

How effective are regular progress checks in terms of AfL within lesson conducted through the lesson study approach?

Gallwch ychwanegu'ch targedau o'ch aseiniad diwethaf gan ddefnyddio'r tabl isod. /

Please add your targets from the previous assignment using the table below.

	Targed/Target	Yr hyn yr wyf wedi'i wneud yn yr aseiniad hwn. What I have done in this assignment.
Targed/Target 1	Greater care is required in proofreading your work to ensure written and grammatical accuracy, as well as clarity of expression.	Proof-read through on each occasion that I altered some that it continued to accurate grammatical and provided clarity of expression.
Targed/Target 2	Revise the correct use of apostrophes of possession as this is a recurring error in your writing.	I revised my apostrophes usage and used this within my writing and checked over this when I proof-read.
Targed/Target 3		

Contents

1A- Aim, focus and purpose of our research

1B- Research content

2- Short overview of relevant literature

3- Explanation of the lesson study

4- Ethical considerations

5A- Lesson study 1 and analysis

5B- Lesson study 2 and analysis

6A Discussion of research findings in related literature and research

6B- Conclusion

6C- Recommendations

1A

Aim, focus and purpose of the research

The purpose proposed by our research question pertained to discuss the effectiveness of progress checks within a one-hour lesson study conducted over the course of two lessons by myself and my fellow researcher. We looked at progress checks in conjunction with Bloom's taxonomy as a an AfL technique. The aim was to focus our attention on the effectiveness of these progress checks and to determine whether the learner's deemed them to be effective. The learner's contribution pertained to a semi-structured interview including lead questions to enable feedback as well as non-participant observation within the classroom environment involved within the lesson study.

1B

Research content

The research was conducted between the two placement schools that myself and my colleague were placed in. My placement school was part one of the lesson study as Bloom's taxonomy is not within the AfL policy. This gave us a good base line for our research to begin. Within the high attainment class there were 28 learners and I chose three learners to participate in the interview progress based on their own level of attainment within this class. I discussed this with my colleague to which they agreed to proceed in a similar way to allow validation to the results of the research. For this class this meant that I would be introducing Bloom's as a new AfL technique. My colleague's placement school persisted with Bloom's as regular progress checks, so our question allowed us to value the effectiveness of these checks to new learners and learners who had experienced them before.

2

Short overview of relevant literature

To establish the effectiveness of progress checks and AfL we needed to encounter the relevant literature surrounding our research. I used a range of resources to enquire about Bloom's, progress checks and AfL. As part of our research question, we looked at Bloom's taxonomy as part of AfL. Assessment for learning is a formative way of creating specific targets through the use of feedback using evidence collated by the teacher. This way of measuring learner's achievement allows the teaching practitioner to provide informed reasons for creating targets for individuals and classes (Clarke, S. 2008). We incorporated progress checks through the use of questions which had a longer wait-time due to the multiple answers that could be given (Rowe, 1974). The use of questions can increase participation within the classroom as this longer wait time allows for the learners to brainstorm giving them more time for cognitive engagement (Rosenshine, 2012). The question allowed a focus on the individual learner and the class which created an opportunity to address their real needs (Black, 2003, pg 35). It also allowed me to deal with any misconceptions and it was a clear instructional way to explore their own learning which facilitates them to become active learners by reflecting on their previous learning and taking responsibility to ask for help.

Bloom's taxonomy incorporates a pyramid of learning that establishes terms of 'lower' and 'higher orders' of thinking and learning. There are 2 versions of Blooms and the original version incorporated six categories, these being: knowledge, comprehension, application, analysis, synthesis, and evaluation. It was originally designed as a step process that allowed learners to progress up each order of thinking to achieve the highest level; evaluation. A revised version was proposed by Anderson et al in 2001 and included verbs such as *remember, understand, apply, analyse, evaluate and create*. This revised taxonomy allowed for the classroom application of learning objectives using these verbs to achieve 'higher order' thinking. The use of these verbs could allow teachers to measure the understanding of learning through a structured way in order for them to prepare and make sure the learners have all the skills necessary for summative assessments. This allowed Bloom's taxonomy to become 'a theory of teaching' rather than a theory of learning. The use of Bloom's taxonomy can increase cognitive challenge for the learners through the use of language that is presented within the questions which could in turn act as this style of progress checks to become a mini plenary (Spendlove, 2015, pg 19). This could in turn enhance the standard of teaching and learning within the classroom by being a way of identifying learners who are in need of extra support or they can be used to summarise key points which could allow for an adjustment in teaching as the teacher practitioners become aware of these issues. As well as acting as a mini plenary, within my research I found that these progress checks made an effective starter as a way of activating prior knowledge. The skill of applying prior knowledge to new situations is one of the sixteen habits of the mind. This enables the learner to look at the situation or task and to complete it using their prior knowledge in order to complete the task (Costa, A and Kallick, B, 2000).

Each part of the pyramid should encompass each other which in terms of summative assessment could allow the teacher to establish where on the pyramid the class are and adjust their teaching accordingly. However, the use of the words 'higher' and 'lower order' of thinking has received some criticisms as Doug Lemov (2017) states that these terms could allow teachers to believe that *"knowledge-based questions, especially via recall and retrieval practice, are the least productive thing they could be doing in class"* (cited in Agarwal, P pg 190). However, research by Butler (2010) showed that retrieval could support a broader level of understanding as the learners were able to transfer the ideas to other contexts. Also,

the retrieval method is found to be useful for exams where the learners answer multiple choice questions.

One criticism of Blooms is that it can be said that it can oversimplify the nature of thought and the overall concept of learning. It is constructivist in nature rather than behaviourist. There is research that allows the difference in difficulty between the lower questions are less difficult than the ones higher. We used questions from Bloom's taxonomy as progress checks within the lesson. Marzano's (2000) model of thinking skills incorporates a wider range of factors that affect how students think and provides a more research-based theory to help teachers improve their students' thinking.

Blooms can be used in set classes as the questions can range between the 6 taxonomies. A disadvantage of this is with a mixed ability class only one goal is produced therefore this could affect the learner's motivation because if that goal is not achievable for them then they are more likely to disengage. Intrinsic motivation is when learners find satisfaction in the skills and knowledge that result. Praise can be a confirmation that one has achieved something worthwhile. Blooms progress checks could be considered a mini goal within the lesson allowing the focus of the lesson to be split into three parts. Each goal for the student would be to have the knowledge and skill to answer correctly a blooms question. this could in turn also effect learner's motivation towards the lesson. This allows them to become achievable (Gardener, 2006, pg 64) which could allow the learners to seek to understand what is involved rather than just committing knowledge to memory (Gardener, 2006, pg 64). There would then be a correlation between goal orientation and active learning. It can also help those of lower attainment re-orient in the task. This then links to the learner's locus of control as they are able to measure their own success in learning against blooms. They are able to recognise their success and then they are able to see themselves capable with can increase their self-esteem allowing them to become healthy and confident individuals (Donaldson, 2012) this then enables them to challenge themselves further indicating the positive learning environment that has been established. (Gardener, 2006, pg 64)

3

Explanation of the lesson study

The methodology used is lesson study research. This form of action research allowed us, as researchers, to secure our own questions based on our interests. Lesson study is a research approach that provides the researcher with evidence that they will then evaluate and reflect upon in order to develop and enhance the next lesson. This happens within a cycle. This allows for a long-term development of goals and to enhance and develop teaching practise in a positive way by maintaining focus on '*the development of teacher practice knowledge*' (Dudley, 2003, pg 2). We used the lesson study methodology to conduct research to support student learning and development within the classroom environment. A strong link is created via the researchers to enable them to critically look at their own teaching practice. The relationships between practitioners has been subjected to criticism with the '*top-down, bottom-up approach*'. Lesson study '*incorporates the top down and bottom-up approach*' (Stigler and Hiebert, 1999). Research has shown that a change in the relationship between researcher and practitioner can unbalance their 'comfortable status quo' (Klein, 1992 cited in Carroll, 2013) leading to 'feelings of discontent' to the theory based around lesson study (Carroll, 2013, pg 14).

Lesson study forms within a continuous cycle and involves teachers who work collaboratively in planning, teaching, observing and reflecting on their own practice within 'research lessons' (Dudley, 2003, pg 2). It is this model that provides CPD for practitioners with could allow them to 'deepen subject knowledge, increase understanding of pedagogy and understand student learning' (Carroll, 2013, pg 23) After discussing the relevant literature surrounding our research question, we were able to apply this to our lessons in order to gain sufficient evidence for our results which could allow us to improve learner's learning. We planned the lessons surrounding three particular learners; our 'case pupils' (Dudley, 2003). The research lessons differ from an everyday classroom lesson because they contain 'special features' (Carroll, 2013, pg 25). Lewis and Tsuchida (1998) outlined some of these differences including the extra time spent planning the details of the lesson and the sharp focus that they create in order to be sufficient in answering the research question. the observation of others teacher, the recording and discussion of the lesson that follows.

The next step was to conduct the lesson while the other researcher observed using our observation sheet (see appendix 1). The observation sheet allowed us to gather evidence of student learning within the first research lesson. This was in order to aid our reflection after the lesson and to enable us to look at areas in which to improve before the second lesson is taught (Carroll, 2013, pg 25). Observation is the responsibility of all practitioner's that work within an educational setting. We observe the learner's skills and developments as well as their interaction with their peers, adults and their environment, including their failures and achievements. The observational methods enable 'school leaders with first-hand evidence about the quality of teaching and learning' (Estyn, 2014, pg 6) which allows to lesson study to enhance teaching practice and the learner's learning. The observation of the class or particular 'case pupils' can be pressure on the learners to perform in a certain way which leads to limitations as a way to gather evidence for the lesson study. Observations can be subjected and susceptible to researcher bias. This can occur because the researcher records what they thought they saw rather than what actually took place or because of the lack of attention by the observer at crucial times (Simpson and Tuson, 2003, pg 18). As researchers, we were able to tackle one of these limitations, the limitation of lack of attention, because we were only looking at the learner's experience and engagement with the progress checks using Bloom's taxonomy verbs therefore as observers we had a clear understanding of the part of the lesson we needed to critically observe.

A semi-structured interview with the three 'case pupils' (Dudley, 2003) was conducted to answer a series of lead questions, this allowed the learners to 'talk at some length and in their own way' (Drever, 2003, pg 10). The 'case pupils' allowed us to become more aware of the individual needs of learners (Dudley, 2003, pg 5). A limitation of this could be that as the interviewers, we could allow unconscious signals to the interviewees. It can be time-consuming should the topic shift and it produce much information that would be difficult to analyse (Drever, 2003, pg 10).

Our observational notes were taken in written electronic qualitative data. The non-participant observations were collected using an observation sheet that we designed which incorporated the progress check and the pupil's response see appendices. The focus group were chosen as a sample because of their attainment levels so that as researchers we could explore the progress checks in terms of their effectiveness in terms of different attainment levels. The sample size pertained to six learners, three from each school. The quantitative data pertained to the number of progress checks that we determined with each lesson which was three and the number of learners involved.

Once the interview had been conducted, we reflected on that lesson using Brookfield's reflective model. Brookfield's model uses four lenses for the critical reflection though the '*use of the autobiographical*', '*students' eyes*'; '*our colleagues' experiences*' and '*theoretical literature*.' Brookfield proclaims that effective classroom practice spurs from reflection of previous pedagogy (Brookfield, 2005).

The use of reflection allows the teaching practitioner to make specific teaching decisions based on an awareness of previous lessons thereby allowing the practitioner to make an informed decision on future planning and lessons. This then enabled us to revise and adjust the lesson. We planned with a second placement school in mind as they had already been accustomed to Bloom's progress checks, there was little planning to be had. We were looking at the learner's response to progress checks to our research pertained to focus 'more on the learners' and 'case pupils' (Department for Education, 2010, pg 4).

4

Ethical considerations

Our ethical considerations were centred around consent and privacy. Parental/ guardian consent was needed for the participants to be observed and interviewed after the lesson. For this we sent out a consent form (see appendix 3) with the learner's had to bring back signed in order to participate within the lesson. The participation was voluntary in order for the participants to maintain their own power of choice and these were obtained before the research lesson took place. We also sent out an information sheets for parents/guardians so that they were sufficiently informed about the research that was going to be conducted. As researchers, we need to adhere to the BERA (2018) guidelines for confidentiality in that the participants and the establishments have a right to anonymity and privacy so for this research the participants will be known as pupil one to six and the establishments will be known as school X and Y as the guidelines state that 'institutions and individual participants to privacy, and should accord them their rights to confidentiality and anonymity.' (BERA, 2018). We also made sure that all the data collected adhered to these guidelines, so the learners were known as Pupil one to three (see appendix 2).

5A

Lesson study 1 results and analysis

The reflective practice observation in the educational sector allows for the school to create 'a shared, culture of improvement, self- evaluation and professional learning' (Estyn 2014, pg 5). The questions could be considered as '*the kind of questions*' needed for an effective classroom practice following a reflection on an individual's teaching practice (Tripp, 1993, pg 48).

Lesson 1 (see appendix 4A) was conducted with a high attainment in a year 7 class. Within this English lesson, the learners were tasked with writing a small speech using the persuasive techniques, AFOREST, that they had learnt last lesson. This lesson then involved the balloon debate in which the learners, after choosing a character with an occupation, had to convince the other learners on their table that they were worthy of a spot in the hot air balloon that was going down. This was an engaging task that all the learners enjoyed. The students had to use this speech to convince the rest of their group to keep them on. All the students engaged well with this task and it allowed for a fun research lesson. The learners achieved the lesson goals by applying prior knowledge and identifying features that would make a successful persuasive speech. The learning was assessment via peer assessment after the main balloon debate in which the learners had to identify the persuasive techniques used within their peer speech. They then had to leave feedback in the form of two stars and a wish. For our research questions three Bloom's progress checks were conducted at the beginning of the lesson to activate prior knowledge for the learner's persuasive techniques, the second was conducted before they were writing the speech and the last was conducted towards the end before the peer assessment task. The progress checks used the verbs associated with Blooms such as *Explain, Explore and Apply* (see appendix 3A).

To reflect on the lessons, we used the reflective model of Brookfield's (2005) and this enabled us to look at our lesson through four lenses critically. The four lenses allow us to reflect critically on our lessons. The last lens pertains to a theoretical discussion based around literature; an in-depth view of the literature has been undertaken during the literature review so within this lens I have summarise the main points of Bloom's taxonomy. Analysing our autobiographies as teachers has fundamental impact and implications on the way we teach (Brookfield, 2005) The first lens being; autobiographical.

Autobiographical.

Within my teaching practice within my current placement school the school policy did not include Bloom's taxonomy so as we began our research the implementation of these as progress checks was foreign. The incorporation of them into my resources was fairly easy and allowed me to develop discussion surrounding the question. The progress checks allowed me to focus the learner's attention to what we were learning about and how we were developing our skills for their upcoming assessment, so it allowed me to discuss the 'bigger picture' with my learners. I was apprehensive about using Bloom's as I was aware that this was a new concept for my learners and wondered how they would respond. This also informed what class I did my research one as I chose the most likely class who would respond to the progress checks and the interview that followed. I used a hands up approach to asking the question related to Bloom's.

Students eyes

To use this reflective model, we incorporated a semi-structured interview to allow us to see how Bloom's taxonomy was implemented within the class and whether they thought it would

be effective to continue. This new concept was explained by me at the beginning of the lesson so that when the learners saw it, they would recognise what I was asking of them. Pertaining to the interview (see appendix 2A) the learners felt that the progress checks helped within the lesson as it reminded them what they had done in the previous lesson and it also helped their motivation because of the positive feedback received from the teacher. The learners felt that the 'hands up' approach worked well because there was a feeling of being 'embarrassed' if they weren't correct (see appendix 2A).

Colleagues views.

Continuing with Brookfield's reflective model, the next stage of the Lesson Study that required consideration was 'our colleagues experience' (2005). Brookfield expresses that this interaction with other professionals can 'unravel the shroud of silence in which our practice is wrapped' (Brookfield, 2005: 200). Within the first lesson, my colleague observed the engagement of the learners in conjunction with the progress checks. She found that the learners were engaged and found that the progress allowed me, during the lesson, to ask as a way to check for understanding before moving onto the next task. Through reflecting upon practice with my colleague it was discovered that at times, some students were so engaged that noise levels increased to a point where concentration was being affected. Whilst reflecting upon this, my colleague identified that a 'wait-time' for silence will be beneficial in ensuring all learners are on task and to avoid any distractions when completing activities (Leahy, B 2019).

5B

Lesson study 2 and analysis

Autobiographical

Lesson study 2 (see appendix 4B) was conducted with a high attainment year 7 class, the same as lesson study 1. This English lesson pertained to the creation of a newspaper article using information that they had collected during the reading of *The Demon Headmaster*. The learners achieved this goal by looking and identifying the features of a newspaper article to which two progress checks were used to activate prior knowledge. Learners then finished the lesson by peer assessing the drafts following the class generated success criteria as a checklist.

The learners were presented with a series of progression steps, which replaced the traditional tool of learning objectives similarly to lesson study one. These steps were presented using Bloom's Taxonomy and were announced in both English and Welsh dialogue. The use of Welsh within this lesson was taken and reflected upon after the semi-structured interview with the three 'case pupils' in which they stated that they would like the progress checks said in both '*Welsh and English because that is our compulsory language in school*' (see appendix 2). The lesson provided good opportunities for the use of these progress checks and the learners engaged with them well.

Students eyes

As seen in lesson study 1, we incorporated the use of semi-structured interviews to look at the lesson and the effectiveness of progress checks. The learners within this class were already aware of Bloom's and progress checks because it is part of the schools AfL policy. This allowed the learners to have a more in-depth view on these checks. Pertaining to the interview, the learners thought that progress checks were a way of making them aware of what to expect within the lesson and could also act as '*a confidence booster*' (see appendix 2). We also asked them about the way they were asked which is the 'hands up' approach.

The learners agreed that this was the best method in which to continue using this approach. A more inclusive approach to progression steps needs to be implemented for effective AFL and this could perhaps be through random learner selection, name generators or individual answer cards for all learners

Colleagues views

The progress checks worked in a similar way to lesson study one. However, during the lesson because of the need to finish the lesson, my colleague found that she began to rush the progress checks to which to make them effective, we found that there should've been a longer wait time. This is supported by the use of questions can increase participation within the classroom as the longer wait time allows for the learners to brainstorm giving them more time for cognitive engagement (Rosenshine, 2012). Apart from this, the engagement of the learners was positive and allowed us to cement our findings with our research into progress checks. During this discussion with colleagues it was identified that not all learners were focused on important tasks which resulted in pupils not having full comprehension during progression checks.

Theoretical

To end the reflection part of this lesson study we looked at Bloom's and progress checks in a theoretical based discussion. It is pronounced that a vital element of critical reflection is to read a theoretical analysis to allow us to switch out interpretive frames, so we are able to view a situation differently (Brookfield, 2005). I looked at Bloom's and progress checks through a critical lens to finish and found that regular progress checks cemented the learning of the lesson and Bloom's taxonomy allowed for the progression along certain questions using the verbs to track the learners movement and could also be used to set next steps for individual learners as well as the class as a whole. We looked through the critical lens in reference to our literature review.

6

Discussion of research findings in relation to related literature and research

As we conducted our research and evaluated it critically, we found that the learner's level of engagement with the progress checks was high. Progress checks were a good way for the class to focus on their goals and to answer direct questioning. They also successfully acted as a mini plenary and could also be used as an effective starter task to activate prior knowledge. This allows for the learners to practice their new knowledge in small sections; this is because our working memory only allows for so much information to be obtained (Rosenshine, 2012, pg 13). The use of these progress checks allows the information to flow from short term memory to long term memory via rehearsal. The learners commented that the praise during the progress checks helped to determine the goal of the lesson or that part of the lesson. The use of this praise allowed a reinforcement of the lesson goal in answering the Bloom's progress check effectively. This could enhance the motivation of the learners. However, Brophy (1981) made a criticism about teacher praise is not equal to positive reinforcement because praise can be used in a nonstrategic manner and is often not intended or used to reinforce student behaviour. The use of positive feedback after these progress checks allowed us, as teaching practitioners to use positive praise in a strategic manner to enhance the motivation of the class and individual learners.

We found that the use of three questions within the lesson in terms of progress checks worked well with the learners as Rosenshine (2003) states that these small bits of information would allow the learners to process them effectively. After these small steps, we used the progress checks to check for understanding. The language used within the Bloom's progress checks motivated the learners even if they did feel under pressure about answering the progress checks (See appendix 2A).

The use of informing the class about the progress checks in lesson study one allowed them to prepare for the lesson. The learners preferred the hands up approach because they didn't feel confident enough to answer if the teacher randomly choose them. As seen in appendix 2B, the learners in lesson study 1 thought that those who were not sure of the answer could learn from their peers who did know. This allowed the progress checks to enter the social side of the classroom with the appearance of the 'more knowledgeable other' (Vygotsky, 2018). The MKO refers to a person of higher attainment, this could allow the progress checks to have a deeper meaning because the answer has come from their peers allowing for that social connection rather than the teacher element of the classroom to rein.

From the students interviews we found that progress checks are considered to be a useful way to allow students to check their own understanding. We found that the students preferred the hands up approach because they didn't feel so pressured to recall a response. One of the suggestions by the students in the interview was that these progress checks could become a small worksheet that they stick in at the end of the lesson. This could act as a plenary of every lesson, however, to do this towards the end of the lesson, it could be too late to provide individual help for those students who may need extra support, but this is where differentiation towards the class.

6B

Conclusion

The methods used when collecting the data were; semi-structured interviews with lead questions and observation sheets. The way in which we obtained our data was through the use of observations and observation sheets. This method allowed us to obtain additional information during the lesson about the engagement of the learners in terms of progress checks. The qualitative manner of the written reports results provide short, concise notes on a singular incident which allows for a sharp focus during the lesson study by the observer. Some advantages of this method of observation is that it implements an in-depth investigation into the learner's situation which provides an emphasis on reality. This method has a way of viewing and pin-pointing abstract ideas in practical ways. As well as a way of providing instant feedback from the class it also allows us, as researchers, to gain direct access to events or interactions that allow us to focus on our research (Simpson and Tuson, 1995, pg 16). Observations can also allow us to gain permanent and systematic records of social interactions and can be used to enrich data supplied by other means as well as having the ability to be 'extremely varied' (Simpson and Tuson, 1995, pg 16).

As a practitioner there may be an instance of bias if there is an existing relationship with the child similar to Piaget's research in 1936 however, during our research we reduced the element of bias as our placement schools were different therefore the observer didn't know the class or the learner so there was no 'existing relationship'.

We piloted semi-structured interviews as we conducted our research. The strengths of using this kind of interview allowed us to be able to talk in depth for us to be able to have sufficient results for the discussion to answer our research question and it can be easy to record as we found when we used electronic devices. There are limitations in using this type of interview however, one of these is that the interviewer could give out non-verbal communication such as eye contact, timing of the question and tone of voice is important when asking the question. We tackled the limitation of the depth of information by adding lead questions to our interview in order to keep the learners on task and the discussion centred around our research question. Semi-structured interviews also can contain issues of validity as the researchers who are collecting the data do not know if the respondent is lying or have imperfect recall. We reduced the risk of imperfect recall because we enabled the interview to take place straight after the lesson. As the interview was conducted in focus group, this then raised other issues surround focus groups. The learners may have behaved differently as they were in a group but we, again, reduced the risk of this by only choosing three participants instead of the usual six to eight that usually occurs within focus groups.

Should I conduct this type of research again and considering the time limit for the research I would conduct it through a variety of age groups and class attainment so it would be more valid in order to generalise our findings. However, our research was conducted with the same level of attainment and the same age group so we could only generalise our research in accordance to high attainment Year 7 classes. This makes it extremely difficult to generalise the findings to outside the case study as we know that each child is different.

6C

Recommendations

The suggestions by the learners made valid and informed points. As well as using the progress worksheets as a way to aid revision, the learners also suggested that the progress checks became more visual as 'it is motivation when we see something on the slide that is

bright and bold.' (see appendix 2A- Pupil 2). They also suggested that the progress boxes on the slide was helpful because it reminded the learners what skills they were supposed to be learning or working on. The quantitative number of three progress checks was the object of discussion within the semi-structured interview. There was a difference of opinion in this as pupil 3 thought there were enough progress checks within the lesson whereas pupil 1 believed that fewer was better. Pupil 3 thought there was enough progress checks because they fitted nicely in with the tasks with allowed for focus. Some of the other recommendations made by the students where that we could have said the progress checks in Welsh because it helps them to improve their own Welsh and they engaged with the progress checks well.

Word count: 5371

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