

ECAD6007

Student Number: 1903564

A critical evaluation and the identification of next teaching and learning steps focusing on a case study of an individual learner or a group of learners, based on an observed critical incident.

Jack Rose

Introduction

In this assignment, I will reflect and evaluate the learning steps on a specific case study to which I observed a 'critical incident' in a Secondary School in South Wales. The critical incident will be evaluated and compared to the relationship of the four purposes and will be linked with the outlines of Donaldson's report. Pedagogical research will also be considered when critically evaluating the incident.

I will be focusing on the implementation of a "random name generator" in a classroom and its effect on eliminating the risk of a critical incident by increasing levels of engagement. This method randomly chooses a pupil when asking a question, as opposed to the more voluntary participation of hands-up technique. Active participation is deemed an essential role of pupils' learning (Harrison and Howard, 2009), where pupils are expected to participate, thus taking ownership of their own learning (Hammond, 2016). Effective questioning techniques within the classroom can raise standards (Black and Williams, 1998), encouraging pupils to think and reflect (William, 2011); express ideas (Alejandro, 2017) engaging pupils in the classroom to enhance their own understanding of a given topic (Shore, 2015); provide the teacher with useful information about where the pupils are with their learning (Clarke, 2005) thus making adequate adjustments to teaching to better support the future learning of the pupils (William, 2011). Focusing on the "random name generator", this essay will critically discuss the advantages and disadvantages of this teaching strategy to student learning and engagement. The random name generator allows students to be randomly selected at the tap of a button. This method can ensure random selection for responses, ensuring the more confident 'hand-raiser' pupil doesn't dominate classroom discussions (Goodrich, 2012), facilitates engagement among pupils (Rogers, 1997), and sets clear expectations that all students have a valued opinion (Alejandro, 2017); eliminates assumptions of favouritism amongst pupils (William, 2011); more accurately identifies common misconceptions and gaps in pupils conceptual understanding (Clarke, 2005).

Observation

In order to conduct this research accurately, one of the requirements was to carry out a full observation in a teaching classroom. This took place in an English medium comprehensive in the Caerphilly Borough, and for this assignment the school in question will be referred to as School "X" due to confidentiality (BERA, 2018). According to My Local School, (2018), there are 763 pupils on roll, aged from 11 to 18, including a sixth form.

Approximately 20.7% of the school population are eligible for free school meals, this percentage above the Welsh average of 16.4% (My Local School). This research suggests that students in this school live in a more deprived area and are from lower socioeconomic statuses than other schools throughout Wales. However, the number of free school meals have fallen since 2010 (Estyn Report) within Caerphilly County Borough, with the percentage of students eligible for free school meals totalling 21.5%. The majority of the pupils are from a white British background (2.8% of the school being a minority Ethnic) with 0.5% of the School population speaking English as an additional language. The school has a statemented 10% with Special Educational Needs (SEN).

Methodology

The critical incident witnessed was among a sample of a Year 8, set 1 English lesson. The lesson was literacy dominant with all members of the class engaged and focused.

The research was conducted via an unobtrusive observational case study of students. There are two different forms of observing; unobtrusive observation and obtrusive. With the objective of witnessing a critical incident, it was best to observe without interfering. An unobtrusive observation is a method of data collection and analysis where the participants of the study are not affected, thus, the researcher does not interact with subjects, just observes. Data was collected over a one hour lesson including 25 key stage 3 pupils. A qualitative approach was utilised to collect information for this study. The distinction between qualitative and quantitative data is that qualitative data is defined as a description or an observation of an event, whereas quantitative data is numerical information based on quantities.

There are various methods of recording an observation. The information for this study was collected by analysing a structured written observation of the critical incident. Information was collected using an observation document and an Assisted Reflective Conclusions Model document. These documents prompted reflections and analysis by adapting Wood (2016) questions, which enabled the researcher to identify key points and reminders of the objectives relevant to the study (Punch and Oancea, 2014).

The main benefit of observational research is that it enables the researcher to observe the students in a natural setting, which can reveal pungent insights that would be unavailable via other methods. However, this method is limited due to its lack of validity. Interactions and events are subjective to researcher bias, furthermore, behaviours may be missed by the researcher thus giving a restricted view of the incident (Hobart and Frankel, 2004).

An observation is a method of collecting systematic data, whereby researchers can use their senses to analyse behaviours in a natural setting or situation (Cohen et al, 2011., Hobart and Frankel, 2004., Sharman et al, 2007). It entails a prolonged engagement in a social context or setting and recording the observations. The observation was conducted during the normal school hours at School 'X'. In order to minimise disruption to the school routine, the sample was chosen via a random convenience sample of pupils and teachers. A convenience sample refers to the subjects being selected as a result of their convenient accessibility and proximity to the researcher. The students and teachers being randomly selected to participate in the study will generate more unbiased and reliable results (Cohen et al, 2011).

The four purposes

The four purposes are fundamental to children's progress and development of skills (Donaldson 2015). Donaldson's report implies that all children, adolescents and young adults will be ambitious and are ready to learn. Research investigating the correlation between socioeconomic status and ambition, suggests adolescent ambitions are influenced by social class (Ashby and Schoon, 2010). It is suggesting one's drive to succeed is significantly lower among less privileged individuals (Kirk, 2017); students with uneducated parents in low status jobs are less likely to succeed due to lack of ambition (Harris and Goodall, 2007) illustrates lower educational attainment as a direct impact of their lack of determination to succeed (Goodman and Greg, 2010). Those who underestimate the value of educational requirements fare worse and are more likely to be unemployed in comparison to those in the highest denomination of social class (Sellgren, 2017). This is also supported when analysing data from PISA. It was concluded that disadvantaged pupils perform significantly worse in most countries that participate in PISA (PISA, 2015). The consideration of research that relates to poverty and willingness to learn is important as the school is situated in a deprived area and averages higher with free school meals. In relation to the first purpose, it is important to emphasise that such a simple, but effective goal and skill, children need confidence and ambition to succeed throughout school and more importantly throughout life. The new curriculum aims more on the individual rather than a group,

therefore these purposes are important for the child to grow in themselves and to be the best student and young adult that they can possibly be, carrying this into adulthood.

In order to minimise the risk of a critical incident occurring, the teacher used a “Random name generator”, where a random student is selected and expected to answer a question within a certain time limit. This method increases participation among pupils who are less likely to volunteer their answers during class discussion. Studies investigating the effectiveness of the traditional hands-up approach to answer teacher questions as an Assessment for learning strategy seem to concur that it doesn’t challenge and support the learning of all students (e.g Hammond, 2016; Wiliam, 2014) as not every student has the opportunity to contribute and participate (Chin, 2008). Some students may therefore become disengaged and have potential gaps in their conceptual understanding and are reluctant to challenge themselves, take ownership of their work to become confident learners as outlined by Donaldson’s report. Contradictory to these findings, this method can also cause anxiety and distress among some pupils who do not know the answer or are introverted (Cuncic, 2019). Despite some individual’s angst of attention from being questioned, avoiding the limelight is not a good strategy to control one’s anxiety (Antony, 2008) with some literature emphasising long-term detrimental effects to mental health (Cornwell et al., 2011). It’s suggested that many cognitive behavioural treatment programs place focus on gradually introducing the individual into situations where you are able to overcome your fears (Mayo-Wilson, 2014). It’s important to consider this method to comply with Donaldson’s four purposed to create a more robust and confident learner.

When we talk about ambition, confidence is a key part of it. Confidence is key to any child in the classroom and going back to the first purpose of Donaldson’s report, every child has the right to be confident and to be heard, ambition then thrives through confidence. That is why I chose this particular critical incident because by choosing a name at random it gives the opportunity to the less confident pupil to answer and potentially answer correctly, meaning it is boosting the confidence of that pupil.

Literature Review

Posing questions to the learners is essential for assessing pupil understanding and ensure pupils are engaged (Collier, 2018). It's imperative that pupils are given the opportunity to receive and process information, and effective questioning can also encourage independent and critical thinking. Traditionally, the teacher poses a question to the learners and pupils will self-select themselves to contribute to the lesson, while some pupils will not engage with the discussion. Research identifies flaws using this method of questioning suggesting the need to improve methods to enable students to learn through participation and suggests more effective techniques would ask questions in ways that include all learners (Dinkmeyer & Dreikurs, 2000). Using a random name generator as a method to select pupils at random has enabled a move in the classroom dynamic where the teacher poses questions to the whole class rather than often a selected few individuals. This technique allows the teacher to use questions to engage all students and sustain an 'active' style to the learning (Gifkins, 2015). Furthermore, this method more accurately identifies gaps in understanding and is a more effective assessment of learning (William, 2010). In a learning environment random name generator can increase classroom engagement (Rogers, 1997), and increase participation of students who are less likely to volunteer to answer the question.

Research suggest that randomisation is an effective method within the classroom (Olvaes, 2016). Posing questions to students by name is a direct and efficient way of encouraging pupils to participate in classroom discussion (Rogers, 1997). Contrary to the alternative of relying on voluntary participation, this method includes all learners. This method also includes the involvement of quieter students who may be reluctant to actively participate by raising their hands, and therefore, would not have been assessed during the lesson. Research suggests that if methods of randomization become normative within the learning environment, it's possible to develop high standards and clear expectations that all students are to participate. As students can be named at any given moment, pupils will actively improve awareness, engagement and interest.

With Donaldson's new curriculum it is vital that we focus on the learning of every individual child, that every single child is learning. With the traditional "hands up" to answer approach, this would contradict with the new approach to the curriculum because some children will not have the confidence to answer voluntary, therefore not learning to their full potential. Which leads me to the critical incident and how it agrees with William (2010) findings. Using a method that randomly picks a member of the class, any student can be called upon to answer any question at any particular time. Research suggests that teachers seem to avoid

asking the less able students and only the higher ability students (Shore, 2015), and are more likely to ask the same students time after time (William, 2010), but with this system of picking students at random then it avoids going to that one exceptional student to answer the questions and gives opportunity to all students.

Research has also identified the importance of providing positive reinforcement via praise and encouragement to increase the efficiency of this method among students who are more reluctant to answer (Olivares, 2016). Creating a safe and positive learning environment will support with setting clear expectations and standards, this will enable students to gain confidence and if maintained can promote academic growth.

This all leads to the Skinner's (1985) approach, that effective teaching must be based on positive reinforcement. It's believed that learning is facilitated through both positive and negative reinforcement, and that it's one's reaction to a stimulus. In spite of similar findings across the studies investigating the influence of reinforcement on behaviour and learning. Previous studies mostly employ an animal sample (e.g Blackman, 1970; Skinner, 1938). The findings of other studies are also limited due to the ethical implications that emerged when investigating an infant cohort, and a small sample size also means that the findings can't be generalized to the whole population. Furthermore, despite Behaviour theorists arguing that reinforcement encourages learning, it's argued that the drive to learn is actually instinctive (Piaget, 1954; Vygotsky, 1978). Additionally, research suggests that it's unclear whether reinforcement has a direct impact on an individual's learning and is instead a more effective method to control behaviour (Kounin, 1970). It's questioned whether learning therefore, is a direct effect of reinforcement or reinforcement directly affecting behaviour which in turn is enabling better learning. Despite these limitations and results from different studies, the importance of positive feedback and encouragement on behaviour within the classroom has been indicated. More timely studies suggest a correlation between positive reinforcement and learning (Kounin, 1970; Burke, 2007; Lewis, 2009) emphasising the importance of managing classrooms to avoid undesired behaviour. Reinforcement has been consistently identified as an efficient approach to promote appropriate behaviour (Evertson and Weinstein, 2013) which promotes learning among students (Skinner, 1953). Using the random name generator in an environment where pupils feel safe to share their findings, ideas and conclusions that has been developed through positive reinforcement can lead to meeting healthy and confident learners who take ownership of their work as detailed in Donaldson's four principles.

Creating a positive learning environment with emphasis on the growth mindset where failure is seen as an opportunity to grow is important when utilising the random name generator (Pope, 2013). Some research suggests that a hands up approach is the most damaging method to use in a classroom. It's found that only a quarter of students consistently put their hands up to answer and students only participate when they have confidence in their answer. Students who participate learn with results suggesting an increase to an individual's IQ's, it's also suggested that some pupils will forgo an opportunity to learn by not participating. Research suggests that if pupils are given the opportunity to participate or not the achievement gap becomes more significant. Literature concludes that in order to increase engagement emphasis has been put on banning the use of hands up to answer questions, and students are chosen at random when a teacher poses a question. However, Research suggests that more able and talented students do not respond well to a no hands up policy in the classroom. More confident and able students seemed to dislike this approach as they feared the embarrassment of having a question incorrect and how this would impact on their reputation. It appears that having a question incorrect could impact on learner's identities (William, 2012). More able students had not experienced failure before this point, they have not come across a time where they have had an incorrect answer. This will, of course have an impact on them, it will knock their confidence, which yields contradictory findings to other research that finds random name picking approaches have a positive impact on engagement and confidence. However, this finding is limited due to the limited sample size, employing only girls the results can't be generalised to the whole population. To bring it back to Skinner's approach and how it links to positive reinforcement, whichever way you look at it then there is somewhat positive reinforcement, if the higher able children has an incorrect answer then it is positively reinforcing them that it is ok to be incorrect and that the learning is far greater than only answering the questions you already know. With the less confidence, the evidence is far clearer, if they say the correct answer then it has a positive effect on them and their learning. It's important to create a positive learning environment that encourages characteristics of a growth mindset.

All of this tie into the theme "reward", the sense of reward is important to the children, if they have a correct answer then of course they will have that feeling that they accomplished something and it all ties into positive reinforcement. If a child has an incorrect answer then we must praise them and correct them (Skinner, 1985), same as if a student has a correct answer, then the positive reinforcement, something as little as "well done" can be as effective as saying "that is a good answer but not quite what I am looking for". It all comes down to adapting that positive mindset. Skinner believed that positive reinforcement helps with behaviour management, that a positive praise will impact their behaviour in a positive

manner. Therefore, enforce their learning in a positive way, which also leads to Skinner's beliefs of some sort of reward system. He suggests that the reward system is what I just mentioned, with the positive reinforcement, but a reward system could be in its literal way. That you could have a reward system, for example stickers, a well-done card or even a points system whereas the children obtain rewards when they reach a certain amount of points. Some may argue that this is a form of conditioning, it is proven that a reward system is healthy for the brain and that people respond to it well, it also ties into competition, but we will come across this later in the essay. To go back to a reward system, (Claudio Sosa, 2016) suggests that the reward system drives children and adults to get what they want or to meet an objective, that we thrive for that feeling of excitement and pleasure, the reward system allows you to feel this even if it is in its simplest form.

Operant conditioning refers to behaviour management and to obtain good behaviour through the reward system. There are also controversy to the reward system, as (Travis Hirschi, 1969) argued, every child has a different motive, what if their motive is not to have that sticker or not to comply with the reward system, different people thrive off different things, that the practice is different to the theory but like every theory, it is a trial and error on what works for you and your class.

The reward system leads me to competition and how healthy competition in a classroom is important for success. Healthy competition drives learners to interact and to learn more through determination and the will to succeed more than others. As the research of Burguillo suggests, competition within the classroom can strengthen the drive, ambition and learning of the students, keeping them engaged throughout (2010). Children will thrive to be the best in the classroom and to beat their peers. Nonetheless, there are also cautions whilst using competition as a means of educating and motivating children. Other research suggests that collaborative work is a more effective technique, where children work better in a small group rather than a larger group and has a greater impact on learning than a general free for all competition (Johnson et al., 1981). The research also proposes that it all depends on the setting of the learning, that we must consider the age of the group, the size of the group and also the level of learning and how it is impacted on the child's learning needs. The correlation between competition, desire and the learning work a lot better within the younger years rather than the older students. Research suggests that gender has a factor on learning through competition, with male being more competitive than females (Chanlin, 1999). It also depends on the personality of the student, if a child does not enjoy competition or if a child avoids such tasks then the learning of that child is not present, therefore competition is not

as effective as it could be with other students. When creating such tasks, it is always important to be mindful of who the target audience is, it also leads back to the reward system and the no hands up Dylan William approach, if a child does not comply with the learning techniques then there is no learning taking place, therefore the techniques and approaches mentioned is invalid. Referring back to the new curriculum and Donaldson's four purposes (2015), the focus is on the child as an individual and how the individual is learning rather than the class or group of students.

Reflection

As previously mentioned, the critical incident can be very disruptive to the flow and progression of individuals learning hence why techniques have been researched in this essay. These techniques such as the "random name generator" allows every child the opportunity to be correct and incorrect. This encourages the growth mindset where failure is seen as an opportunity to learn and grow. A critical reflection is important to my future practice, and allows me to reflect and improve my teaching. This links to Montessori theory, where we observe others to improve ourselves. Schon's (1991) views mirror Montessori's findings, as he believed that we must reflect on every critical incident in life in order to improve. "The past is all we have as a guide." This simple but effective quote sums the thinking of Donald Schon, that our past can only determine our future by learning from the past and learning from our mistakes.

With regards to my own professional practice and research, I will reflect upon my teaching in order to improve but in order to minimise a critical incident I will test the "random name generator". This technique proved successful for the teacher observed, but proves that the consistent use of this technique is key for its success and not the technique itself. As William(2010) suggested, this technique improves engagement and the opportunity to improve on failed answers.

If the child is reluctant to answer or reluctant to participate in your methods of teaching then it is important to reflect on it and to change or improve it, that could be possibly presenting these techniques in a different approach or creating new techniques to fit every child, which leads to the random name generator and the prevention of behaviour issues. It is important to take all this into consideration with my own teaching.

When it comes to my own professional development, the critical incident and observation has given me an insight to how pupils react to this and many other methods of learning. The research shows that the result of the methods depends on the confidence of the pupil and the willingness to answer questions, even when called upon.

According to Tripp (2012), it is not the event that is important but how the teacher reacts to that event and how the reaction to the incident determines the outcome of the incident. The outcome of a critical incident is to reflect upon your own performance and how you respond, not the situation itself. A reflection of a critical incident gives feedback and reflects on your teaching practice to possibly change the way you deal with a certain situation in order to improve behaviour management. Observations are key in order to identify critical incidents, reflect, evaluate and improve upon practice. This supports the Montessori theory, (Pound, 2008) on continuously observing lessons in order to improve.

Conclusion

To conclude, in this assignment various topics and techniques have been analysed; the use of a random name generator to minimise the risk of a critical incident occurring, and generate more confident learners (as outlined in Donaldson's report). There are many advantages and disadvantages to these techniques such as, "the random name generator", but research suggests (William, 2011) that picking names at random allows more engagement in the classroom, that there is less of a learning gap between the more able and less able students.

Studies and observations suggests that behaviour and classroom management can be improved with the use of classroom techniques such as the random name generator (Turner and Patrick, 2014), and help improve the confidence and engagement of the pupils (Hansen, 2014).

To present or speak in front of a classroom can be a challenge for a student, therefore a safe setting can be crucial for progress and confidence (Fisher, 2014). A growth mindset is also liable for the participation of the students (Elliot, Hufton, Willis and Illushin, 2015). Moreover, if a child felt the confidence to answer a question and felt secure, this could influence classroom participation (Pollard, 2006).

The random name generator allows an equal lesson for all students, ensuring all have the opportunity to participate, and the classroom is not controlled by the confident student (Goodrich, 2012). Random selection helps ensure all students are attentive, as they may be next to be picked. It also gives voice to those who may shy away from discussions. On the other hand, the method can create additional pressures for students, particularly those who lack confidence. It can create stresses and divide classrooms.

Appendices

Appendix 1.

Model Beirniad Wedi Adfyfyrio (BWA)

Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 26.9.19

Digwyddiad critigol (Ffocws)/Critical incident (focus): The use of Chromebooks

Profiad/ Experience	
Teimladau/ <i>Feelings</i> Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	I believe that the use of Chromebooks are important, they allow the teacher to give out a research task without going to a computer lab. It allows more free thinking and allows every child to do their own research on the subject that they are learning about.
Cofio a Deall/	

Remember and Understand <i>Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda?</i> <i>"Can you list the aspects of the learning experience that went well?"</i> <i>Pa elfennau o'r profiad dysgu oedd yn siomedig?</i> <i>"What were the elements of the learning experience that were disappointing?"</i>	The experiences that went well was the fact that the teacher set a task out to research a specific topic for the lesson. This allows the students to have a more independent role and have to learn in their own way, therefore possibly more of an effective strategy of learning. What did not go so well was the fact that you are relying on technology, the technology might not work or freeze or children could misuse the device. Luckily this didn't happen in this particular lesson.
Gwerthuso a dadansoddi/ Evaluate and analyse <i>Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol?</i> <i>"What will you keep the same to ensure effective teaching and learning in the future?"</i> <i>Beth oedd achos yr elfen siomedig bwysicaf?</i> <i>"What was the cause of the most important disappointing element?"</i>	I will take into consideration how helpful the technology is, that the learning is far greater with a Chromebook, that it allows further research and more understanding on a specific topic. Again, with the technology, it could freeze or not work or the children could get distracted. Also, it could slow the lesson down where children have turn the Chromebooks on and log in.

Casgliadau a chamau gweithredu/ <i>Conclusions and actions</i> <i>Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd?</i> "What are your possible solutions to the disappointing issues identified?" <i>Beth ydych yn mynd i'w wneud nesaf?</i> "What will you do next?"	There are no solution because technology such as Chromebooks are inconsistent, it could happen to anyone. With my subject ICT, I will rely on technology for the students to carry out task so it is important to maintain the technology and to make sure every child is on task.
Y profiad newydd / <i>Transformed experience</i>	

Appendix 2

Model Beirniad Wedi Adfyfyrio (BWA)

Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 2.10.19

Digwyddiad critigol (Ffocws)/Critical incident (focus): Random name generator

Profiad/ <i>Experience</i>	
Teimladau/ <i>Feelings</i> <i>Beth yw eich teimladau ynghylch y profiad?</i> "What are your feelings regarding the experience?"	I feel that I have learnt a lot from this lesson, I thoroughly enjoyed the experience and have picked up many techniques to use in my own practice.

Cofio a Deall/ <i>Remember and Understand</i> <i>Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda?</i> "Can you list the aspects of the learning experience that went well?" <i>Pa elfennau o'r profiad dysgi oedd yn siomedig?</i> "What were the elements of the learning experience that were disappointing?"	It seemed that every child was learning especially with the random name generator, that every child had the opportunity to answer a question, so I will be taking that into my practice. Most of the learning experiences were specific to that lesson, so some would not be useful for me to take into my practice.
Gwerthuso a dadansoddi/ <i>Evaluate and analyse</i> <i>Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol?</i> "What will you keep the same to ensure effective teaching and learning in the future?" <i>Beth oedd achos yr elfen siomedig bwysicaf?</i> "What was the cause of the most important disappointing element?"	I will keep the random generator the same, as I said prior it gives every child the opportunity to answer and to learn. The cause was that the exercises were very subject specific so it is not a negative point but I would not take into my own subject.
Casgliadau a chymau <i>Conclusions and actions</i> <i>Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd?</i> "What are your possible solutions to the disappointing issues identified?" <i>Beth ydych yn mynd i'w wneud nesaf?</i> "What will you do next?"	I could possibly adapt the techniques to my subject. I will take the random name generator into practice because I feel it is a very effective tool.

Appendix 3.

Model Beirniad Wedi Adfyfyrio (BWA)

Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 26.9.19

Digwyddiad critigol (Ffocws)/Critical incident (focus): Fire drill

Profiad/ <i>Experience</i>	
Teimladau/ <i>Feelings</i> <i>Beth yw eich teimladau ynghylch y profiad?</i> “What are your feelings regarding the experience?”	My feelings are that the lesson in general went how it should have, with every child learning and most students participating in the lesson and different tasks.
Cofio a Deall/ <i>Remember and Understand</i> <i>Allwch chi restru’r agweddau ar y profiad dysgu a aeth yn dda?</i> “Can you list the aspects of the learning experience that went well?” <i>Pa elfennau o’r profiad dysgi oedd yn siomedig?</i> “What were the elements of the learning experience that were disappointing?”	It was clear that every child was learning and eager to take part in the lesson by completing the tasks and by participating in the mini whiteboard exercises. I believe that there was too much teacher talking to the classroom and then the classroom were answering back or writing on their mini whiteboard, that was throughout the whole lesson. There could have been more independent tasks and more written work in books.

Gwerthuso a dadansoddi/ <i>Evaluate and analyse</i> <i>Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol?</i> <i>"What will you keep the same to ensure effective teaching and learning in the future?"</i> <i>Beth oedd achos yr elfen siomedig bwysicaf?</i> <i>"What was the cause of the most important disappointing element?"</i>	The use of mini whiteboards were very effective in this lesson because it was evident that every child was learning and participating in the lesson. They had to answer the questions told by the teacher and write them on the mini whiteboard and then hold their answers up. The most important disappointing element was that the lesson was the same for the full lesson, there was not any variety, therefore a fun task could turn long winded but it worked because every child was engaged.
Casgliadau a chymau gweithredu/ <i>Conclusions and actions</i> <i>Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd?</i> <i>"What are your possible solutions to the disappointing issues identified?"</i> <i>Beth ydych yn mynd i'w wneud nesaf?</i> <i>"What will you do next?"</i>	The possible solution is to have a variety of tasks on hand rather than one task for the whole lesson. I will take this practice into my own teaching because the use of mini whiteboards are effective for the child's learning.
Y profiad newydd / <i>Transformed experience</i>	

Appendix 4.

Model Beirniad Wedi Adfyfyrio (BWA)

Assisted Reflective Conclusions (ARC) Model

Dyddiad/Date: 2.10.19

Digwyddiad critigol (Ffocws)/Critical incident (focus): Kahoot quiz

Profiad/ Experience	
Teimladau/ <i>Feelings</i> <i>Beth yw eich teimladau ynghylch y profiad?</i> “What are your feelings regarding the experience?”	I feel that the lesson went well and every child was engaged, they knew they had a quiz on their Chromebooks, so the children were excited for that.
Cofio a Deall/ <i>Remember and Understand</i> <i>Allwch chi restru’r agweddau ar y profiad dysgu a aeth yn dda?</i> “Can you list the aspects of the learning experience that went well?” <i>Pa elfennau o’r profiad dysgi oedd yn siomedig?</i> “What were the elements of the learning experience that were disappointing?”	The use of competition works particularly well in a classroom, children want to be the best and to win, so every student was engaged and ready to compete and learn. With the use of competition, it can be daunting to children and the lower ability children. With Kahoot, it shows how everyone done so it can be worrying for some who scored low.
Gwerthuso a dadansoddi/ <i>Evaluate and analyse</i> <i>Beth fyddwch chi’n cadw’r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol?</i>	I think that the use of competition does work in the classroom and it is proven so. The students learn in a different way, so that is what I will take into practice, the use of competition.

<i>"What will you keep the same to ensure effective teaching and learning in the future?"</i> <i>Beth oedd achos yr elfen siomedig bwysicaf?</i> <i>"What was the cause of the most important disappointing element?"</i>	The quiz itself, again with the use of competition it differentiates between the top child and bottom child, so it can cause damage to self-esteem.
Casgliadau a chamau gweithredu/ <i>Conclusions and actions</i> <i>Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd?</i> <i>"What are your possible solutions to the disappointing issues identified?"</i> <i>Beth ydych yn mynd i'w wneud nesaf?</i> <i>"What will you do next?"</i>	Either use a different app for the quiz or when you choose your name instead of typing your real name in, type a fake name so no one knows how you done. Either use a different app for the quiz or when you choose your name instead of typing your real name in, type a fake name so no one knows how you done.
Y profiad newydd / <i>Transformed experience</i>	

Appendix 5.

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 26.9.19
Lesson details:

Year 8 Drama

Classroom culture

(Are the students focused on learning?)

It seemed like the students were focused, everyone got involved with the tasks and drama exercises. Through this it was clear who was not involved and who were participating.

Objectives

(Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?)

It was clear who's doing the work and who is not by the activities given to them. Most were engaged because it was a full, fun lesson.

Direction

(Are the students clear about what they are doing and how to do it well?)

All students were clear in what they were doing, the tasks were very clear and fun. The children listened and done the tasks eagerly.

Access and challenge

(Are all students able to engage in the lesson? Are all students challenged?)

Children were challenged in a different ways, especially in Drama, some were confident and others not so confident. But I think most came across with some sort of challenge.

Assessment

How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching?

The teacher gave many little tasks and made sure everyone was involved in these tasks, you could not sit down or shy away with the tasks the teacher gave. There were many different activities and each one very different with their own challenges. The teacher saying over and over, telling them what skills they are using.

Specifics / Critical Incidents

Are there particular telling moments and examples which it would be helpful to discuss?

Between each group task, the students got a bit excited and was a bit loud and excitable but the teacher soon calmed things down.

Chromebooks- each student sin year 7 and 8 has a Chromebook. This is n alternative way of learning and teaching. The teacher gave the class a research task to do on the Chromebook.

Appendix 6.

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 2.10.19
Lesson details: English Year 8, set 1
Classroom culture (Are the students focused on learning?) Students were focused, from the get go, all students wanted to learn and most eager to ask questions.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) There were clear purposes and objectives to the lesson, there were clear tasks from the start and every student were clear on what they were doing from the start of the lesson.
Direction (Are the students clear about what they are doing and how to do it well?) Students were very clear in what they had to do and they were on task throughout the lesson, students were also eager in their learning.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?)

Every student was engaged in the lesson and some were challenged. The only evidence to show this was the questioning of the students or they would say that they do not understand the task.

Assessment

How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching?

The use of the random name generator to ensure every child is aware and ready to answer.

The teacher would ask questions and demand participation from the students and students were ready to participate and that was evident.

The teacher had a starter task straight away, ten minutes of reading in silence.

There was a lot of teacher, class collaboration and also a lot of independent work.

Specifics / Critical Incidents

Are there particular telling moments and examples which it would be helpful to discuss?

The use of the random name generator to ensure every child is aware and ready to answer.

Chromebooks were used in the lesson, the use of the Chromebooks were vital to the lesson by the students researching and doing tasks on the Chromebook in relation to the work.

Reward cards- cards for the star pupils.

Appendix 7.

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date:

26.9.19

Lesson details:

Year 8 French

Classroom culture

(Are the students focused on learning?)

All students were focused on the lesson, it was such a fast paced and full lesson that students did not have time not to focus or play around.

Objectives

(Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?)

It was a very class, teacher based lesson, so the teacher is constantly teaching and students are constantly answering questions. The whole class participated

Direction

(Are the students clear about what they are doing and how to do it well?)

The students seemed to understand by answering the questions and by writing the correct answers on the mini whiteboards.

Access and challenge

(Are all students able to engage in the lesson? Are all students challenged?)

I believe that the most were engaged, it was a fun lesson and needed the class to get involved and full concentration.

Assessment

How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching?

For most of the lesson, it was the teacher saying the rules in French(as in if the word is masculine or feminine) and on a mini whiteboard the students had to translate what the teacher said. It is clear which student is learning and which students are correct by looking at the answers on the mini whiteboard. The teacher was very organised and enthusiastic.

Specifics / Critical Incidents

Are there particular telling moments and examples which it would be helpful to discuss?

Fire drill - Towards the end of the lesson there was a fire drill. Everyone knew what to do, leave their bags, stand up and all walk to the yard. Kind of military style.

--

Appendix 8.

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 2.10.19
Lesson details: Science year 8
Classroom culture (Are the students focused on learning?) All students were focused and enthusiastic to learn and to engage in the lesson and learning.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) There was a very clear purpose to the lesson, it was a very fast paced lesson, with excitement and fun in the lesson with many different activities.

Direction

(Are the students clear about what they are doing and how to do it well?)

The students were very clear and understood what they had to do. They done it well and all enthusiastic to participate.

Access and challenge

(Are all students able to engage in the lesson? Are all students challenged?)

Every student was engaged in the lesson and I can imagine some were challenged, but this was not clear.

They had a quiz online, and a few had every answer correct. So in a sense it was clear enough that most of the students were challenged.

Assessment

How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching?

Before, the teacher would ask a lot of questions to know what the children knew and understood already.

The use of Chromebooks were important to the lesson as the students had to follow the powerpoint and do their own research before participating in an online quiz to test what they have learnt. They could see exactly what they had wrong and what the correct answer was.

Specifics / Critical Incidents

Are there particular telling moments and examples which it would be helpful to discuss?

Chromebook - Use of Chromebooks, many positives about the use of them, but also some negatives.

Kahoot quiz- Online quiz to be used on the Chromebooks.

Reference list

Alejandro, L. L. (2017). Briefcase recitation system with random name generator: An alternative recitation tool. *International Journal of Computing Sciences Research*, 1(2), 36-45. doi: 10.25147/ijcsr.2017.001.1.10.

Antony MM, Swinson RP. *The Shyness and Social Anxiety Workbook*. Oakland, CA: New Harbinger; 2008.

Ashby, J. & Schoon, I. (2010) The role of aspirations, ambition and gender in predicting adult social status and earnings. *Journal of Vocational Behavior* , 77, issue 3, pp. 350 - 360

British Educational Research Association (BERA) (2018) *Ethical guidelines for educational research*. 4th edn. Available at: <https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018> (Accessed: 28th September 2019).

Black, P and William, D. King's College, London. Department of Education and Professional Studies (1998), Inside the black box: Raising standards through classroom assessment, GL Assessment, London.

Burguillo, J.C. (2010). Using game theory and Competition-based Learning to stimulate student motivation and performance. Computers and Education, Issue 2. Pp.556-575

Chanlin, L.J., (1999). Gender differences and the need for visual control. International Journal of Instructional Media. Issue 3, pp. 329.

Chin, C, (2008). Students' questions: a potential resource for teaching and learning science. Studies in Science Education, 44(1)

Clarke, S (2005), Formative assessment in action: weaving the elements together, Hodder Education, London.

Collier, E (2018). What is Effective Questioning & Why Should I Use it in My Classroom?
Available at <https://www.highspeedtraining.co.uk/hub/what-is-effective-questioning/>

Cornwell, B. R., Heller, R., Biggs, A., Pine, D. S., and Grillon, C., (2011). Becoming the center of attention in social anxiety disorder: Startle reactivity to a virtual audience during speech anticipation. Journal of Clinical Psychiatry, 72(7): 942–948.

Cuncic, A., (2019). Overcoming a Fear of Being the Center of Attention When You Have SAD. available at <https://www.verywellmind.com/center-of-attention-fear-3024831>

(Donaldson 2015)

Dinkmeyer, D. & Dreikurs, R. (2000). Encouraging Children to Learn. USA: Taylor and Francis.

Elliot, N.R., Hufton, W., Willis, L. & Illushin, J.G. (2005) Motivation, Engagement, and Educational Performance. UK: Palgrave Macmillan.

Estyn.gov.wales. (2019). Comprehensive School | Estyn. [online] Available at: <https://www.estyn.gov.wales/provider/6764077> [Accessed 29 Sep. 2019].

Goodrich, K. (2012). Classroom techniques: Formative assessment technique number one. Teach. Learn. Grow. The education blog. Retrieved from <https://www.nwea.org/blog/2012/classroom-techniques-formative-assessment-technique-number-one/>

Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. *Psychological Bulletin*, 89(1), 47-62.

Kirk, M., (2017). How Some Kids Escape Poverty. Available at <https://www.citylab.com/solutions/2017/05/how-some-kids-escape-poverty/527409/>

Hammond, E.M., (2016). My hand is up, therefore I am a good learner: A study into Year 4 pupils' perspectives on voluntary classroom participation. *Journal of Trainee Teacher Education Research*. Available at <https://jotter.educ.cam.ac.uk/volume7/107-136-hammondem/107-136-hammondem.pdf>

Hansen, A. (2014). *Children's Errors in Mathematics* (3rd ed.) London: Sage.

Harris, A. and Goodall, J., (2007). Engaging Parents in Raising Achievement Do Parents Know They Matter? Available at <https://dera.ioe.ac.uk/6639/1/DCSF-RW004.pdf>

Harrison, C., Howard, S. & King's College, London. Department of Education and Professional Studies (2009), *Inside the primary black box: assessment for learning in primary and early years classrooms*, GL Assessment, London.

Hirschi, T. (1969). *The causes of delinquency*. Berkeley: The University of California Press.

Mayo-Wilson, E. et al (2014). Psychological and pharmacological interventions for social anxiety disorder in adults: a systematic review and network meta-analysis. *Science Direct*, 1(5), pp368-376

Mylocalschool.gov.wales. (2019). My Local School. [online] Available at: http://mylocalschool.gov.wales/?_ga=2.168814433.1126869378.1572352785-1545268268.1572352785 [Accessed 29 Sep. 2019].

Pisa (2015). Available at <https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf>

Pollard, A. (2006) Social differentiation in primary schools. *Cambridge Journal of Education*. 17(3), 158-161.

Pope., G (2013). Questioning Technique Pocketbook. Available at <https://books.google.co.uk/books?hl=en&lr=&id=zYFeBAAQBAJ&oi=fnd&pg=PA7&dq=growth+mindset+and+effective+questioning&ots=zYtDslHwYe&sig=PIPqhBiAfQ3mhUgikRoO3fw1rvo#v=onepage&q=growth%20mindset%20and%20effective%20questioning&f=false>

Rogers, J. M. (1997). Class participation: Random calling and anonymous grading. *Journal of Legal Education*, 47(1), 73-82.

Schön, D. A. (1991) *The Reflective Turn: Case Studies In and On Educational Practice*, New York: Teachers Press, Columbia University.

Shore, D. (2015). Dr. Ken Shore: Encouraging class participation. Retrieved from http://www.educationworld.com/a_curr/shore/shore056.shtml

Skinner, B.F. (1985) Cognitive science and behaviourism. *British journal of Psychology*, 76(3), 291-301.

Tripp, D. (1993). *Critical Incidents in Teaching: Developing Professional Judgement*. London: Routledge.

Truthful Classroom (2013). Available at <http://truthfulclassroom.blogspot.com/2013/12/how-no-hands-up-works.html>

Turner, J. C. & Patrick, H. (2004) Motivational influences on student participation in classroom learning activities. *Teachers College Record*, 106(9), 1759-1785.

William, D (2011), *Embedded formative assessment*, Solution Tree Press, Bloomington.

William, D, (2014). *The Right Questions, The Right Way. Using Assessments Thoughtfully*, 71 (6), p.p. 16-19