Which classroom management strategies are most effective to obtain pupils immediate attention?

	Target	What I have done in this assignment.
Target 1	Ensure you synthesise and reflect - you have done this in a few places but in other places it could be further extended.	I have tried to synthesise more during this assignment. I have tried to be more reflective also.
Target 2	Be as specific as possible when making recommendations - this will allow you to show knowledge and understanding.	I have limited the number of recommendations that I have made in order to try and be more specific.
Target 3	Please proof read your work as I am sure you would have corrected these prior to submission.	I have proof read my work as best I can.

Student number: 1500479

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Introduction

The purpose of this report is to evidence the effectiveness of research as a means of reflection that can aid the improvement of future practice. The topic centred within this research report involves behaviour management strategies used within the classroom environment, specifically attention-gaining strategies. The aim of this lesson study research is to investigate whether any of the three chosen classroom management techniques implemented within a lesson, obtain the immediate attention of the learners. The study will use lesson study (observation), focus group interviews and reflection, to inform current and future practice concerning effective classroom management techniques. Tripp (2012) states the importance of reflection in relation to professional development and judgement, citing it to be fundamental, and thus research is another approach to being a reflective practitioner and to improve professional judgement.

The environment in which this lesson study was conducted was within a year 4/5 class in a community primary school within Swansea. The school is currently rated as a 'Green' support school and has over 400 children enrolled, with almost a quarter of these children receiving free school meals, (My local school, 2018). The class contains 30 pupils with a split of 27 year 4 pupils and 3 year 5 pupils. Of these pupils four are English as an additional language (EAL) students and three have an additional learning need (ALN) statement with a fourth under review. There is a mixed range of attainment levels within the class, and currently children swap for mathematics and spelling lessons.

Literature review

This report focuses on attention gaining strategies within the classroom, a topic which relates to many of the approaches and theories that connect classroom management, effective education environments and holistic development, (Bondy et al., 2007). Attention gaining strategies can be used for a variety of purposes, including ensuring attention during whole class instruction, reinforcing engagement during the lesson, and to monitor progress, via mini plenaries for example, (Nagro et al., 2018). Due to the specific enquiry of this report, literature directly relating to the research question is limited, however the areas surrounding the research question have been researched more thoroughly and have received greater contributions. It is for this reason that this literature review will discuss the broader topics which relate to the research question such as effective classroom management and the link to attention gaining strategies, and the relationship between attention and attainment which relates to the three attainment levels of the participants.

It is evident that there is a relationship between classroom management and effective learning and engagement, which is apparent in the productivity of students in classes where

the teacher has created an environment where behaviour is managed efficiently, (Bondy et al., 2007). Classroom management and behaviour within the classroom is one of the leading issues that teachers highlight as problematic, (Alter and Haydon, 2017), and managing the classroom environment ensures that the lesson and the process of learning are uninterrupted, and that the environment is optimal for the students remain on task, and that their educational performance is improved, (Parsonson, 2012; Partin, 2009). Nagro et al (2018) encourage being proactive in implementing a range of whole class strategies, including attention gaining strategies, rewards (positive reinforcement), and feedback, in order to be successful in maintaining the positive classroom environment, and reducing the need to think of implementing under pressure. The idea of targeting whole class behaviour is something which Parsonson (2012) also state is important; as early intervention is required to prevent the development of minor disruption into larger scale inappropriate classroom behaviour which can affect the learning environment and the engagement levels of the class.

However, this leads onto another important point within classroom management; the definitions for on-task and student engagement versus off-task and disruptive. On-task behaviour is the definition provided when children are collaborating with the teacher or completing what the teacher has asked them to do, whilst engagement is solely when this on task behaviour occurs during the assigned time that the teacher has provided, (Cangelosi, 2013). Off-task behaviour is defined as any time the students are not completing the assigned task, for example daydreaming, or continuing to work whilst the teacher is talking, so this behaviour only affects their own engagement level, which differs to disruptive behaviour which is defined as behaviour which inhibits other children being on-task (Cangelosi, 2013). This coincides with Partin (2009) who suggests that whilst teachers may be actively teaching, this does not indicate that the children are listening or learning and state that higher attaining students, good readers and females often display higher on-task behaviour. This is something which will be further discussed during the analysis of the children's behaviour from the observation.

Also of interest was whether there is a relationship between attention and attainment, as the sample of children for this study was chosen to be a representative sample of the different levels of attainment present in each class. Duncan and Magnuson (2011) define attention as 'the ability to control impulses and focus on tasks' (p.49), whilst others highlight the importance of this attentional control and focus as essential skills when measuring academic results and educational learning (May et al., 2013; McClelland, Morrison and Holmes, 2000). Many studies have found particular links between attention and academic achievement stating that children who show positive attention skills also tend to show greater advancement in terms of academia, (Department for Education, 2012; Duncan and Magnuson, 2011; Magnuson et al., 2016; Rabiner, Godwin and Dodge, 2016). However, there

is some disagreement between when this relationship is stronger, with some stating that the relationship is more prominent at an earlier age (Duncan and Magnuson, 2011; Magnuson et al., 2016), whilst others believe it is more obvious later on at key stages 2 and 3, (Department for Education, 2012). However, they all conclude that that the importance of the skill of retaining attention is unquestionable, due to the predications that can be made when comparing attention and achievement in terms of academic outcomes.

The Department for Education (2012), establish that children with attention problems have lesser school engagement, which Magnuson et al., (2016) say will then affect their academic achievement due to spending less time engaging with academic tasks. They also correlate engagement levels with wellbeing and positive friendships, something which is supported by Rabiner, Godwin and Dodge (2016) who emphasise the decline in academic grades for children with low attention and peer relationships. There are some limitations in this area, as despite this influx of research confirming the relationship between attention and academic performance, Rabiner, Godwin and Dodge (2016) highlight that there is still more to be done to inform why and how achievement is effected by attention skills and other factors.

Methodology

The methodology used within this investigation is Lesson Study, which is a type of research methodology that originated in Japan, involving the analysis and study of pedagogy within a lesson, (Fernandez and Yoshida, 2004; Cerbin, 2011). The lesson is co-planned with another professional (usually teacher) to focus on a specific topic or area within the lesson, (Godfrey et al, 2019). It can then be used to aid the improvement of professional development, as teachers and/or student teachers are required to work collaboratively together to reflect on the chosen area, and subsequently develop their pedagogy which consequently should positively impact the learning and progress of the pupils, (Archer, 2016; Lee and Tan, 2020). The lesson study within this report is comprised of observation of the behaviour of three children whilst three attention gaining strategies are implemented within the class, followed by focus group interviews with these children, and finally a discussion with the other researchers about the process and results of the lesson study in order to reflect and make any necessary changes. The focus group for this study was chosen via judgemental sampling, where the researcher has chosen the group as a representative sample of the class, and the different levels of attainment within it, (Cohen, Manion and Morrison, 2007; Elfil and Negida, 2017).

The observation of children is one of the essential roles of a teacher. It can provide evidence of the progress and development of children, be part of formative assessment, and highlight any misconceptions which can then be addressed in order to advance progress, (Hobart and Frankel, 2009). Observations can be either qualitative, where the meaning

behind the experiences is explored and analysed, or quantitative, where the numerical results are explored and analysed, (Dawson, 2009; Kumar, 2014). The observation methodology within this study is both qualitative and quantitative as it focuses on the researchers' interpretation of the reaction of children to attention gaining strategies in the authentic environment of a standard lesson, but this interpretation of attention is also rated on a scale inspired by the Leuven Involvement scale. The 5-point scale was developed by Ferre Laevers in order to assess children and adult involvement levels, and has been adapted in this report as a 4-point scale (Appendix 1, page 5), to assess children's attention, (Laevers, 2000).

Thus, a positive of this type of observation it that it allows researchers to view behaviour live in an authentic context, (Babbie, 2012). However, it is essential that we acknowledge that observer bias can be a factor in this method, and to avoid this, the observations will be recorded by the two impartial researchers who are unfamiliar to the children and do not have preconceived ideas about the children they are observing, (Hobart and Frankel, 2009). Observation that the researchers make can be from a participant or non-participant perspective, and for this report the observations were from a non-participant perspective, where the other researchers within the lesson study have transcribed notes on the behaviour of the participants, (Pellegrini, Hooch and Symons, 2013). However, it must be recognised that sometimes participants will act in a certain way, modifying their behaviour to what they think that the researcher is observing, known as the 'Hawthorne effect', (Wickström and Bendix, 2000). To avoid this, participants will not be informed of the exact nature of the research question, and instead will be provided with an information sheet which explains that the researcher will be looking at the lesson as a whole.

After the stage of observation, focus group interviews will be conducted, where discussion around a semi-structured set of questions will be facilitated in order to obtain the pupils' opinions towards the attention gaining strategies implemented within the lesson, whilst also allowing for unexpected answers, (Cohen, Manion and Morrison, 2007; Kumar, 2014). The record of discussion will be kept on a pre-created questionnaire filled in by the researchers, and all children will have the opportunity to discuss and ask questions, (Kumar, 2014), with the discussion then being used as qualitative data that can be analysed for the report. The advantages of group interviews for children are that they promote a greater range of answers due to the possibility of discussions emerging, and that they are less intimidating, (Cohen, Manion and Morrison, 2007), In this study, to ensure that the environment comfortable and is not intimidating, only two of the three researchers will be present during the interviews. One disadvantage of this method is that sometimes only one opinion will govern the discussion, and that some participants may feel they cannot offer an opinion that differs to the group members, (Cohen, Manion and Morrison, 2007). However,

the researchers will try to avoid this occurring by ensuring they ask each of the children to contribute to the questioning, and to not talk over on another.

The process and data obtained will then be reflected on using the Kolb (1984) cyclical model of reflection, where a concrete experience will be discussed, evaluated and improvements can be planned and then implemented. However, we will ensure that the reflection element of the Kolb model is comprehensive by subsequently using Brookfield's four lenses of reflection where the researcher considers the views of themselves, their colleagues, the participants and the literature, (Brookfield, 1998). This is because it is a collaborative investigation with 2 other researchers (PGCE students) and with children, so it seems appropriate to reflect not only on our own experience, but also on the experience of the co-researchers, and the pupils, before comparing with the literature. Egeberg and McConney (2018) highlight listening to the views and beliefs of children as an essential perspective when discussing effective classroom management strategies and state that whilst some may question whether the views of these children may be legitimate, their study indicates that it is an invaluable insight into classroom management and effective teaching. It is important to note that this cycle will be reproduced 3 times, and after each reflection slight adaptations may be made to ensure that implementation and observation is effective. The data collected from the observation will be triangulated with interviews and reflection to improve the validity and reliability of the study, (Golafshani, 2003; Thurmond, 2001).

Ethical considerations

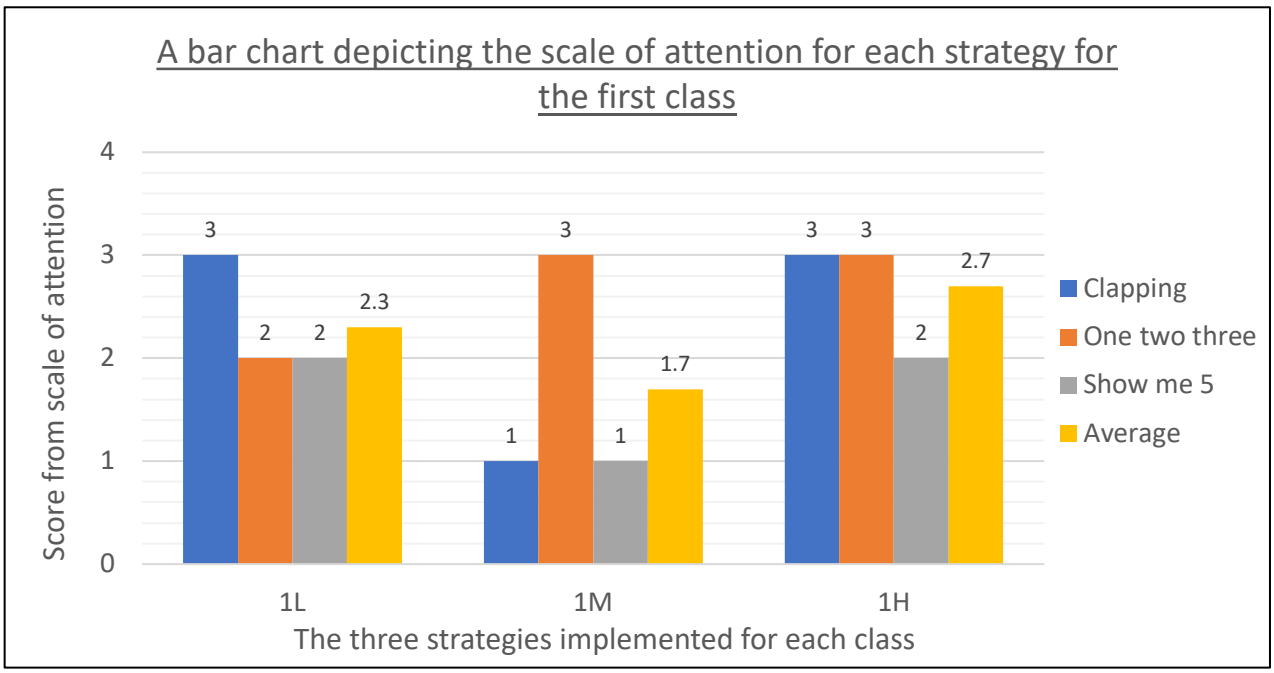
There are many ethical concerns that must be assessed when conducting research. Anticipated risks which may have adverse effects upon the participants, the researcher(s) or the institution must be discussed and the steps to address and minimise them must be considered. It is important to note that all children participating in this study have given verbal assent throughout, and the parents of these children have provided written consent. For the purpose of this report an example of a risk to each of the stakeholders within the study, and the steps taken to mitigate the risk, will be outlined below.

One of the main risks that must be considered for participants is the risk to anonymity, which can be mitigated by ensuring that researchers conform to British Educational Research Association (BERA) guidelines, ensuring that all participants' names are changed to ensure confidentiality and anonymity, (*BERA, 2018; 21).* For the purpose of this report participants will be referred to as Pupils A-I. One of the risks to the researcher includes the possibility of bias in the recording of data, which is mitigated within this investigation by the triangulation of research as more than one method is being used; lesson

observation, focus group interviews and lesson reflection. Lastly, one of the risks to the institution would be the reputation of the university being tarnished which can be mitigated by ensuring that full ethical approval is received before conducting the study, and that a professional manner is implemented at all times.

Results and analysis

Figure 1: Results of the first class



The results of each strategy for the children from the first lesson study within this report can be seen in the figure above and in Appendix 1. The bar coloured yellow is the average score for the three strategies for each child. The interview answers for these children can be seen in Appendix 2, and the reflection for this lesson can be seen in Appendix 3. All of the children were keen to participate and were confident when answering the interview questions.

The first child labelled 1L is a lower attaining child, 1M is a middle attaining child and 1H is a higher attaining child, all chosen as a representative sample of the class. The total scores indicate that One Two Three (OTT) was the most effective strategy for this class with a score of 8, whilst Rhythm clapping (RC) was second with a score of 7, and Show me 5 (Sm5) was least effective for gaining attention with a score of 5.

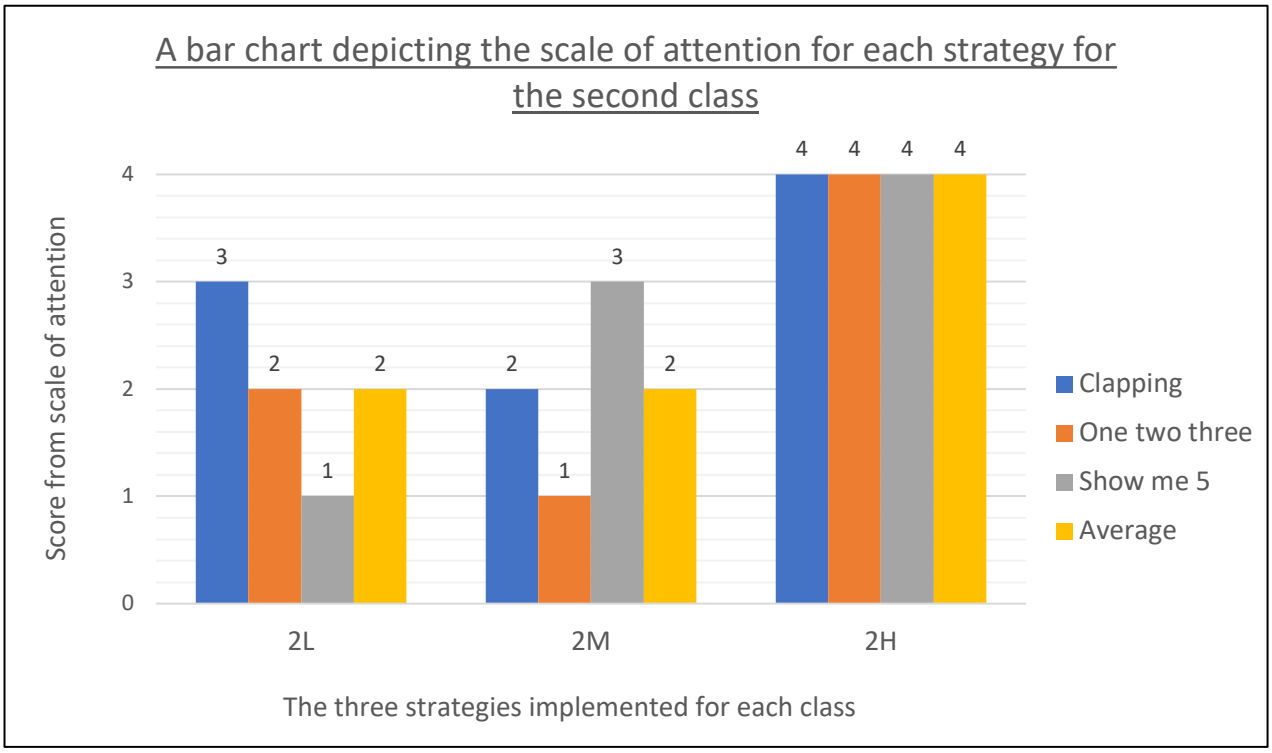
As depicted, the lower attaining child's highest score on our score of attention was for the RC method (3), and they scored equally on the OTT, and Sm5 methods (2), with an average score of 2.3 on our scale of attention. Despite scoring highest on the RC, they

stated their preferred method within the focus group interview was OTT, and the method they stated to like the least was the RC (Appendix 2, questions 12 & 13). The said the reason for liking OTT was because they liked the loud noise, and they also stated that they knew they would stop for this and the RC due to the need to respond back. They also initially stated that they 'think' they stopped for Sm5, but then when asked if there were any strategies that did not stop them immediately this child concluded that Sm5 did not stop them immediately because they sometimes cannot see it (Appendix 2, questions 7 & 10). It is also interesting to note that while the child did meet many of the desired actions from our attention scale, that they did not meet the 'no talking' point for any of the strategies and instead continued to talk quietly throughout the lesson (Appendix 1, pages 2-4).

The middle attaining child's highest score on our score of attention was OTT (3), and they too scored equally for the two remaining methods (1) but had a lower average score for all three methods of 1.7 on our scale of attention. These results do not correspond with the interview answers given by the child as they stated that clapping was their preferred method, and that they did not like OTT due to it being too fast (Appendix 2, questions 12 & 13). Unlike the first child this child was silent throughout the implementation of all three strategies, but for RC and Sm5, this was the only action point on the scale of attention that was met. This is contradictory to their interview as they stated that they stopped for Sm5, and 'froze' during clapping, as well as completing the required actions for both when they did not clap back fully, or show 5 (Appendix 2, questions 6 & 7). It was also interesting that this child was only looking at the teacher for the OTT strategy, which was coincidentally their highest scoring, and during the interview they also identified 'looking at the teacher' as the action required for this strategy (Appendix 1 and Appendix 2, question 5).

The higher attaining child's highest score on our score of attention was jointly on RC and OTT (3), and they scored lower on the remaining method of Sm5 (2) and had the highest average score for all three methods of 2.7 on our scale of attention. This corresponds to the interview results for the preference for this child, where they stated that OTT is their favourite strategy, while Sm5 was their least favourite due to the requirement to hold their hand in the air causing their arm to 'get tired' and that they did not respond to this one due to it being too quiet and not seeing it (Appendix 2, questions 12 & 13). They also stated that they stopped for OTT and the RC due to them being 'noisy' (Appendix 2, questions 8 & 9). This child was also able to recall the desired actions for each of the strategies, stating the need to stand still, or 'stick like glue' as an action despite not meeting this action for any of the strategies. They also did not look at the teacher for Sm5, despite stating that this was a requirement of the strategy, (Appendix 1 and Appendix 2, question 7).

Figure 2: Results of the second class



The results of each strategy for the children from the second lesson study within this report can be seen in the figure above and in Appendix 4. The interview answers for these children can be seen in Appendix 5, and the reflection for this lesson can be seen in Appendix 6.

The first child labelled 2L is a lower attaining child, 2M is a middle attaining child and 2H is a higher attaining child, all chosen as a representative sample of the class. The total scores indicate that RC was the most effective strategy for this class with a score of 9, whilst Sm5 was second with a score of 8, and OTT was least effective for gaining attention with a score of 7.

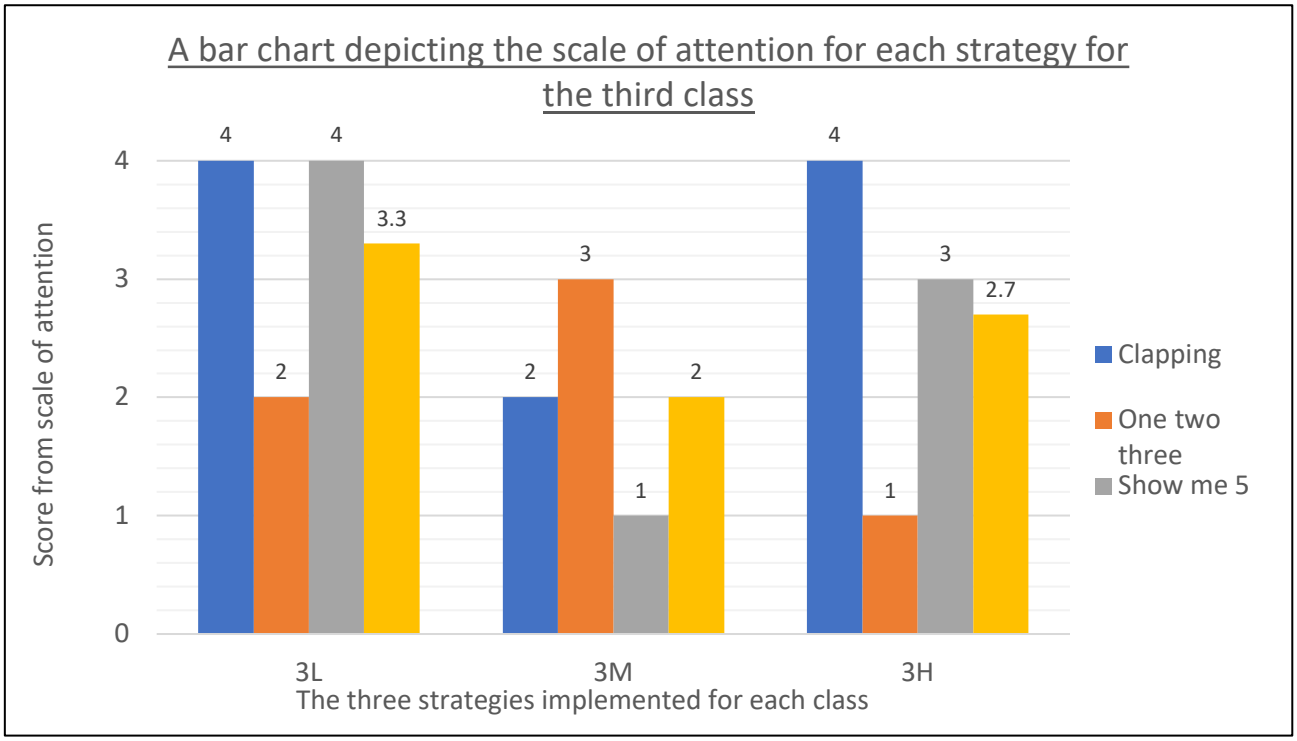
As depicted, the lower attaining child's highest score on our score of attention was for the RC method (3), followed by the OTT strategy (2), whilst Sm 5 (1) was their lowest score, with an average score of 2 on our scale of attention. It is interesting that during the interview this child recalled the RC, their highest scoring method, when asked what strategies were used (Appendix 4 and Appendix 5 question 3). This child also reported that Sm5 was their least favourite method, which correlates with the score they gained for it, however when asked what they did, this child seemed to report the required action rather than what they did personally. They also stated that they did not stop for any of the methods, asserting that he continues to write the word or sentence he is on, which is something that many of the other children have also reported (Appendix 5, Question 10).

The middle attaining child's highest score on our score of attention was for the Sm5 method (3), followed by the RC (2), whilst OTT (1) was their lowest score, with an average

score of 2 on our scale of attention. Despite it being the lowest score for this child, they rated the OTT method as their most preferred, (Appendix 5, question 13). They also initially declared that they stop for all of the methods, before rephrasing to state that they do pay attention, but after they finish the sentence or word they are on (Appendix 5, questions 10 & 11)., which may correlate with them not talking for any of the implemented strategies but continuing to write for the RC and OTT strategies (Appendix 4).

The higher attaining child's scored full marks (4) for all three strategies and thus their average was the highest for the group and was also 4 on our scale of attention. They stated that all of the strategies make them stop, however one point of interest was that he declared that he did not clap back to the RC method (Appendix 5, question 6), despite the observer noting that he had but was a little late in doing so (Appendix 4). This could be a misinterpretation where the child suggesting that usually he does not repeat it back. He also said that the RC is the most effective to make him stop and listen as he can hear the beat, but his preference was OTT. Similarly, to 1H from the first lesson he stated that Sm5 was his least favourite due to his arm aching when holding it up (Appendix 5, questions 8, 12 & 13).

Figure 3: Results of the third class



The results of each strategy for the children from the third lesson study within this report can be seen in the figure above and in Appendix 7. The interview answers for these children can be seen in Appendix 8, and the reflection for this lesson can be seen in Appendix 9.

The first child labelled 3L is a lower attaining child, 3M is a middle attaining child and

3H is a higher attaining child, all chosen as a representative sample of the class. The total scores indicate that RC was the most effective strategy for this class with a score of 10, whilst Sm5 was second with a score of 8, and OTT was least effective for gaining attention with a score of 6.

As depicted, the lower attaining child's highest score on our score of attention was jointly for the RC method (4) and the Sm5 method (4), whilst they scored lower on the OTT method, with the highest average score of 3.3 on our scale of attention. This is surprising as during the focus interview they answered that their preferred method would be OTT, and that their least favourite would be Sm5 as they do not stop as quickly, (Appendix 8, questions 12 & 13). Despite scoring highly on the RC and Sm5 methods, she also stated that she did not stop immediately for any of the strategies due to needing to process when she is already completing a task, (Appendix 8, questions 8-12). This differs to the observations made by the researcher, (Appendix 7). She also stated that she did not clap back during the first strategy (Appendix 8, question 6) which again differs to the observations made by the researcher (Appendix 7), however she did recall correctly the reasons why she did not react immediately to the second strategy (Appendix 8, question 7).

The middle attaining child's highest score on our score of attention was for OTT (3), followed by the RC method (2), and their lowest score for Sm5 (1), with an average score for all three methods of 2 on our scale of attention. In relation to the scores from the attention scale, this child rated the Sm5 strategy as their least favourite, and also provided reasons why they did not stop for this strategy immediately, (Appendix 8, questions 10, 11 & 13). Like many of the other children within this study they also have stated that a lot of the time the reason they do not stop and respond is due to wanting to complete the sentence they are on, (Appendix 8, question 11). Interestingly, he also stated the reason why he feels he stopped for the RC strategy was because it is a familiar strategy used throughout the school, (Appendix 8, question 8 & 9).

The higher attaining child's highest score on our score of attention was for the RC method (4), followed by Sm5 (3, and their lowest score was for OTT (1). They had an average score for all three methods of 2.7 on our scale of attention. Again, this child preferred the OTT strategy despite it being their lowest scoring method and stated that it is the one that makes them stop immediately because it is loud, (Appendix 8, questions 8, 9 & 12). They also stated that their least favourite strategy was Sm5, and that this strategy was the one that they felt they did not stop for, as well as the clapping strategy due to not hearing the original clap, (Appendix 8, questions 10, 11 & 13).

Figure 4: Results of the lower attaining children

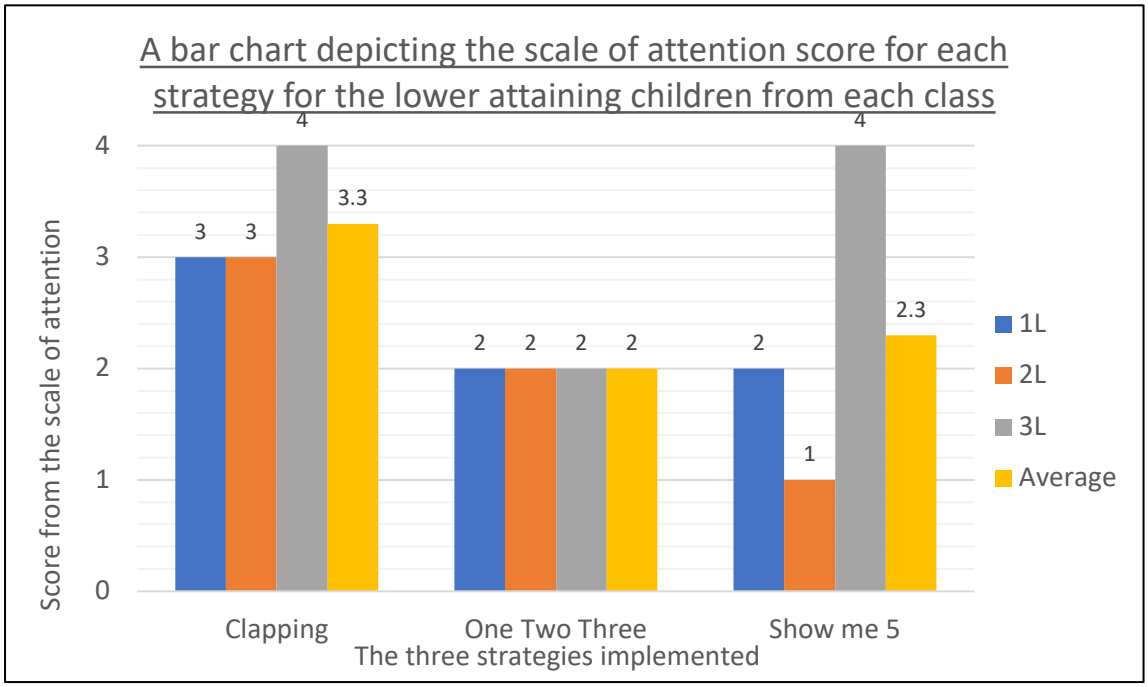


Figure 5: Results of the middle attaining children

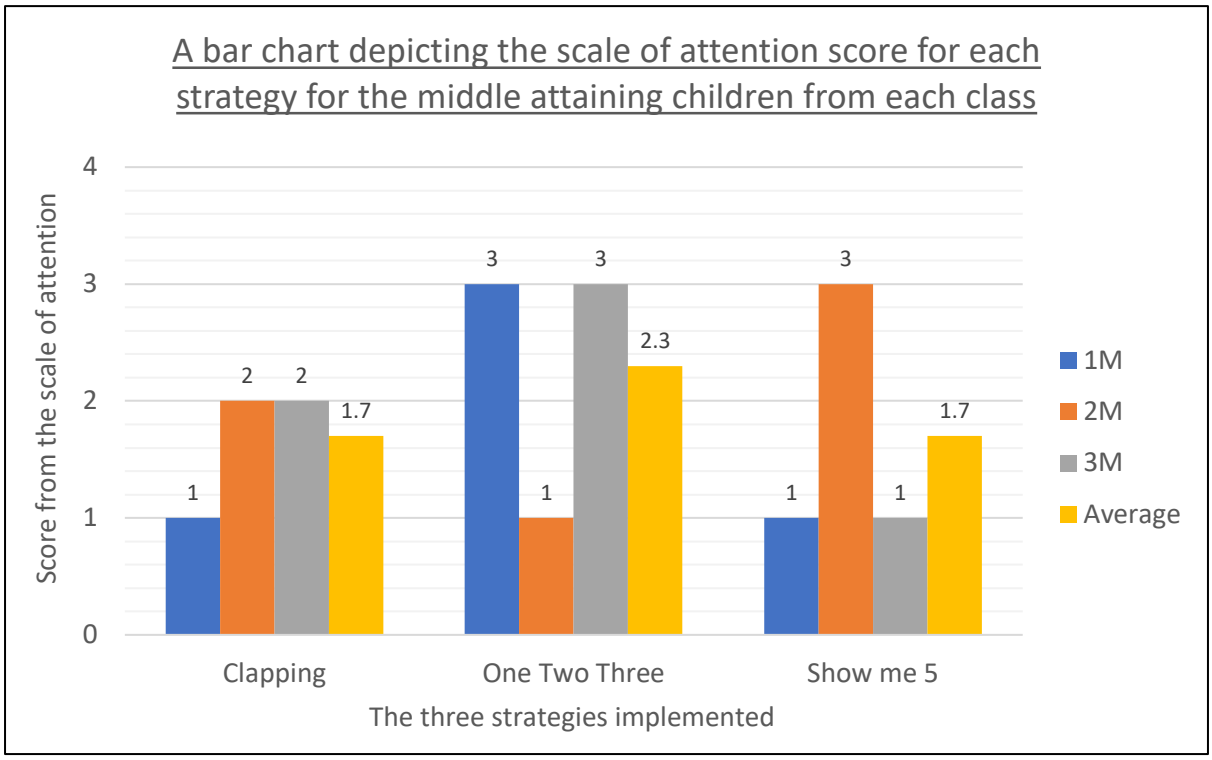


Figure 6: Results of the higher attaining children

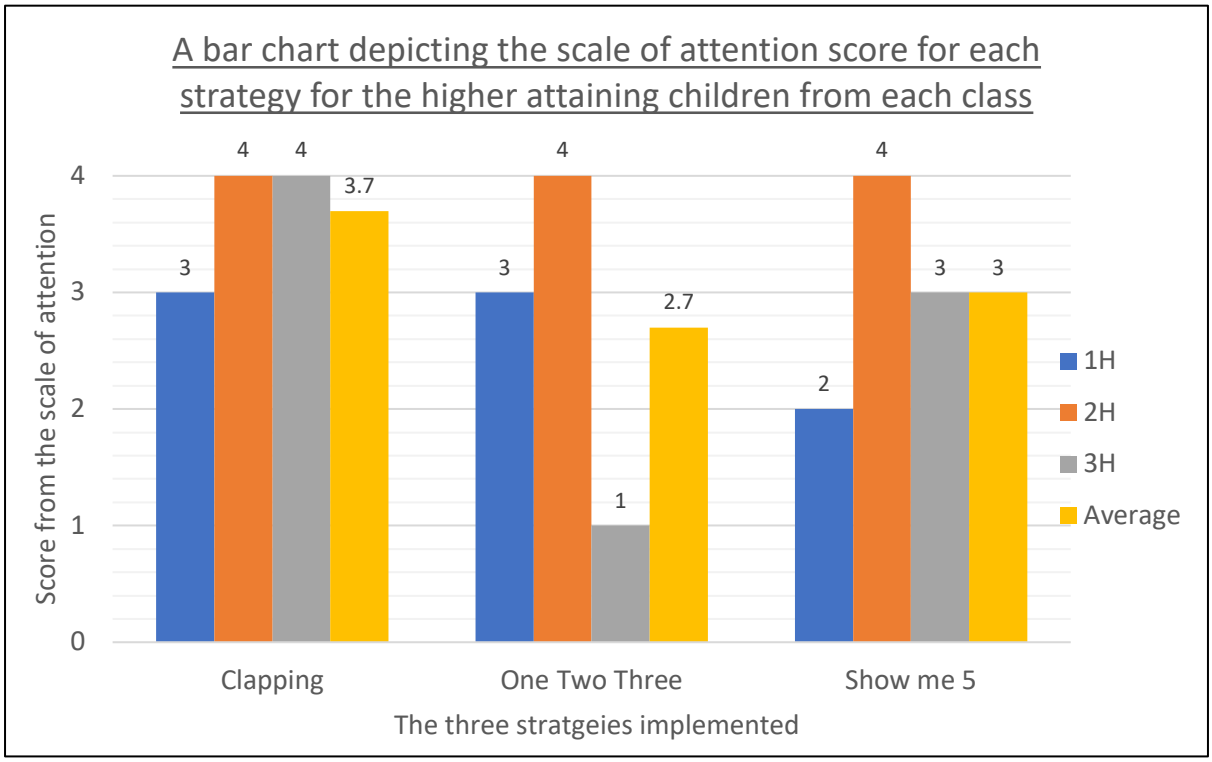
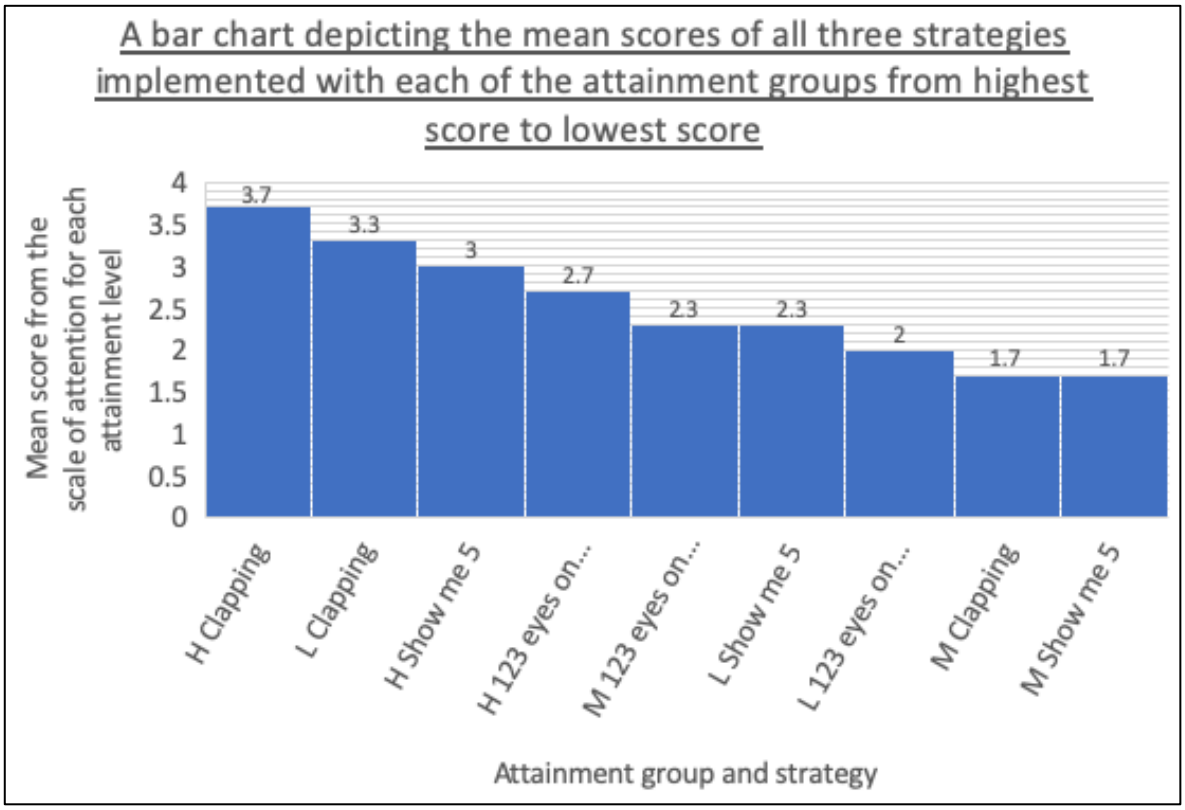


Figure 7: Results of all of the children/strategies from highest mean score to lowest



It is evident from Figure 4 that the highest mean score for the three implemented strategies was 3.3 for the Rhythm clapping method for the lower attaining children from each class, whilst the lowest mean score was 2 for the One Two Three method for this group. This result is replicated for the higher attaining children as seen in Figure 6, however the mean score is higher for these children at 3.7 for the Rhythm clapping and 2.7 for the One Two Three. Contrastingly, Figure 5 depicts the highest mean score for the three implemented strategies as 2.3 for the One Two Three method for the middle attaining children from each class, and the joint lowest mean score as being 1.7 for the two remaining strategies. It is interesting to note that on average, both the higher and lower attaining children showed greater scores on the scale of attention than the middle attaining children. For all three strategies the mean scores for the middle attaining children was lower than that of the higher attaining children, and similarly for two of the strategies (Rhythm clapping and Show me 5) the mean scores were also lower than that of the lower attaining children which is illustrated on Figure 7.

Discussion

Firstly, I think it is important to address the findings in relation to the research question for this report; *'Which classroom management strategies are most effective to obtain pupils immediate attention?'* On average, class 1 showed greatest attention for the One Two Three strategy, and least attention for the Show me 5 strategy, which the researcher attributes to the need for a noisier strategy within her class, something which was also affirmed by the children in the study. Class 2 and 3 both depicted Rhythm clapping gaining the greatest attention, and One Two Three gaining the least attention. My lesson was lesson 2, and on the whole, I felt both of the caller responder (Rhythm clapping and One Two Three) gained the greatest attention, as I felt that during Show me 5, some of the children continued to talk. This was correct for the Rhythm Clapping but not for the One Two Three, which I would attribute to the scale of attention, where I may be able to hear the children verbally responding "one two" but not noticing them continuing to write or fiddle, (Appendices 3 & 6). Researcher 3 believed that One Two Three was the most effective for his class, and that Rhythm clapping would be the least effective, contradictory to the results of the sample. This could suggest that monitoring only three children would not be a great enough sample size for this type of investigation, (Cohen, Manion and Morrison, 2007).

It was also interesting to note that the higher and lower attaining children (on average) scored highest on the Rhythm clapping whilst the middles score highest on the

One Two Three. After reviewing the literature on attention and attainment, I was unsurprised to find that for all three strategies the higher attaining children had higher mean scores than the middle attaining children, (Department for Education, 2012; Duncan and Magnuson, 2011; Magnuson et al., 2016; Rabiner, Godwin and Dodge, 2016). However, it was surprising that for this sample, the lower attaining children had higher mean scores on two of the three strategies for the middle attaining children, which using Duncan and Magnuson (2011)'s definition would suggest they had greater attentional control (p.49).

This leads onto a point made previously in the report about on and off-task behaviours. Of the 9 children observed and interviewed 4 commented about wanting to finish tasks, sentences or words that they were in the middle of when the attention gaining strategy was implemented and a further 3 commented about strategies where they have to put things down ensuring they have to stop the task they are completing (Appendix 2, 5 & 8). This could suggest that they think they are remining on-task by continuing to finish what they have started, rather than being off-task to the strategy and its purpose (giving new instructions, providing feedback etc), (Cangelosi, 2013). It also connects the point proposed by Partin (2009), that despite the teacher actively teaching, the children are not on-task, with the highlighted reflections of the researchers thinking that certain strategies are more effective than they truly are. This is especially true for the middle attaining children in classes 2 and 3 who both stated they felt compelled to finish the task, and thus would account for the lower mean average of the middle attaining group.

Conclusion and recommendations

This report has given a brief insight into the process of lesson study. The focus of the implementation of attention gaining strategies was planned as a group of researchers, implemented and observed, focus group interviews were conducted and followed by a cyclical model of reflection to evaluate and decide any improvements. Therefore, despite the risks to validity and reliability, the triangulation of the results from the observation, group interviews and reflection, as well as conscious effort to attend to these risks, weaken them, (Cohen, Manion and Morrison, 2007). The report aimed to depict the use of lesson study in the development of pedagogy in order to positively impact learner progression due to a significant part of the new 2022 curriculum for Wales and the Professional Standards for Teaching and Leadership is to be a reflective practitioner and a skilled researcher who engages in professional learning to influence all learners, (Welsh Government, 2017). For example there are descriptors such as 'Continuing professional learning,' 'taking responsibility for self' and 'Evaluating the impact of changes in practice' under the QTS standards for professional learning, leadership and innovation respectively, (Welsh

Government, 2019).Thus the central benefit of this type of enquiry based research is that it aids the professional development of the researcher in improving their pedagogy, and consequently encourage the holistic development of the learners. However, like previously stated, there are also some limitations in this area of pedagogy, as the research into specific methods and strategies of gaining attention is lacking with many researchers instead looking into the broader topic of classroom and behaviour management (see Nagro et al., 2018).

The research question that is the focus of this report was chosen due to the previously researched conclusions that attention directly effects academic attainment, (Trentacosta and Izzard, 2007). And the findings of this report suggest that there is no one strategy of attention gaining that suits the needs of all learners and that only by knowing the individuals within your class can you judge the most suitable strategies and their effectiveness. Thus, in my next school experience, and my future practice, I will aim to develop my own behaviour management plan and strategies that suit the needs of all of the learners in my classes. This is also something which links to one of the targets from my mid-term report; to research and develop different ways of managing the classroom environment.

Like Rabiner, Godwin and Dodge (2016), I also feel that, despite the extensive research into the relationship between attention and attainment, that greater insight is needed on the reasons for this relationship, and how best to support individuals with poorer attention skills to close the attainment gap. If I were to do these lessons again I would possibly look at gender rather than attainment also, as I feel this is something that interests me due to the extensive research that girls show greater levels of engagement and thus perform better academically than boys, (Lietaert et al., 2015).

In light of the research conducted within this lesson study, there are a couple of key recommendations that can be made. The first is in relation to the sample size, which I believe was too small to be a representative sample for the whole class, and therefore, the analysis of these results may be too general. This is something which other studies have also acknowledged, stating the need to replicate and verify with larger groups, (Aliakbari and Bozorgmanesh, 2015). Thus, a greater sample size would increase the validity and reliability of the observations conducted, which in turn will produce a greater quantity of results to be analysed and reflected upon. In reference to one of the limitations highlighted above, another recommendation would be for further research into the area of attention gaining strategies to be conducted in order to close the gap in the research. This would provide greater insight into attention gaining strategies which would in turn develop classroom and behaviour management strategies. Lastly, I feel that as a group, we could improve the scale system that we have created to refine the points included. I feel that measuring attention is difficult, as when compared with the response from the children, it highlights that many children feel as though they are showing greater levels of attention than what looks apparent

to the researcher. This is evident in the children often not making eye contact with the teacher and continuing to finish the set task. Despite this, I agree with Egeberg and McConney (2018) that the opinions of the children/ participants involved in the study provided valuable insight into the research conducted.

In conclusion, lesson study is an effective way to observe children in the classroom environment, in order to make reflections and inform the future practice of the researcher, and it is something which I would consider using again in my own career and practice.

Reference list

Aliakbari, M. and Bozorgmanesh, B. (2015). Assertive classroom management strategies and students' performance: The case of EFL classroom. *Cogent Education*, 2(1).

Alter, P. and Haydon, T. (2017). Characteristics of Effective Classroom Rules: A Review of the Literature. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 40(2), pp.114-127.

Archer, R. (2016). Lesson study in initial teacher education: students' positioning analysed through the lens of Figured Worlds. *Proceedings of the British Society for Research into Learning Mathematics*, 36(1), pp.13-18.

Babbie, E. (2012). *The practice of social research*. 13th ed. Cengage Learning.

Bondy, E., Ross, D., Gallingane, C. and Hambacher, E. (2007). Creating Environments of Success and Resilience. *Urban Education*, 42(4), pp.326-348.

British Educational Research Association (BERA) (2018). *Ethical guidelines for educational research*, [online] p.21. Available at: https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018 [Accessed 6 Oct. 2019].

Brookfield, S. (1998). Critically reflective practice. *Journal of Continuing Education in the Health Professions*, 18(4), pp.197-205.

Cangelosi, J. (2013). *Classroom Management Strategies: Gaining and Maintaining Students' Cooperation*. 7th ed. New York: John Wiley & Sons.

Cerbin, B. (2011). *Lesson Study*. Stylus Publishing, LLC.

Cohen, L., Manion, L. and Morrison, K. (2007). *Research methods in education*. 6th ed. London: Routledge.

Dawson, C. (2009). *Introduction to Research Methods: A practical guide for anyone undertaking a research project*. 4th ed. London: Constable & Robinson.

Department for Education (2012). *The Impact of Pupil Behaviour and Wellbeing on Educational Outcomes*.

Duncan, G. and Magnuson, K. (2011). he Nature and Impact of Early Achievement Skills, Attention Skills, and Behavior Problems. In: G. Duncan and R. Murnane, ed., *Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances,*. New York: Russell Sage, pp.47-69.

Egeberg, H. and McConney, A. (2017). What do students believe about effective classroom management? A mixed-methods investigation in Western Australian high schools. *The Australian Educational Researcher*, 45(2), pp.195-216.

Elfil, M. and Negida, A. (2017). Sampling methods in Clinical Research; an Educational Review. *Emergency*, 5(1), pp.1-3.

Fernandez, C. and Yoshida, M. (2004). *Lesson Study*. Routledge.

Godfrey, D., Seleznyov, S., Anders, J., Wollaston, N. and Barrera-Pedemonte, F. (2019). A developmental evaluation approach to lesson study: exploring the impact of lesson study in London schools. *Professional Development in Education*, 45(2), pp.325-340.

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), pp.597-607.

Hobart, C. and Frankel, J. (2009). *A Practical Guide to Child Observation and Assessment*. 4th ed. Oxford University Press.

Kolb, D. (1984). *Experiential Learning: experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Kumar, R. (2014). *Research Methodology: A step-by-step guide for beginners*. 4th ed. SAGE Publications Ltd.

Laevers, F. (2000). Forward to Basics! Deep-Level-Learning and the Experiential Approach. *Early Years*, 20(2), pp.20-29.

Lee, L. and Tan, S. (2020). Teacher learning in Lesson Study: Affordances, disturbances, contradictions, and implications. *Teaching and Teacher Education*, 89, p.102986.

Lietaert, S., Roorda, D., Laevers, F., Verschueren, K. and De Fraine, B. (2015). The gender gap in student engagement: The role of teachers' autonomy support, structure, and involvement. *British Journal of Educational Psychology*, 85(4), pp.498-518.

Magnuson, K., Duncan, G., Lee, K. and Metzger, M. (2016). Early School Adjustment and Educational Attainment. *American Educational Research Journal*, 53(4), pp.1198-1228.

May, T., Rinehart, N., Wilding, J. and Cornish, K. (2013). The Role of Attention in the Academic Attainment of Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 43(9), pp.2147-2158.

McClelland, M., Morrison, F. and Holmes, D. (2000). Children at risk for early academic problems: the role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), pp.307-329.

My Local School. (2018). [redacted] *School*. [online] Available at: http://mylocalschool.gov.wales/School/[redacted] [Accessed 01 Oct. 2019].

Nagro, S., Hooks, S., Fraser, D. and Cornelius, K. (2018). Whole-Group Response Strategies to Promote Student Engagement in Inclusive Classrooms. *TEACHING Exceptional Children*, 50(4), pp.243-249.

Parsonson, B. (2012). Evidence-based Classroom Behaviour Management Strategies. *Kairaranga*, 13(1), pp.16-23.

Partin, R. (2009). *The classroom teacher's survival guide*. San Francisco, Calif.: Jossey-Bass.

Pellegrini, A., Hoch, J. and Symons, F. (2013). *Observing children in their natural worlds*. New York: Psychology Press.

Rabiner, D., Godwin, J. and Dodge, K. (2016). Predicting Academic Achievement and Attainment: The Contribution of Early Academic Skills, Attention Difficulties, and Social Competence. *School Psychology Review*, 45(2), pp.250-267.

Thurmond, V. (2001). The Point of Triangulation. *Journal of Nursing Scholarship*, 33(3), pp.253-258.

Trentacosta, C. and Izard, C. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion*, 7(1), pp.77-88.

Tripp, D. (2012). *Critical Incidents in Teaching*. London: Routledge.

Welsh Government (2017). *Professional standards for further education teachers and work-based learning practitioners in Wales*.

Welsh Government (2019). *Professional standards - Hwb*. [online] Hwb.gov.wales. Available at: https://hwb.gov.wales/professional-development/professional-standards/ [Accessed 21 Oct. 2019].

Wickström, G. and Bendix, T. (2000). The "Hawthorne effect" - what did the original Hawthorne studies actually show?. *StandJ WorkEnviron Health*, 26(4), pp.363-367.