

Design, conduct and critically evaluate a close-to-practice research project (Lesson Study), focusing upon the impact of practical demonstration (as a visual resource) on pupils' learning and engagement in Art lessons

	Targed/Target	Yr hyn yr wyf wedi'i wneud yn yr aseiniad hwn. What I have done in this assignment.
Targed/Target 1	Continue to engage with a wide range of relevant literature to inform and build your personal viewpoint.	A wide range of relevant resources has been visited to inform my research and build my own point of view.
Targed/Target 2	Consider developing counter arguments when critically evaluating the impact of your own practice.	Critical evaluation of educational research literature has been carried out to enrich my counter arguments.
Targed/Target 3		

1. Introduction

Demonstration has always been viewed as a fundamental part of the Art lessons. During my teaching practice, my mentor has recommended me to set myself a target of delivering demonstration for every lesson I teach, even if a lesson was aiming to resume or to complete a task that had already commenced through previous lesson (when demonstration had already been delivered). This prompted me to work with my research partner to find out more about the impact of demonstration on pupils' learning and engagement.

This research thus aims to design and apply appropriate research methodologies to analyse, critically evaluate and reflect upon classroom-based research evidence in an ethical manner, with reference to the relevant education literature, theory and government documents.

2. Research Context

For this research, two cooperative research events have been undertaken through alternately teaching and observing of a lesson that planned by both researchers in which that one teacher delivers teaching, while the other carries out the observation (as a non-participant observer). However, the second lesson plan will be revised post reflection upon observing of the first lesson's outcomes and gaining feedback from the three case pupils who the observer will be focusing on (as a sample group) to see if any improvement or a different result will emerge.

The aim of these two observations has been set to examine the impact of a teacher's practical demonstration of an Art technique on learning and engagement of three case pupils chosen from each of the two classes of year eight. Furthermore, the research will shed light on how pupils make connections between theoretical knowledge and practical implementation of the technique they learn/practise through demonstration, with relation to the lesson objectives. Yet, the observations will be critically analysed and addressed in a context of ethics, respect, confidentiality and anonymity, to comply with BERA Ethical Guidelines for Educational Research (2018).

3. Literature Review

Since both researchers will be focusing upon practical demonstration, it would be advantageous to inform our practical research with a critical evaluation of educational research literature in order to bridge the '*gap*' between research and practice that is indicated by Broekkampa & Van Hout-Wolters, (2007). This necessitated me primarily to consider the importance of demonstration in classroom from a numerous points of view.

Some scholars, such as Wellington & Ireson, (2012) viewed demonstration as a '*purposeful, clear and visible*' method of enhancing understanding of the concepts. Similarly, Hetland et al. (2013) viewed demonstration as an '*authentic*' process of illustrating the concepts. Relevantly, the Open University, (2015) considered that significance of demonstration lies in providing students with the experiences of real events, phenomena and processes, as well as developing and challenging students' understanding. Furthermore, Harbour et al. (2015) referred to demonstration as a '*modelling*' method that teachers utilise to help students clarify what they do and why they do it through, as well as making a decision to solve problems may occur during the process (ibid, 2015) as cited by (Archer & Hughes, 2011).

I tend to agree with all these views by adopting them as a one synthesised and comprehensive definition, since they provide a broad understanding, as well as a diversified

perspective of the demonstration concept. Thus, I view demonstration as an authentic modelling method that provides learners with the experiences of real events and processes of illustrating the desired concept or skill to enhance their knowledge and link theory with practice.

Secondly, I looked further into the relationship between demonstration and learner's engagement on the one hand, and between demonstration and student's achievements on the other hand. In this context, Harbour et al. (2015) as cited by Scott, Anderson, & Alter, (2012); VanDeWeghe, (2006); Zimmerman & Pike, (1972) suggested that demonstration (as a modelling tool) supports pupils by preparing them to tackle both simple and complex tasks and behaviours; this includes addressing unclear concepts, using explicit examples to reduce student's confusion and enhance their understanding, so that they engage with the task by making connections between their thinking and their learned skills, and therefore, they learn the concept in a meaningful context, which may lead to enhance their engagement and achievements (ibid,2015) as cited by Sandholtz, (2011).

Nevertheless, Pianta, La Paro and Hamre, (2008) suggested that pupils' engagement can be maximised through: emotional support, classroom learning environment, behaviour management and time management, in addition to Instructional support, with constructive feedback. However, pupils' level of engagement may vary; this variation has been arguably categorised in three main dimensions: behavioural engagement, cognitive engagement, and relational engagement (Davis, Summers & Miller, 2012).

Yet, similarly, Fredricks, Blumenfeld & Paris, (2004) had categorised pupils' engagement into three dimensions: behavioural, emotional, and cognitive. *Behavioural engagement* refers to students' participation in the activity; *emotional engagement* refers to students' influential reactions to peers, teachers, and the school context; and *cognitive engagement* which refers to students' levels of effort and willingness to proceed mastering their learning strategies (Harbour et al, 2015) as cited by Fredricks, Blumenfeld & Paris, (2004). However, during teaching and observing, I have noticed that some pupils seemed to be engaged with the task without being able to fully achieve the learning goals of the task, or even worked hard but struggled with learning. Thus, in this respect, I tend to agree with Fredricks, Blumenfeld & Paris, (2004) assortment of pupils' engagement (even narrower) into two main types: one makes efforts to simply do the task, and the second type who makes efforts to focus on understanding and mastery. Thus, I have discussed this issue with my research partner, taking into consideration differentiation and scaffolding strategies to support pupils solving the problem within and after demonstration. We have also decided to simplify the demonstration process by dividing it into two or three steps to make it easier and

manageable for all levels, with a challenging extension of the main task for those who have high level of attainment.

Thirdly, I looked further into what to consider when planning a demonstration. In this context, the National Academy Press, (1997) as cited by (O'Brien, 1990) suggested considering a number of issues: the illustrated concepts; which part of demonstration will generate the greatest enhancement in student learning; student's prior knowledge before the demonstration; supporting means and materials for effective learning; how the demonstration related to the lesson objectives; questions to be appropriate to motivate student prior, during and after the demonstration process; follow-up questions to test and stretch students' understanding of the new concept. This prompted us to identify and phrase our questions in a broader scale for a greater engagement.

4. Methodology

In educational research, it is significant to clarify distinction between method and methodology (Cohen, Manion & Morrison 2018). The term *Method* in this context may indicate to the range of approaches and procedures used to gather data (ibid, 2018). For this research, the way of data collection has been applied through: observing, questioning, interviewing, focus group (sampling) and reflection. Additionally, a written reflection report has been designed to be used as a means of recording social communication of the teacher and students during each of the two observed lessons. Relevantly, Kawulich (2012) as cited by Marshall & Rossman, (1989) identified observation a '*systematic description*' of the events, behaviors, and artifacts of a social setting.

Yet, for that purpose, I have designed with my research partner an '*Observation Schedule*' form that is adapted from '*Leuven Scale*' to measure levels of engagement prior, during and post demonstration (Lavers, 2008).

Nevertheless, the methodology applied for this research being 'Lesson Study' (LS), which involves developing teacher practice through a collaborative work by a group of teachers (Dudley, 2011). For this research, I have worked with a fellow teacher (my research partner) in planning, teaching, observing and analysing learning and teaching.

Furthermore, this 'close to practice enquiry' approach may effectively help teachers to witness learning in detail from a fresh eye; it may also identify the gaps between assumptions and the reality of learning, and as a result, assist teachers in planning learning in order to meet and match the needs of students accurately (ibid, 2011). Moreover, as the learning is reviewed with pupils and peers through reflecting on each observed lessons;

adjustments can be then made to ensure lessons meet the bespoke needs of the class, and therefore, the findings can be shared amongst the wider community of teaching (DfE, 2009, pp. 5-6). Yet, at the end of the process, there will be responds to observation and a reflection of how the needs can be met, and how to improve teaching strategies for the further lessons.

The reflection model thus has been adapted from Gibbs, (1988) Reflective Cycle by examining the experience and reflecting critically on it through the following stages: Feelings and thoughts, description, evaluation (both positive and negative), analysis, conclusion about what is learned and what could have done differently and action plan (1988). While an observation questionnaire has been designed accordingly to be implemented during and after each observation process.

Additionally, it would also be advantageous to consider applying Brookfield, (1995) critical reflection model (which is from the core of effective observation) by categorising the reflection through four main lenses: the first lens is the autobiographical lens, or the self-reflection lens. Through this model, teachers may rely on their previous learning experiences or on their experiences as a teacher to set typical assumptions and intuitive reasoning (Brookfield, 1995). Similarly, Tripp (2011) defined four approaches to analysis through thinking strategy about our practices, rationale, personal theory analysis and professional judgement. Tripp (2011) also suggested that ideology critique is essential for professional judgement; as it enables us to make rational, informed and deliberate choices. The second lens is the students' eyes. This model enables "responsive teaching" through student's evaluations, assessment, student journals, groups or interview and student-focus (Brookfield, 1995). The third model is peer lens or colleague perception. Brookfield (1995) suggested that peers may spot some teaching strategies from different angle during the teaching activities. This method has been also adopted and evident by the PGCE practitioners through the bridging events (2019- 2020), when there has been an opportunity to share ideas, discuss and reflect on that. The fourth model is theoretical literature lens; this model enables employing research theories about teaching practice to enhance critical thinking (Brookfield, 1995).

Yet, the method of observation applied maybe considered as a non-participant observation approach, since the researcher didn't take any active part in the learning activities at this observation event. Nevertheless, this approach is criticised for the fact that this type of observation may lead pupils to behave differently in the presence of an audience (Kumar, 2014). However, in this observation event, most students seemed to be focusing on the learning activities without paying attention to the presence of the observer.

While we have developed an observation schedule questionnaire that is partly adapted from 'Leuven Scale' which is introduced and supervised by Professor Ferre Laevers (2008) at the Research Centre for Experiential Education (RCEE) at Leuven University, to be used for this observation in order to measure level of attention and engagement during the various demo stages (beginning middle and end).

The focus group has been chosen to be three pupils from each of the two classes to be observed during demonstrations. The three pupils have been chosen randomly from each class of year eight as a qualitative sample group as representatives of the whole classroom, as it was impossible to conduct the research on the whole students in each classroom. Yet, the research has been undertaken at an 11-18 mixed comprehensive school, located in a large city in South Wales, with 1,700 pupils, including 357 in the sixth form (Estyn, 2018). Nearly a quarter of pupils come from different ethnic minority backgrounds, and just over 20% speak English as a second language (ibid, 2018). Only a few pupils are fluent in Welsh (ibid, 2018). Around 6.5% of pupils are eligible for free school meals, and fewer than 10% of pupils live in the 20% most deprived areas in Wales (My Local School, 2018). Around 12% of pupils have a special educational need (Estyn, 2018). The school is rated as Green for support category (My Local School, 2018). Additionally, the school is considered as a pioneer in the area, and is currently working along with the Welsh Government and other schools towards progression of the new curriculum (which is due in 2022).

Despite the sample group has been chosen randomly, some factors have been considered when selecting them such as: gender balance (e.g. one girl and two boys for the first observed lesson and two girls and one boy for the second one) and variation in levels of ability. Thus, according to Cohen, Manion & Morrison (2018) this sampling method maybe considered as a purposeful random sampling (mixed-method).

5. Ethical Considerations

As teachers, educational research would be an essential part of our everyday profession. However, ethical issues should always be considered, especially when undertaking a research that involves studying a group of young people as a sample in a complex workplace like schools. Thus, the British Educational Research Association (BERA) set up framework to conduct research ethics under guidelines those maybe summarised through the following aspects: Responsibilities to participants; responsibilities to sponsors, clients and stakeholders in research; responsibilities to the community of educational researchers; responsibilities for publication and dissemination; and responsibilities for researchers' wellbeing and development (2018). Relevantly, EWC (Education Workforce Council), set 'Personal and Professional Responsibility' as one of the key principles of professional

conduct and practice (2019). Yet, since the sample group in our Lesson Study are young children, a numerous of arrangements thus have been considered to comply with BERA, (2018) Guidelines; this has been implemented through: treating all participants in respect, dignity and equality; taking the responsibility of keeping names of the pupils and school confidential and anonymous all times (further details on how to store and protect data have been provided on the Ethical Form, UWTSD, 2019). Moreover, a Consent Form was provided to the parents to confirm their approval on their kids' participation in the research event, with a clarification of the right to withdraw any time (a copy of the Consent form can be found on the Appendices at the end of this assignment). Yet, for the purpose of this research I should refer to the three observed pupils as A,B and C for Lesson Study one, and A2,B2 and C2 for Lesson Study 2 for confidentiality and anonymity.

6. Lesson study 1 results and analysis

In this section I will discuss my view and reflection of the lesson taught by me research partner from a non-participant observer perspective (as part of our Lesson Study).

The cooperative lesson was planned under the title '*Around the World*', aiming at year 8, as part of the Scheme of Work for spring tem. With relation to meaningful links to curriculum, this Art lesson (as part of a series of lessons) involved encouraging pupils to think, research and discuss ideas on world buildings and pattern design, as well as teaching them how to produce a mono-print artwork, with understanding of the world culture and design concept. While the cross curricular meaningful link was set to make a connection with literacy through reading researching tasks. The lesson was run by my research partner with a personal target to correlate teaching practice with QTS professional standards through: Pedagogy, collaboration, innovation, professional learning and leadership. The Learning Objectives were set to enable pupils to understand other cultures around the world through iconic buildings, structures and textile pattern design and to produce mono-prints of a building or structure from one of these countries and a mono-print of a structure filled with a pattern or design from the same country.

Preparation of materials, tools and learning resources has been arranged and placed on the desks prior the start of the lesson. The classroom environment appeared to be positive, safe and quiet, and pupils seemed to be ready to learn. Yet, mutual trust and respect relationship between teacher and students seemed to be prevailed during all time.

The lesson commenced with a starter task, and most students appeared to be concentrating on the task. The Lesson objectives have been explained and displayed on the screen, with a dialogue and discussion atmosphere throughout the lesson.

Demonstration then has been delivered by the teacher with questioning and encouragement for pupils to engage, with success criteria displayed on the screen and explained at the beginning of the demonstration and during the main task, as well as being revisited and displayed on the screen again during the self-evaluation and plenary.

Self-evaluation has been implemented by asking pupils to reflect on their work through writing answers of questions about what they have learned, what went well, what challenges they have faced and what could be done differently for improvement.

At the end of the lesson, summarising of the task, the learned skills and the concepts has been delivered through the plenary, with link to lesson objectives and success criteria.

In general, most aspects of learning went well, and pupils completed the task with different levels of engagement and achievement. Based on the resulted work and the discussion during demonstration and task, I could establish that most pupils have achieved the learning objectives, as they learned and practiced skills of mono-print technique by producing own print, as well as learning about world cultures.

Prior and during the demonstration, pupil A appeared to be at a routine level of concentration, with no real signals for Involvement or energy, and likely to be easily distracted. Thus, this child's level of engagement may be measured at grade 3 '*Moderate*' according to Leuven Scale, (Lavers, 2008). However, this pupil's concentration has increased when other students were asked to describe steps of demonstration and the task. Thus, the level of engagement according to Leuven Scale maybe measured as 4 at that time. This student received some scaffolding support during the task to take the excess ink out prior printing; she had some unwanted smudges, but she decided to carry on with the task (without needing to re-print it again). Pupil A achieved some pattern drawing after completing the main architecture drawing.

At the start of the demonstration, pupil B took a place with a reasonable distance of the demonstration table with good level of concentration. During all stages of the demonstration student B demonstrated a good level of engagement that can be measured as 5 according to Leuven Scale, (Lavers, 2008), with the same level of attention when other students were asked to describe demonstration. Yet, when starting the task himself, pupil B spent long time on taking the excess ink, and he frequently flipped up the paper to check his drawing, so that the resulted print contained fewer errors (smudges).

Pupil C also demonstrated a great focus during the demonstration with willingness to answer questions raised by the teacher. During the task, this pupil seemed to be confident and knowing what to do, with a high level of engagement; this pupil's involvement can be

therefore measured as 5 according to Leuven Scale. Pupil C has also completed the drawing and extended the task by filling some patterns.

At the end of the lesson, I have interviewed the three case pupils (A,B and C), with the presence of my research partner. The interview questions addressed what they have learned from the demonstration, how the demonstration has helped them achieving the success criteria, their suggestions for a more effective demonstration, and how would they complete the task if the demonstration was not provided. Their answers have testified that they have understood the concept and learned the practical technique through the practical demonstration, and they confirmed that they would not be able to complete the task without the demonstration. However, they would wish if the duration of the demonstration was slightly longer for a better consolidation of the practical skills.

Overall, most elements of the learning went well through this experience. However, I have noticed that the teacher requested that each pupil to produce two prints, while on demonstration she had only demonstrated one print which may cause a bit of confusion to many pupils, so that most pupils have produced only one print as a result.

Additionally, all pupils did not completely take off the excess ink before starting the printing task, so some unwanted smudges appeared on the prints because of their hand pressure on the printing tile. There was also a low level of chatting between a few pupils during the task.

Thus, for our second lesson I have decided with my research partner to revise the lesson plan by make it clear that only one print is required, taking into account pupils' voice by suggesting expanding the time of demonstration for more engagement. In this respect, (Olson, 2011) suggested that "teachers who took part in a lesson study transformed their teaching practices after discussing a new insight with colleagues" (p. 599).

7. Lesson study 2 results and analysis

In this section I will shed light on my view and reflection from a perspective as a teacher, while my research partner was undertaking the role of the non-participant observer (for our Lesson Study research). The lesson was under the same title '*Around the World*', aiming at the same Year group (8), with some revision on the lesson plan and the PowerPoint presentation, while the lesson objectives remained same as previous lesson (1).

Yet, similar class set-up arrangements have been prepared for this lesson. Resources, materials and equipment prepared on desks upon arrival of the pupils. The starter task has been changed into drawing a pattern or part of a pattern for warming up and for more

engagement by pupils, as well as to be more relevant with the main task and the taught concept.

The classroom environment appeared to be positive, safe and quiet, and pupils seemed to be passionate to learn. Yet, I was eager to promote mutual trust and respect relationship with pupils all times.

I commenced the lesson with a starter task, and most students seemed to be engaged with the task. The Lesson objectives have been explained and displayed on the screen, with questioning and discussion atmosphere throughout the lesson.

The following step was introduction to the concept, with questioning and discussion along with example images display on the PowerPoint presentation.

I have then delivered Demonstration with questioning and encouragement for pupils to engage, while the success criteria was displayed on the screen and explained at the beginning of the demonstration and during the main task, as well as being revisited and displayed on the screen again during the self-evaluation and plenary.

All pupils seemed to be focusing during the demonstration, while I asked questions with relation to the success criteria to engage them with the learning activity, as well as to establish their understanding of the concept and the steps of printing.

My research partner has carried out the observation role, focusing upon three case pupils (A2, B2 and C2).

According to my research partner report on the '*Observation Schedule*' sheet (copy of it can be found on the *Appendices* part) Pupil A2 demonstrated high level of involvement during all demonstration stages, as well as when other students were asked to describe steps of task demonstrated; this was measured as 5 (*Extremely High*). Similarly, pupil B2 showed a high level of engagement, while pupil C2 demonstrated slightly lower level of attention during demonstration and when other students were asked to describe demonstration and task.

Furthermore, during the task, pupils C2 asked for some assistance to ascertain that he did the task correctly. Thus, a little bit of scaffolding support had been provided.

Self-evaluation then has been implemented by asking pupils to reflect on their work through answering questions about what they have learned, what went well, what challenges they have faced and what could be done differently for improvement (example of their answers can be found on the *Appendices*). At the end of the lesson, summarising of task and learned skills and concepts has been delivered through the plenary, with correlation to lesson objectives and success criteria.

Significantly, interviewing of the tree pupils was undertaken after the end of the lesson (as an initial part of the Lesson Study research).

Pupils answered that they had learned about concept and techniques of mono-print, and they had learned *“how to avoid making ‘noise’ by not pressing hard, not to use too much ink and to take out the excess ink”*. Furthermore, they felt there could have been more questioning if demonstration had not been provided, as without the demonstration they would not be able to complete the task.

In addition to the four questions asked in previous lesson, we added a question about what pupils think regarding the length of the demonstration. All of the three pupils agreed that the demonstration was delivered at the right duration for them.

8. Conclusion

In summary, demonstration through the both observed lessons has played a significant role in enabling pupils to achieve the lesson goals. Yet, Lesson Study methodology has prompted me to take ownership of developing the quality of teaching, as well as taking full account of pupil's voice. In this respect, Dudley, (2014) as cited by Pedder (2012) suggested that Lesson Study provides a unique development model for teachers and schools, as it helps teachers to learn more about how their teaching affects their pupils' learning, in the complex environment of the classroom. Thus, it provides close-up view to evaluate and observe the relationships between teaching and learning (Dudley, 2014).

Yet, with regards to the impact of the demonstration on pupils' learning, I have notices that both focus groups' resulted prints inevitably contained some unwanted noise (smudges), most of them are acceptable for this type of Art technique. However, the level of pupil's engagement has slightly improved at the second lesson with the amendments we have made on the demonstration approach as well as the lesson plan. This has been evidenced through pupils' answers at the second research lesson study. Having discussed the outcomes of our collaborative research with my research partner, we both agreed that our demonstrations were delivered successfully in a way that enabled pupils to achieve the learning goals. However, we have also learned from the first teaching experience about how to improve our teaching practice in a method that provides pupils with better learning experience through the second lesson. Relevantly, having looked further into literature, we found that Hattie, (2009:22) suggested that the impact on pupil's learning occurs when teachers learn from own teaching. Similarly, Murphy et al. (2017) indicated that teachers can learn from other fellow teacher's practice through Lesson Study. Moreover, Murphy et al. (2017) also suggested that Lesson Study featured by the element of concentrating on

learning and learners, unlike other observation-based approaches which only focus on the performance of the teacher, since it provides a better understanding of students' needs.

Moreover, I see Lesson Study as a collaborative work not only between teachers but also between teachers and pupils to improve learning process; this view may agree with Dudley's (2014) point of viewing LS as a partnership that brings pupils and teachers together to improve learning.

However, there might be some limitation of generalising the outcomes this research since it has been applied on a small selected group of pupils. Additionally, the sample group pupils' answers might be accused for not being fully accurate. Therefore, further research on a larger group might be beneficial for future research.

Yet, the challenges we have encountered through this experience was when two of the three case pupils decided not to take part in this research even just a few minutes before the start of the first lesson. We had then to select other pupils who finally agreed on participating in the research event. We viewed that incident from a positive angle, as it showed our commitment to comply with research ethics and the democratic atmosphere that we have promoted throughout our lessons.

There was also another little challenge to adapt our university schedule with the school timetable for these two lessons, as well as arranging meetings for discussing our Lesson Study's reflections and further plan, particularly, after the second observed lesson, due to commitment with other module that is run by the university simultaneously, as we feel that such a significant research experience should be allocated considerable amount of time and dedication to attain a better attainment.

In conclusion, the use of Lesson Study model as a collaborative research methodology has provided an opportunity to understand the needs of the learners and to reflect on classroom teaching practice for developing innovative approaches to pedagogy in general, and specifically learning aspects of demonstration through the Art lessons.

9. Recommendations

In my opinion, our research tool for data collection could be even more effective if we used additional means of recording (such as audio recording or filming) should the school policy allow that. Additionally, it would also be more efficient if both lessons were delivered by the same teacher (to avoid bias), so that the research partner can observe both lessons; such a

method could implement more accurate research result and measurement, not only for pupils' attainment but also for teacher's performance.

Moreover, complying and promoting school's values and strategies by adopting innovative approaches to teaching through communicate a passion and enthusiasm for learning, securing high levels of engagement and progress, as well as building up positive relationships with students and knowing their needs (Estyn, 2018).

For future lessons I would recommend taking into consideration pupils' emotional well-being when undertaking observation-based research (we may apply Leuven Scale for Well-being to measure that). Furthermore, I would also recommend applying lesson study on a larger scale of sample group, as well as considering increasing the number of the observed lessons and involving more observers for future research, with an emphasis on demonstration in correlation with main lesson elements (such as lesson objectives, formative assessment and plenary).

Yet, for more effective demonstration I would recommend continuing with questioning for gaining pupils' engagement, as well as for assessing their understanding of the concept. Significantly, I have noticed that effective questioning may help in improving pupils' critical thinking skills and raising their self-esteem, as pupils can feel that their answers may contribute to class discussions (Estyn, 2018). However, if questioning focuses on competition or comparison between pupils, it can have a negative impact on the classroom culture and on the learning process; as in such a case pupils would focus on getting teacher's attention or praise rather than learning (Black & Wiliam, 1998). Nevertheless, if one or more pupils who responded with a wrong answer or even struggled to know the right answer, teacher can then identify the area that needs to be re-explained or re-demonstrated to clear this point. Thus, questioning through demonstration can be an initial part of formative assessment which may help low attainment pupils to achieve better results if it concentrates on specific problems with their work, with a clear understanding of what they did wrong and how to correct it (ibid, 1998). This can be implemented through constructive feedback.

This research experience was my first experiment of using Lesson Study as a methodology, however, it is a strategic choice for teacher's contentious professional development (Dudley, 2014), and will thus open the door for further research and practice.

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