement or enhancement. Collaborating with a fellow researcher to conduct this lesson study, one researcher taught a lesson whilst the other adopted the role of observer, specifically concentrating on the three selected MAT pupils, throughout the entire process. Audio recordings were made of the respective interviews with pupils with elements of the recording transcribed for the purposes of research. Dudley (2015) explains that lesson study as a form of professional development is unique as it hones in on effective learning as opposed to the way the teacher conducts the lesson. The observing teachers must take time to reflect on their observations as well as the interviews that they conduct with the monitored pupils, in order to share their own perspective, knowledge and learnings. This cyclical approach creates the opportunity for adjustments to be made to future lessons as appropriate, and for further reflections to be made.

The approach is a qualitative one, that requires time to be effective, which Stigler and Hiebert (1999) suggest results in small, positive enhancements in teaching. This is, in part, due to the fact that the approach grants teachers a deeper understanding of pupils' learning, enabling them to adapt their lesson plans, teaching and AFL strategies accordingly. By working collaboratively, a broader more dynamic set of ideas can generally be offered to the group, encouraging teachers to try new approaches developing their own personal skillset and supporting the sharing of best practice which is then cascaded to the wider department/school so that the benefits can be utilised by all. McNiff (2002, p141) defines this research approach as being a "transformational process", particularly to the person

conducting the research as they can literally adapt and effect changes to their approach almost immediately.

Within the construct of a lesson study, an observation is the process where a non-participant observer, someone who does not take part in the lesson, monitors a group of individuals to ascertain specific information in a structured way. Dowling (2005) comments that getting inside a child's mind can only truly be achieved through the observation of pupils' actions and through conversations with them. There are many benefits to being a non-participant observer, Thompson (2016) advises that structured observations can be conducted quickly and are straight forward in their implementation. When pupils are monitored in their natural environment, their behaviours may escape the natural consciousness and transpire through body language, behaviour and language. Cohen et al (2007) suggest that pupils may adapt their behaviour due to the attendance of an observer or the researcher may become too attached to the group to remain objective, thus reducing the credibility of the data produced. It is the triangulation of the overall research approach that overcomes this as a range of sources are derived from to draw conclusions (Denzin, 1970). The triangulation approach means using three methods to obtain data; an observation, pupil interviews and researcher reflection. This produces an air of validity, allowing the researcher to capture a variety of dimensions to research outcomes, in order to consider and identify potential ways forward.

As part of this lesson study, a semi-structured interview took place between the researchers and the three observed MAT pupils. Dudley (2011) explains that the interviews add great value to the process as the researcher is able to obtain the pupils' perspective on what went well, what they felt could have gone better, what they learned as well as any ideas to enhance the lesson for the future. The semi-structured interview process allows for structured questions to be asked and for detailed responses to be provided. Cajkler et al (2015) describe the process as allowing the interviewer to delve deeper on a particular response, especially if it resonates with the research question. They also purport that it allows the interviewer the opportunity to request more clarity or to follow up with supplementary questions on the back of a response, particularly if inconsistencies have been identified. Answers will be unique to each pupil which aids the qualitative approach to data collection. Cohen et al (2007) recommend an air of caution when interviewing pupils from the perspective of them perhaps saying things that they think the interviewer wants to hear, rather than demonstrating complete honesty and integrity throughout. They also highlight the ease in which pupils can deviate from the question asked and require gentle steering back on course to ensure responses are relevant.

For this research, Gibbs' (1988) six step reflection model in conjunction with Brookfield's four lenses (1998) have been used to formulate reflections on the back of each lesson, enabling the researchers to apply a structure to their learning and to identify key areas of what went well and what can be improved. Gibbs' (1988) model encourages the honing of reflective focus on 6 key areas; description, feelings, evaluation, analysis, conclusion and action plan. By incorporating Brookfield's four lenses (1998) to this, enables the adoption of a variety of perspectives; the researcher's, the pupil's, the peer's and theoretical literature. Entwined, these models create a robust reflective approach allowing thoughtful consideration regarding how the lesson went from all perspectives, not just the researchers.

There are many ethical considerations that need to be taken into account when conducting lesson study research and as Denzin (1989) advises, the principal obligation should always be to the people being studied rather than the subject or discipline. The British Education Research Association (BERA, 2018) is ultimately responsible for setting out the ethical code adhered to by the education sector, they assert that it is crucial when research is to be conducted that pupils and their guardians receive an explanation, which needs to be written in clear, user friendly language to avoid ambiguity and ensure clarity. The ethics form (appendix 10) completed to support the research undertaken, clearly explains all of the approaches and methods used, including anonymity and confidentiality, management and use of data; adhering to the Data Protection Act (DPA, 2018), pupil and the guardian consent/assent and the mechanism by which pupils can retract their involvement at any time. This is directly attributed to United Nations Convention on the Rights of the Child (UNCRC, 1990): Article 12 which states that children from birth to age 18 have the right to have their wishes known and taken seriously and that children must be able to provide their assent. The UWTSD Research Ethics & Integrity Code of Practice (2017-2020, p4) guideline states that ethical consideration must be given any research that "implicates the involvement of others" and must adhere to all legal, professional and ethical frameworks, which this research complies with.

Lesson study 1 occurred in the placement school and focused on a literacy lesson (appendix 1 and 2) with the learning objective (LO) of expanding sentences using an adjective, when, where, why and how. MAT pupils received specific differentiation; they were expected to incorporate an adjective, when, where, why and how to each of the prescribed sentence starters, whereas the middle and lower ability were asked to incorporate fewer of the requirements. The MAT pupils were also challenged with creating their own sentences, using their own imaginations, as an extension. During the observation the research partner rated all pupils a 5 on the 'Leuven Scale for Involvement' (see Fig1) for both teaching input and the main task (appendix 9) stating that they were all demonstrating strong engagement.

Interestingly this engagement varied, with one of the MAT group (Pupil A) overtly involved, raising their hand at any given opportunity and making deep breathing sounds appearing desperate to be selected, this pupil was also the most vocal during the main task, discussing and sharing their ideas with the table, whether they wanted to hear them or not.

Pupil P, whilst reporting a 5 on the Leuven Scale achieved this in a very different way, displaying strong listening skills, verbal nods and putting their hand up when ready to contribute to the lesson. This pupil also approached whiteboard task during lesson input confidently and independently, able to generate a sentence comfortably. This independence was also evident through the main task as Pupil P didn't seek advice or reassurance from their peers, instead appeared thoughtful and contemplative as they constructed their sentences. Pupil X meanwhile appeared engaged during lesson input although in a much more introverted way, not choosing to put their hand up to volunteer their sentence ideas, but able to respond when cold-called. Pupil X was again confidently able to access the task during the main lesson, working independently and not appearing distracted by their peers who were sharing ideas on the table.

During the lesson plenary, Pupil A was the most animated, keen to share their own sentences as well as eager to put their hand up when asked for ideas to develop peers work with praise or improvements, demonstrating as mentioned earlier via Black and Wiliam (2003) the ability to be critical of their own and peers work. This capacity was not demonstrated by Pupil P or X, who did not volunteer to provide verbal feedback on their peers' sentences, perhaps because they were less comfortable doing this or were less interested in critiquing others. As discussed with all pupils during the interview process (appendix 4), the plenary peer feedback task could have been facilitated differently by using the 'green for growth' green pen approach, with pupils swapping books and marking accordingly. This would have perhaps been a more secure way of ensuring all pupils were able to give and receive feedback from each other, which as previously cited, Shore (2000) says can support the metacognitive abilities of MAT pupils as they hone their analytical and critiquing skills.

The observation question; 'To what level is child engaged/involved in success criteria?' using the 'Leuven Scale for Involvement', drew out some key considerations in relation to the research question, as two of the three observed pupils were rated a 3, with the other pupils being rated a 4 by the research partner. The feedback for both pupils (Pupil A and X) explained that neither appeared to refer to the SC during the lesson and the targets that they set themselves seemed generic and did not specifically correlate with the SC. It is worth noting here that the teacher created the SC based on the lesson's LO and did not consult

with the pupils as to what the criteria should be (appendix 8). Importantly all three pupils marked their work against the SC during the plenary, with only Pupil A overtly referring to the criteria when considering and generating their personal targets. During the interview, Pupils P and X re-confirmed this observation, that they only revisited the SC at the end of the lesson with Pupil A advising that by referring to the criteria during the lesson provided huge benefits, “Because usually my SC would mostly be dots not ticks, so because I used it throughout it helped me more” (appendix 9). This correlates with Estyn’s (2008) stance that MAT pupils who take accountability and ownership of their learning develop more robustly, concurrently achieving one of Donaldson’s (2015) four purposes of being an ‘ambitious, capable learners who are ready to learn throughout their lives’.

The work produced by all three pupils was of a high standard, particularly the sentences that were generated by the teacher’s sentence starters as the pupils appeared to methodically use the five step approach to extending (appendix 5, 6 and 7), however when pupils started to create their own unique sentences, this structure appeared to dissipate. All MAT pupils attempted this extension task, with Pupil P excelling at generating personal ideas that they were able to expand on. Importantly, Pupil P felt that they achieved the first two areas of the success criteria (Fig2), yet failed to self-assess positively for the third, which demonstrates a harshness in critiquing their own work as these sentences were some of Pupil P’s strongest. It is also apparent that the targets set by Pupil P are not directly linked to the success criteria but instead linked to a personal review of the work they did (appendix 5).

(Fig2)

Success Criteria	Achieved (tick)
1. I can use adjectives correctly to extend sentences.	✓
2. I can use when, where, why and how questions to extend sentences.	✓
3. I can create my own sentences and expand them using adjectives, when, where, why and how questions.	...
Targets	
Target 1:	Add more description. 2
Target 2:	Better handwriting 1
Target 3:	Better Presentation. 3

(Pupil P, SC and Targets)

Two of Pupil P’s targets are purely aesthetic, which Holderness (cited in Eyre and McClure eds, 2001, p41) refers to as a “secretarial level” of assessment, a purely surface level evaluation. In comparison, Pupil A has one aesthetic target, whilst Pupil X has none (Fig3).

Pupil A rates their only aesthetic target, 'more punctuation' (appendix 9) as their most important target to focus on in future lessons. From the research group's nine targets, only one directly correlated to the SC, this was from Pupil A, 'a little more adjectives' (appendix 9), which demonstrates that pupils failed to synthesize the SC with their targets, and as confirmed during the interview process, pupils chose instead to look over their work and decide what they needed to improve on, paying only minor attention to the SC. The 'target data' results (**Fig3**) illustrate that whilst the majority of targets were specific and attainable – only 44.4% of pupils' targets were relevant, with that relevance relating to 'better description', 'more adjectives'.

(Fig3)

Target Data					
	Aesthetic / Secretarial	Directly Linked to SC	Specific	Attainable	Relevant
Pupil A	1	1	3	3	2
Pupil P	2	0	3	3	1
Pupil X	0	0	2	2	1
%	33.3%	11.1%	88.8%	88.8%	44.4%

(Target data results)

Whilst the researcher encouraged pupils to refer to the SC to help construct their targets it appears that pupils slipped into a self-assessment process that they were familiar with; looking over their work and deciding whether they had met the targets that they had previously concluded that they needed to achieve. To make this research more specific in future, it would be pertinent to modify it by introducing scaffolding; instructing pupils to look specifically at each SC and if appropriate, create a target for each, taking it step by step, reflecting on the work that they have just produced. It may transpire that pupils generate their targets based on one SC as opposed to all three, which would be their own choice as a result of their own assessment.

Lesson study 2 occurred in the research school and also focused on a literacy lesson (appendix 11 and 12) with the LO concentrating on the use of speech marks, differentiated so that MAT pupils were expected to use them in their own writing, whereas the middle and lower ability were asked to use speech marks in a given piece of text or sentences. As part of the observation which was conducted by the research partner, all three observed pupils were rated a 4 or 5 on the 'Leuven Scale for Involvement' for both teaching input and the main task (appendix 13) detecting that all pupils demonstrated full engagement and rated themselves a 10 for confidence on the topic, when asked by the teacher. Similarly to lesson 1, pupil engagement varied as all three pupils displayed very different attributes, Pupil H, for

example was extremely vocal throughout lesson input and the main task, wanting their voice heard more than any other child. Pupil H put their hand up at any given opportunity and shared their ideas with their own and surrounding tables as often as they could. There is a synergy here with Pupil A in lesson 1, as Pupil H and Pupil A display similar traits which Lee-Corbin and Denicolo (1998) prescribe is due to faster thinking, MAT pupils are able to process information and find answers, whether they are right or wrong is a different point, quicker than most.

Pupil G, the only pupil to be assessed as a 5 (appendix 13) during both lesson input and the main task, approached both parts of the lesson in a much calmer more considered manner. Although when tasked with working in pairs on a whiteboard activity, Pupil G took the lead, scribing and coming up with the ideas then checking with their partner that they were happy, almost demonstrating a mis-match in the pairing, as Pupil G's partner was willing to sit back and let Pupil G do all of the thinking, not necessarily the most appropriate stimulant for the MAT pupil. Mixing abilities has its advantages, but its limitations need to be managed and counteracted so that neither pupils learning is adversely impacted (Teare, 1997). Pupil I displayed a very deep and considered approach in their engagement, paying strict attention and keeping very much to themselves. They choose to complete mini tasks alone and did not engage with other pupils around them and was not impacted by the, at times, enthusiastic discussions taking place around them. All pupils opted for the 'gold' level tasks and were keen to challenge themselves which is evident from the observation notes (appendix 13).

During the main task, all pupils attained a high standard of work, achieving the lesson objective by creating their own sentences utilising speech marks, however only Pupil H actually completed the initial five sentence starters and moved on to the extension task (appendix 15). Pupil H was very chatty during the main task, yet managed to complete the most work, demonstrating a clear understanding of how to use speech marks. Both Pupil I and G were working quietly and contemplatively, ignoring distractions and remaining focused, producing less work but also demonstrating a strong understanding of the LO. The teacher engaged the class to establish the success criteria for the lesson with Pupil G and Pupil H very keen to provide their input. These suggestions were recorded on the whiteboard by the teacher who asked pupils to select the ones most appropriate to them or to create their own if they wished. This approach is one the class performs regularly, however, only Pupil G chose to create their own SC, generating two bespoke ideas out of the three; 'Alan Peat sentences in speech' and 'a variety of punctuation' (**Fig4**). This clearly demonstrates accountability and ownership of their own learning which means because they understand what success looks like they can assess their work accurately (Estyn, 2011)

(Fig 4)

Success Criteria	GT	Achieved (tick)
1.	Alan Peat Sentences in speech	✓
2.	A variety of Punctuation	✓
3.	Speech marks at the beginning and the end	✓
Targets		
Target 1	Try to use commas 2	
Target 2	Try and ~~you~~ use more Alan Peat sentences. 1	
Target 3	Try to use better punctuation 3.	

(Pupil G SC and Targets)

The observation question concerning how involved pupils were in relation to the success criteria resulted in two out of the three pupils being rated a 5 on the 'Leuven Scale for Involvement' by the observer (appendix 13), which is higher in contrast to lesson 1. This is undoubtedly because the teacher held a discussion with the class to produce the SC, giving the MAT pupils an opportunity to engage and advise, whereas in lesson 1, the SC was prescribed. It was ascertained during the interview (appendix 19) that pupils did not generally refer to their SC during the lesson, which was similar to lesson 1. All pupils explained their reason for not referring was because they had "memorised it". Only Pupil G advised that they occasionally referred to the SC during the lesson, with no pupil advising that they used it to help them create their targets. Both Pupil I and H both found it difficult to set targets as they felt that they had achieved the lesson objective and therefore struggled to think of areas of improvement. Pupil H in particular was quite a challenge for the teacher and kept approaching her for validation and support (appendix 13), which links back to Eyre's (2006) point, that if MAT pupils are not challenged enough, they may become disruptive. Pupil H also advised in the interview that they needed a steer from their peers and teacher to stimulate them, which could suggest the need, as previously mentioned, for scaffolding in target setting.

The triangulation approach to obtaining information for this research has helped to generate plausible data. The observations established clear attitudes and engagement levels shown by each pupil throughout the lifecycle of each lesson which in conjunction with the interviews and lesson output created a number of parallels. One conclusion that can be drawn is that regardless as to whether MAT pupils are visibly more engaged and vocal or visibly more focused and introverted, targets have been chosen based on previous experiences and personal views of work produced, irrespective of the SC of that lesson. There was a

consistency in the data achieved in both the placement and research school, regardless of the differing geo-socioeconomic status of the schools. The 'Leuven Scale for Involvement' as an observation tool produced a steady set of data results (**Fig5**), with both sets of MAT pupils producing an average overall score of 4.3333. However most notably, the 'engagement with success criteria' scored more highly in the research school as an element of scaffolding was in place to support its construction, whereas in the placement school, pupils were prescribed the SC based on the LO.

(Fig5)

		Leuven Scale for Involvement Scores				
		Input	Main Task	Plenary	SC	Average
Placement School	Pupil A	5	5	5	4	4.75
	Pupil P	5	5	4	3	4.25
	Pupil X	5	5	3	3	4
	Average	5	5	4	3.3333	4.3333
Research School	Pupil H	5	4	3	5	4.25
	Pupil G	5	5	5	5	5
	Pupil I	4	5	3	3	3.75
	Average	4.6666	4.6666	3.6666	4.3333	4.3333
Total Average		4.8333	4.8333	3.8333	3.8333	4.3333

('Leuven Scale for Involvement' Observation Data)

The SC/target sheets used by the pupils to record their targets were proformas that both sets of MAT pupils were familiar with, however, the ability to analyse and identify whether they needed to establish targets directly linking to the SC was lacking in both groups. The interview process enabled both researchers to dig deeper to understand the choices pupils made in their target setting, enabling similar conclusions to be drawn; both sets of pupils had preconceived ideas as to what literacy targets they needed to focus on, as opposed to using the SC to tailor their targets on the back of what they learnt in that particular lesson. A way of adapting this in future lessons could be to provide the SC at the start of the lesson, then drawing on and referring to it regularly throughout the lesson, perhaps pausing the lesson at a sensible point to ask pupils to conduct a review. This would help develop metacognitive and analysing skills as pupils are shown how to keep referring back to the source in order to draw new conclusions about their work.

Both researchers reflections focused on similar recommendations for future lessons (appendix 3 and 18) regarding the development of MAT pupils by making lesson tasks more challenging and scaffolding target setting in order to equip pupils with the skills required to set measurable, attainable and realistic targets that can help drive their learning and encourage autonomy. As explained earlier, Black and Wiliam (1998) believe that pupils need coaching and development with target setting, they need to be supported to cultivate the requisite skills to be able to independently examine, review and plan their next steps. This consideration links to Vygotsky's (1978) 'Zone of Proximal Development', as guidance and encouragement are needed to develop the child's ability, the skill is too complex for them to master alone. Both researchers have reached this same conclusion through their reflections (appendix 3 and 18), further melding with the consistent results provided by the triangulation approach; observations, interviews and reflections. All pupils believed that they could apply the targets set to future literacy lessons (appendix 4 and 19), but they were not succinctly drawn from the SC to be able to allow the researcher to draw a safe conclusion that success criteria can be used by pupils to improve. By making some minor amendments to the way that the SC is introduced to a lesson could make a significant difference to the way a MAT pupil, and the rest of the class to a certain degree, contemplate their targets for their future development. As Didau (2015, p280) indicates, if SC is "clearly modelled, scaffolded and practiced" it can be utilised as a formative assessment tool, helping the teacher and pupil understand what needs to be learnt in future.

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