

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.

A critical incident can be accepted by scholars by a number of different definitions. However, a critical incident in an educational setting is generally accepted as a valuable and meaningful event occurrence (Joshi, 2018) which is “vividly remembered” (Brookfield, 1990, p. 84). Tripp (1993) mirrored this view, displaying a critical incident as an interpretation of an event which is marked as a significant turning point or change. However, Joshi (2018) puts forward how the critical incidents are not always a dramatic, demanding event; they are often very common events which occur daily in the educational setting. An incident often becomes critical when it is analysed and reflected upon. Analysis of critical incidents is one of the approaches of a teacher’s professional development (Joshi, 2018). Richards and Farrell (2010) discuss how an unplanned, unexpected critical incident during a lesson provokes insights into some aspects of teaching and learning. Richards and Farrell (2010) reinforce how the analysis and reflection process on these incidents provides an opportunity for teachers to learn about their teaching practice, their individual learners and how to develop their practice further. This essay is centred around one observed critical incident from an educational setting. Throughout this essay, there will be an analysis of this particular critical incident with links to at least one of Donaldson’s Four Purposes of education. There will also be a discussion of the methodology for observing and creating case studies based in a school setting, as well as a literature review of the areas of teaching and learning which stem from this particular critical incident. The essay will finally include a reflection, evaluation and identification of the next teaching and learning steps for future practice.

The critical incident was observed in an average sized, English medium, inner-city primary school. This particular school is a 1.5 form entry school where thirty percent of all of the pupils have English as an additional language. As of January 2019, this school was ranked as a green school, meaning they are deemed to be a very effective school (Wightwick, 2019). The school has eleven classes within the school, starting from reception and each year group includes a mixed class. This particular observation took place in a year two class, with twenty seven pupils consisting of twenty one girls and six boys. The class was ran by one class teacher and this class shared a teaching assistant with a year one class. The

names of the school, pupils and teachers will not be mentioned and will be kept confidential throughout this essay, following the 2018 BERA ethical guidelines. These guidelines recognise the diverse approaches to completing educational research and promote respect for all those who engage in the research, including the participants, the researchers and all those who come in contact with the research (BERA, 2018). The BERA guidelines discuss how every individual involved in research should be treated with dignity, sensitively and fairly with the right to be free from prejudice. Therefore I will be writing sensitively and ensuring confidentiality throughout this essay to comply with the BERA (2018) guidelines (BERA, 2018).

Research methodology will be discussed in the following part of the essay. Payne and Payne (2004) identifies methodology as a grand scheme of ideas which directs researchers in working towards gathering findings. In addition to this, Daly (2003) and Newman and Clare (2016) discusses how methodology is used to summarise the findings which supports the research. Educational research is defined by Spaulding et al (2010) as a systematic collection of data which is related to a field(s) of education, which is then analysed and findings are presented. Educational research can be carried out through a number of different methods, procedures and disciplines which commonly include observations, interviews and questionnaires amongst many more (Rhedding-Jones, 2005).

In order to gather findings for this particular essay, the method of observation is required. Observations provide the freedom to gather data from innate occurrences during naturally happening social situations (Cohen et al., 2007). In this instance, the observation took part in a foundation phase classroom. Cohen et al, (2007) further point a number of strengths of using observations as a method of data collection; as a whole, the use of this perception and direct cognition with an occurrence as an approach to data collection can provide stronger, more authentic data than could be otherwise collected through alternative methods. Therefore data from observation is believed to be the most valid and reliable technique of data collection (Cohen et al., 2007).

When collecting research through observation, it is important to consider a method of observation. There are a number of methods of observation which include participant and non-participant observation. Participant observation involves accessing a setting and getting involved with participants to gain an insight into their social situation including their behaviour and reality (Conrad and Serlin, 2006). Participant observation can often have an influence on the on those being observed. Tassoni (2007) discusses how it is likely for participants to respond differently as they could be distracted, nervous or embarrassed when

an observer is present in the classroom, thus causing the Hawthorne Effect (Fernald et al., 2012). On the other hand, the way in which participants engage with the observer can have a positive impact on their work or outcomes as Tassoni (2007) believes it is often natural to praise or help young children with their work.

Robson (2003) places emphasis on how non-participant observations allow for individuals to have an insight on the reality of behaviour in the classroom, especially those which are often unnoticed or misunderstood as a non-participant observer is quite literally at a distance and so can clearly see what is happening in the instance. It can also be thought that it is easier to record findings if non-participant observation is carried out. There are, however, some downfalls to this method of observing as it could be that the observer may need clarification on what a child/practitioner has done and the non-participant observer would not have the opportunity to ask any follow up questions (Tassoni, 2007; Robson, 2003).

Before the session, I had planned to carry out non-participant observation. However due to the dynamic of the classroom and demand for help with some tasks, I was led away from this method and participant observation was carried out. Despite the downfalls of biased findings and potential change in behaviour in participants, this method of observation provided findings on an insight and conversation during a problem solving activity. As well as observation, it is important to consider case study methodology. Case studies, according to Harrison et al (2017), are,

“an effective methodology to investigate and understand complex issues in real world settings” (p.1).

Particularly in social sciences and education, case study methodology has undergone much development (Harrison et al, 2017). Leod (2019) states how the case study is not a research method in itself but researchers often select methods of data collection and analysis which constitutes to a case study. In this case, the method of observation allowed for the creation of a case study, or critical incident, providing an insight of every-day incidents in education. These case studies work sufficiently in providing an insight for further research, or reflection on incidents to benefit further practice (Delamont, 2012). However it is highlighted by Leod (2019) that often case studies cant generalise results to a wider population due to case studies often dealing with one person, event or group. Thus, meaning there is a likelihood for observer bias, as discussed above. For example, even Freud had once been criticised for using case studies where the information was biased to suit the particular theory of behaviour (Leod, 2019; Delamont, 2012).

During the observation sessions which took place in the year two classroom, four critical incidents were noted (see all appendices). Despite only one critical incident being discussed in this particular essay, it is important to understand how often incidents arise in educational settings which can be critically analysed for learning and practice to be further developed. The particular incident which I have decided to reflect upon further in this essay considers a low ability mathematics group who were tackling a problem solving topic activity (see appendix five). However, due to tight time restraints to complete the task, the task was heavily lead by the teacher, where the group had very little opportunity to read and discuss their task with their peers and a very short time to solve the problem(s) asked of them. Thus, the teacher's involvement often lead to suggestion or even telling of answers to ensure the task was completed in time for lunch. Upon completion, the group was asked how they felt about the task, where an individual responded with "easy peasy lemon squeezy".

Professor Graham Donaldson (2015) advocates that through the transformation of the education system in Wales in 2021, learners will benefit from experiences in school which will support each child to grow throughout their adult life. These are known to be four purposes, which how children become ambitious, capable learners, ready to learn throughout their lives; enterprising, creative contributors, ready to play a full part in life and work; ethical, informed citizens of Wales and the world and healthy, confident individuals, ready to lead fulfilling lives as valued members of society (Welsh Government, 2018). The particular critical incident highlighted in this essay, suggests that children observed in this critical incident are linked to one of Donaldson's four purposes (Donaldson, 2015) as healthy, confident individuals as they were ready and confidently taking part in their activity, they made decisions upon answering the questions in their work and faced the challenge of taking part in the task. The confidence was certainly apparent in the individuals who felt that their task was "easy peasy lemon squeezy", as previously described. However, it was evident that through a lack of time resulting in the task being heavily teacher-lead, this particular instance limited the children's ability to flourish as ambitious, capable learners who are ready to learn throughout their lives (Donaldson, 2015). The ability to communicate with their peers to evaluate what they found and explain their ideas was taken away from them due to the short time frame available for the group to complete their task. As well as this, the individuals may find themselves relying upon this teacher guidance and find it hard to learn for themselves throughout their lives in education. Nevertheless, if more time was available then the children would have been given the opportunity to discuss their findings and thus develop as ambitious, capable learners.

In section of the essay, a literature review will be conducted where context two main areas of research will be provided using much synthesis of sources of literature. A first area of research will be challenge within the primary school setting to broaden students' knowledge. The critical incident discussed throughout this essay highlighted the lack of stretch and challenge involved in the task for the children due to the level of teacher involvement. Implementing a stretch and challenge models in classrooms requires teachers and students to recognise that learning should be challenging and often, difficult. This may seem an obvious statement, but often, it is known that teachers are likely to set a limit on what we think students can achieve (Light, 2017). Stretching and challenging students is best effective when teachers know their students' abilities well, through a combination of a range of data, such as progression stages or grades, to enable teachers to make the best decisions when planning lessons for the class (Light, 2017; Wiliam, 2011). Light (2017) discusses the importance of challenge and believes that,

"once you've diagnosed your students' strengths and barriers to learning, there are a whole host of options you can implement to raise the bar in your classroom" (p.1).

Professor Dylan Wiliam (2011), in his book Embedding Formative Assessment, explains that when students work together in sharing, clarifying and understanding their learning intentions, this plays an essential role in assessment for learning; those students who have a clear picture of their learning journey, are more likely to engage in challenging tasks and are more able to reflect on their progress over time and take responsibility for knowing how to move forward and broaden their subject knowledge. As well as this Professor Hattie (2012) identifies peer discussion in the classroom, where students are given the opportunity to respond to challenging questions posed to them by teachers, as being integral to accelerating students' learning (Light, 2017).

Soviet psychologist Lev Vygotsky (1896-1934) developed the social learning theory which asserts that learning is a social process which the support of parents, peers and the culture in which we belong plays a crucial role on cognitive development (Daniels, 2002). The concept of the zone of proximal development was developed through this theory of social constructivism. This zone of proximal development has been discussed as;

"the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through

problem-solving under adult guidance, or in collaboration with more capable peers"
(Vygotsky, 1978, p. 86).

Therefore, this concept of the zone of proximal development refers to a phase of development where a child has partially mastered a task but could reach their potential with the assistance or guidance of a skilful individual, may that be teacher or peer (Lloyd et al, 1999; Vinney, 2019). Vinney (2019) goes on to discuss how when learning is taking place in the zone of proximal development, only a very small amount of assistance is required. It is emphasised that if too much assistance is given, it is likely for children to only mirror the skilled individual instead of becoming a master of the particular concept of education for themselves (Vinney, 2019). Light (2019) acknowledges that for many years, stretch and challenge was only readily available for the children who fall into the category of more able and talented, where it often came in the form of an extension task for those who finished their work early.

McLeod (2019) recommends that when assisting a pupil to move through the zone of proximal development, education providers are encouraged to focus on three important components which aid this learning process, which are as follows:

- "1. The presence of someone with knowledge and skills beyond that of the learner*
- 2. Social interactions with a skilful role model where the learner will be inspired to and practice their skills further.*
- 3. Scaffolding, or supportive activities provided by the educator, or more competent peer, to support the student as he or she is led through the ZPD" (McLeod, 2019 p.3).*

Vygotsky's zone of proximal development aims to encourage students to work for extended periods of time without relying on the teacher's constant input. Professor John Hattie, alongside Gregory Yates, in Visible Learning and the Science of How We Learn (2013), explore the difference between teachers as activators as opposed to teachers as facilitators. There has been a debate between those who believe teachers need to hold a facilitative role and those who support teachers being activators of learning in the education setting (Taber, 2009; Hattie, 2012). Alfieri et al. (2011) conducted an analysis on this topic area which showed the value of directed over undirected discovery learning. The findings of this analysis could be discussed in some detail, however the concluded main findings can be

summarised as an unassisted discovery learning does not generally benefit learning, and that teachers should instead employ scaffolded tasks to encourage students to reach an objective (Alfieri et al., 2011). Hattie (2012) enforces this by stating;

“teachers are change agents; they need to be activators; and they are responsible for enhancing student learning” (p.162).

A further area of discussion is the importance of students' wellbeing when learning, particularly self-efficacy. The students who believed that the task was “easy peasy lemon squeezy” seemed to hold high level of self-efficacy. Self-efficacy and mental wellbeing of students can be viewed as a sensitive topic, however much research has been carried out in a range of different settings on the subject (Bandura, 1997). There is thought to be a direct link between the level of self-efficacy of a student and their academic attainment (Lane et al., 2004). Self-efficacy can be defined by Bandura (1997) in a journal by Lane et al, (2004) as;

“the levels of confidence individuals have in their ability to execute certain courses of action, or achieve specific outcomes” (p.247).

Research suggests that the most powerful source of self-efficacy for students is previous performance accomplishments (Lane et al., 2004). It has been highlighted by Gunn (2019) that when a student has reasonably high self-efficacy, they commonly hold confidence in their academic ability going forward, as well as sense of control over their motivation to learn. Therefore, research suggests that self-efficacy can boost student achievement, foster emotional health and well-being, and serve as a of motivator of learning (Gunn, 2019). However it is important to understand that unfortunately, there is evidence that suggests students with additional learning needs have a greater risk of developing low self-esteem (Lyons, 2012). Although, while not every student with low self- esteem will underachieve in their education, there is much research which displays how low self-esteem can often lead to less academic success (Daniel & King, 1997). This does not mean that these individuals are less capable of achieving, but merely perceive themselves as incapable (Lyons, 2012). In addition to this, while more researchers agree that self-esteem impacts academic achievement, according to Colvin (2000), there is much research which states that self-esteem does not affect learning or academic success and that effect in their education is highlighted to be the determining factor in whether or not a child succeeds.

A current theorist, Ferre Laevers, uses a five point scale to measure well-being and involvement to assess the level of learning that is taking place. The scales help practitioners

to understand how focussed and comfortable the children are in the education setting (Kingdon et al., 2016). It is believed that when a child is consistently placed at a low level of the well-being and involvement scale, their chance of educational development is being threatened. According to Laevers, when a child's level of well-being and involvement increases, their learning develops in parallel (Kingdon et al., 2016).

These scales are thought to be a useful tool for practitioners as when a constant high level of well-being and involvement is recorded for the child, this is an indication of rich learning experience taking place (Arnerich, 2018; Kingdon et al., 2016). Observation and assessment play are a key part of such scales, and Arnerich (2018) suggests that making the Leuven Scales a part of practice for teachers, they can give an much deeper understanding of the needs of the children in their setting.

The next section of this essay will include a reflection and evaluation of the discussed critical incident and the steps that I would take forward in my practice after writing this essay. Schon (1983), in his book *The Reflective Practitioner*, developed the term "reflective practice". Reflective practice has been identified by MacNaughton (2003) as an intellectual engagement with practices, aiming towards transforming future practices and knowledge. Schon recognised how education professionals face unique, and often challenging, situations in their settings on a daily basis. It is thought that the most effective professionals reflect upon their practice to better understand their students and improve future practice (Schon, 1983; Marbina et al., 2010; Brookfield, 1998). Reflection underpins standards for professional practice across all education professions (Brookfield, 1998).

There are a number of effective models of reflection. Commonly used models of reflection include Gibbs reflective model (1988), Kolb reflective cycle (1984) and Schon model (1991) among many others. Despite the majority of these models being outdated, the models are still used effective modes of reflecting to critically evaluate and improve upon practice in education settings. In this instance, the model of reflection used has been the University of Wales Trinity Saint David's Assisted Reflective Conclusions Model (ARC Model) (see appendices one to four). This model allows for the engagement in a number of proposed questions which make the practitioner think about their practice; their feelings on the practice, positive elements, disappointing elements, possible solutions and next steps.

From completing the ARC model of reflection on the critical incident discussed in this essay, I have found that the task posed to during the critical incident allowed for the children to

collaborate to find some answers. I also thought that the scaffold of coloured blocks given to the children worked well towards finding the possible answers. Thus, in future practice, I would ensure the opportunity for children to collaborate and share answers is possible. I would also ensure the scaffolding resources are readily available for the students who may need them. However, the most disappointing element of the incident to me was the lack of time available for the students to attempt the task and discuss their findings. Due to the lack of time, their discussion time was hindered by teacher lead discussions and answer suggestions, thus lacking challenge in the activity. Therefore in future, I would take on board the work of Dylan Wiliam (2011), who discusses how allowing time for students to discuss their findings, sharing ideas and clarifying their thinking allows for a rich learning experience. I will also ensure children are stretched and challenged to an appropriate level in their tasks, in order to broaden knowledge and ensure that children are working within the zone of proximal development, as discussed previously. I also noticed that there was no follow up task or opportunity for the children to continue on the problem solving activity posed to them. Therefore in future practice, I would ensure that the choice is available to them to continue and extend upon the problem solving activity to stretch their knowledge further. According to Light (2017), setting up choice in the classroom can often be tricky to get right and, if done badly, can be detrimental to stretch and challenge if students choose less cognitively demanding tasks. However, effectively incorporating choice means setting the bar high and expecting students to continue to produce excellent work but acknowledging the scaffold to producing this work may be different from child to child depending on their needs (Light, 2017). Nevertheless, independently completing challenging extension tasks is thought to boost the morale of children, especially when completed successfully (Wiliam, 2011). Thus, through allowing children opportunity to stretch and challenge their knowledge, could lead to a sense of self-efficacy and a further enriched and enjoyable learning experience.

To conclude, I have approached this essay by considering BERA guidelines (2018) while observing a group of children in a year two class while completing a problem solving essay to find a critical incident. I have then used my findings from this critical incident to provide a literature review and a reflection in order consider the steps I would take on board in my future practice. This essay has provided an insight into the importance of observation in the early years classroom as well as the importance of reflecting on practice. Five new professional standards for teaching and leadership have been introduced in Wales (hwb.gov.wales, 2017). The practice of observing and reflecting allows for the development of a number of these proposed standards. However, the professional standard of 'Professional Learning' is particularly met through this good practice. This standard requires

the teacher to continuously extend their knowledge and understand the benefits of reflection and openness to challenge and change in progressing pedagogy. Critical reflective practice encourages teachers to understand their learners needs and abilities (Aronson, 2010). It also helps skilled teachers to explore their own teaching to benefit growth and progress (Pollard and Collins, 2005). Thus, this is a step in which I will ensure to take in my future practice to ensure each pupil receives a beneficial and enjoyable learning experience.

References

Alfieri, L., Brooks, P., Aldrich, N. and Tenenbaum, H. (2011). Does discovery-based instruction enhance learning?. *Journal of Educational Psychology*, 103(1), pp.1-18.

Arnerich, M. (2018). *How To Apply The Leuven Scales In Practice | Family*. [online] Family. Available at: <https://family.co/blog/management/leuven-scales/> [Accessed 23 Oct. 2019].

Aronson, L. (2010). Twelve tips for teaching reflection at all levels of medical education. *Medical Teacher*, 33(3), pp.200-205.

Bera.ac.uk. (2019). *Ethical Guidelines for Educational Research, fourth edition (2018)*. [online] Available at: <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018> [Accessed 8 Oct. 2019].

Brookfield, S. D. (1990). *The skillful teacher*. San Francisco: Jossey Bass.
Cambridge: CUP.

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

Cohen, L., Manion, L., Morrison, K. & MyLibrary 2007, *Research methods in education*, 6th edn, Routledge, London; New York.

Colvin, R. (2000). Losing faith in self-esteem. *The School Administrator*, 57(2), 28.
Conrad, C. and Serlin, R. (2006). *The Sage handbook for research in education*. Thousand Oaks [Calif.]: Sage Publications.

Daly, M. (2003) Methodology, in R.L. Miller and J.D Brewer (eds) *The A-Z of Social Research*. London: Sage.

Daniel, L. G. & King, D. A. (1997). Impact of inclusion education on academic achievement, student behaviour and self-esteem, and parental attitudes. *The Journal of Educational Research*, 91(2), 67-80.

Daniels, H. (2002). *Vygotsky and Pedagogy*. 1st ed. London: RoutledgeFalmer.
Delamont, S. (2012). *Handbook of qualitative research in education*. Cheltenham: Edward Elgar Publishing Ltd.

Donaldson, G. (2015). *Successful Futures: Independent review of curriculum and assessment arrangements in Wales*. Caerdydd: Llywodraeth Cenedlaethol Cymru.

Fernald, D., Coombs, L., DeAlleaume, L., West, D. and Parnes, B. (2012). An Assessment of the Hawthorne Effect in Practice-based Research. *The Journal of the American Board of Family Medicine*, 25(1), pp.83-86.

Gunn, J. (2019). *How to Encourage Student Self-Efficacy*. [online] Concordia University-Portland. Available at: <https://education.cu-portland.edu/blog/leaders-link/build-student-self-efficacy/> [Accessed 18 Oct. 2019].

Harrison, Helena; Birks, Melanie; Franklin, Richard & Mills, Jane (2017). Case Study Research: Foundations and Methodological Orientations [34 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 18(1), Art. 19,

Hattie, J. (2012). *Visible learning for teachers : maximizing impact on learning*, London: Routledge

Hattie, J. (2013). *Visible Learning and the Science of How We Learn*. New York: Routledge.

Hwb.gov.wales. (2017). *Professional standards - Hwb*. [online] Available at: <https://hwb.gov.wales/professional-development/professional-standards> [Accessed 19 Oct. 2019].

Joshi, K. (2018). Critical Incidents for Teachers' Professional Development. *Journal of NELTA Surkhet*, 5, pp.82-88.

Kingdon, Z., Gourd, J. and Gasper, M. (2018). *Flourishing in the early years*. 1st ed. New York: Routledge.

Lane, J., Lane, A. and Kyprianou, A. (2004). SELF-EFFICACY, SELF-ESTEEM AND THEIR IMPACT ON ACADEMIC PERFORMANCE. *Social Behavior and Personality: an international journal*, 32(3), pp.247-256.

Light, D. (2017). *Bloomsbury CPD library Stretch and Challenge*. 1st ed. London: Bloomsbury Publishing.

Lloyd, P., Fernyhough, C., Vygotsky, L. and Wygotski, L. (1999). *Lev Vygotsky*. 3rd ed. London: Routledge.

Lyons, A. (2012). *Self-Esteem and Learning Disabilities | Epilepsy Treatment | Intractable Childhood Epilepsy*. [online] Epilepsytrementdrugs.com. Available at: <http://epilepsytrementdrugs.com/esteem.cfm> [Accessed 20 Oct. 2019].

MacNaughton, G. (2003). Reflecting on early childhood curriculum. In G. MacNaughton, *Shaping Early Childhood* (pp. 113-120). England: Open University Press.

Marbina, L., Church, A. and Tayler, C. (2010). *Victorian Early Years Learning and Development Framework*. 1st ed. Melbourne: University of Melbourne, pp.7-11.

Mcleod, S. (2019). *Case Study Method in Psychology | Simply Psychology*. [online] Simplypsychology.org. Available at: <https://www.simplypsychology.org/case-study.html> [Accessed 19 Oct. 2019].

Mcleod, S. (2019). *Zone of Proximal Development and Scaffolding | Simply Psychology*. [online] Simplypsychology.org. Available at:

<https://www.simplypsychology.org/Zone-of-Proximal-Development.html> [Accessed 23 Oct. 2019].

Newman, D.S. & Clare, M.M. 2016, "School Psychology as a Relational Enterprise: the Role and Process of Qualitative Methodology", *Contemporary School Psychology*, vol. 20, no. 4, pp. 327-335.

Payne, G. and Payne, J. (2004) *Key Concepts in Social Research*. London: Sage.

Rhedding-Jones, J. (2005). *What is research?*. Oslo: Universitetsforlaget.

Richards, J. C., & Farrell, T. S. C. (2010). *Professional development for language teachers*.

Schön, D. A. (1983). The structure of Reflection In- Action. *The reflective practitioner*. New York: Basic Books.

Spaulding, D., Lodico, M. and Voegtle, K. (2010). *Methods in educational research*. 2nd ed. San Francisco, Calif.: Jossey-Bass.

Taber, K. (2009). *Progressing science education*. 1st ed. New York: Springer.

Tassoni, P. (2007). *Child care and education*. Oxford: Heinemann.

Welsh Government (2018). *Education In Wales: Our National Mission*. [online] Cardiff: Education Wales, p.11. Available at: <https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf> [Accessed 16 Oct. 2019].

Wightwick, A. (2019). *Wales school colour codes 2019: The schools ranked green*. [online] walesonline. Available at: <https://www.walesonline.co.uk/news/education/wales-school-colour-codes-2019-15758437> [Accessed 8 Oct. 2019].

William, D. (2011). *Embedded formative assessment*. 1st ed. Bloomington: Solution Tree.

Woolliscroft, C. 2016, "Stretch and challenge, for students and teachers", *Teaching Geography*, vol. 41, no. 2, pp. 72-73.

Appendix 1



Model Beirniad Wedi Adfyfyrio (BWA) *Assisted Reflective Conclusions (ARC) Model*

Dyddiad/Date: 26/09/2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Problem Solving : Lack of Challenge

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	<u>It was good to see that the classroom was set up well, with the task, continuous and enhanced provision all linking with their topic of world in union.</u> <u>I enjoyed my experience of observing the problem solving activity as all of the children were enthusiastic and engaged with the task well.</u>
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	<u>The task was linked well with their class term topic. The children communited and worked with their peers effectively during the task.</u> <u>I was disappointed to see the lack of challenge during this task. Instead of allowing time for the children to think and work out the problems, the answers were quickly suggested.</u>
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	<u>I would keep the activity the same. I would still ensure that the children work in ability groups, as this worked well.</u> <u>I believe that lack of time and time management issues caused the impatient answer suggestions from the teacher.</u>
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r problemau siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	<u>I would ensure that the lower ability groups, that may need more time for figuring out answers, are allocated a larger amount of time for this activity.</u> <u>I will consider all of the points stated above, to ensure that the children aren't spoon fed their answers, and that the children learn to work out answers for themselves to broaden their knowledge and become independent learners.</u>

Appendix 2



Model Beirniad Wedi Adfyfyrio (BWA) *Assisted Reflective Conclusions (ARC) Model*

Dyddiad/Date: 26/09/2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Welsh Helpwr Heddiw

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	<u>This was a lovely lesson. Very good to see the children take responsibility of their own learning. Was also good to observe the level of welsh spoken in the primary school setting.</u>
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	<u>Went well : Child lead learning; teacher only stepping in if children were struggling. Helpwr Heddiw being a weekly task meant the children knew exactly what to do, not a lot of direction was needed.</u> <u>Disappointing: Only a short amount of time was dedicated to this lesson (approx.. 20 minutes), this lesson was engaging and all of the children were participating, therefore I would have liked to have seen this lesson last longer. Was stopped to continue with problem solving activity which had been started before lunch.</u>
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	<u>Pupil lead learning & discussions.</u> <u>Lack of time / time management</u>
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materiau siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	<u>Managing time better</u> <u>I will take on this helpwr heddiw technique for welsh lesson as it seemed to work very well where all children were engaged and enjoyed themselves.</u>

Appendix 3



Model Beirniad Wedi Adfyfyrio (BWA) *Assisted Reflective Conclusions (ARC) Model*

Dyddiad/Date: 26/09/2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): pupil voice

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	<u>Pleased yet shocked to see the level of pupil involvement in the lesson planning process.</u> <u>Disappointed with how hectic the session was : shouting out suggestions where only some were heard and taken into account.</u>
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	<u>Lots of ideas from the children, to cover a range of subjects</u> <u>The lack of organization for the suggestions, shouting suggestions meaning some were missed.</u>
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	<u>I will definitely ensure children's ideas are used for the lesson planning process: some came up with ideas that I never would have thought about. Choice in their learning could mean they were more likely to engage with the activity</u> <u>Lack of planning or underestimating the level of involvement</u>
Casgliadau a chamau gweithredu/ Conclusions and actions Beth yw eich atebion posibl i'r materiaon siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	<u>Ensuring there is a systematic way of recording ideas in place</u> <u>I will use this pupil voice method in future however I will use a systematic method of recording the students' ideas.</u>

Appendix 4



Model Beirniad Wedi Adfyfyrio (BWA) *Assisted Reflective Conclusions (ARC) Model*

Dyddiad/Date: 02/09/2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Mathematics

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	<u>A very positive activity and lesson. However, the incident of the use of helpful resources being looked down upon made me feel really uncomfortable, especially when child A was upset by the comment.</u>
Cofio a Deall/ Remember and Understand Allwch chi restru'r agweddau ar y profiad dysgu a oeth yn dda? "Can you list the aspects of the learning experience that went well?" Pa elfennau o'r profiad dysgu oedd yn siomedig? "What were the elements of the learning experience that were disappointing?"	<u>Effective activity, effectively directed and differentiated to perfectly challenge each ability group, good amount of teacher lead learning.</u> <u>The fact that it was pointed out that resources can only be used if a student is struggling : essence of failure.</u>
Gwerthuso a dadansoddi/ Evaluate and analyse Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? "What will you keep the same to ensure effective teaching and learning in the future?" Beth oedd achos yr elfen siomedig bwysicaf? "What was the cause of the most important disappointing element?"	<u>I will ensure that maths is fun (like in this lesson, where it was a super hero problem) to engage the children.</u> <u>Trying to ensure the children were challenged to try to work out the mathematics problems mentally before using equipment to help them.</u>
Casgliadau a chymau/ Conclusions and actions Beth yw eich atebion posibl i'r materiau siomedig a nodwyd? "What are your possible solutions to the disappointing issues identified?" Beth ydych yn mynd i'w wneud nesaf? "What will you do next?"	<u>Offering equipment to everybody, or putting the equipment on the table so it can be easily accessible if its needed.</u> <u>I would ensure that all children have the opportunity to use apparatus so that nobody is looked down upon for needing some extra help</u>

Appendix 5



OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 26/09/19
Lesson details: Problem Solving activity in relation to their topic of world in union and the rugby world cup. Children were to design four new rugby kits by using possible combinations from two colours.
Classroom culture (Are the students focused on learning?) The students were split into their maths ability groups. These groups rotated around the problem solving task, working in the challenge area, on continuous provision-creating flags from klikko and a further task on the maths table. The groups worked well together where each group was confident moving around the classroom and were on task throughout the day.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) The objectives of the lesson were explained by the teacher. The RUCSAC (read, understand, choose, solve, answer, check) objective method was displayed clearly inside the classroom and the children knew how to use this well. There was a main focus of the task to work in an organised way to find all of the possible solutions/combinations.
Direction (Are the students clear about what they are doing and how to do it well?) Children read the problem to themselves then discussed the problem to each other. The teacher asked questions to ensure the children understood the problem. Questions asked throughout the task, such as 'so what do we do next?', 'what now?' etc
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) All children were engaged in lesson, however this session was heavily teacher lead. The teacher ensured she repeated and reworded questions for children to understand until a child responded. However, lots of the answers were suggested by the teacher.
Assessment How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching? At the end of the session, the children traffic lighted their focus for the teacher to see how easy/difficult they found the task. The teacher also marked work with each child for each individual to receive & understand verbal feedback. Marks recorded.

Appendix 6



OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 26/09/2019
Lesson details: Helpwr Heddiw - Welsh Lesson. 1 child chosen per week to be the helpwr. Today they talked about the weather
Classroom culture (Are the students focused on learning?) Sat in a circle to see each other, teacher took a step out of the circle for the helpwr heddiw to lead the session and have a welsh conversation about the weather with their peers.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) No fully written objective, but the focus of the lesson was put forward by the teacher at the beginning of the lesson.
Direction (Are the students clear about what they are doing and how to do it well?) Students are very clear about what will happen. The helpwr heddiw is a weekly task and so the children now know what to do. The first question was modelled by the teacher and then left to the children's initiative to lead the lesson.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) Role given to children Challenged to continue throughout the lesson without teacher's input (until needed) Later on in the lesson, the teacher stepped in to challenge the children further to add words such as 'yesterday' and 'tomorrow'
Assessment How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching? Teacher observed the whole lesson, taking notes throughout. She was listening for pronunciation of vocabulary in order to work upon it in the next session (children were told about this before starting the activity)

Appendix 7



OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 2/10/19
Lesson details: Maths lesson which began with a whole class discussion (superhero maths) before splitting into ability groups to complete some tasks.
Classroom culture (Are the students focused on learning?) All children were engaged in the super hero maths. Children used their prior knowledge to then go and apply this new technique to complete some maths problems.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) The class teacher discussed how this lesson would be expanding their knowledge on subtracting in mathematics. A lesson focus was written on the board for the children to understand.
Direction (Are the students clear about what they are doing and how to do it well?) The students were given verbal direction from the teacher and was given some time to ask questions if they were confused - this was effective.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) When split into groups, their tasks were differentiated to suit their ability to ensure each pupil was challenged appropriately. Some resources (100 square, cubes, counters) were accessible for students who were finding the activity hard.
Assessment How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching? 1. Think, pair, share (whiteboards) 2. Teacher marked books when work was complete - children went away to work upon their mistakes then these mistakes were checked again.
Specifics / Critical Incidents Are there particular telling moments and examples which it would be helpful to discuss? Resources were only to be used if students were struggling to complete the task mentally. When child A decided to use a number square, child B laughed and said 'oh no you're not bright enough, you need help'.

Appendix 8



OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 26/09/19
Lesson details: Pupil Voice Starter Lesson. Children were included in the planning for next week's lessons
Classroom culture (Are the students focused on learning?) Children sat on floor, teacher writing ideas in a mind map on the white board. Hands up routine.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) No written objective but teacher vocally explained the aim of this session- to get their ideas on what they could do next week to build upon what they've learnt this week on their topic of 'world in union'
Direction (Are the students clear about what they are doing and how to do it well?) All children seemed clear on what to do as there was a high involvement level and the teacher was impressed with their ideas.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) The teacher questioned the pupils on their ideas, asking 'why' and 'how' they'd like to carry out the activity.
Assessment How does the teacher assess student understanding before, during and after the lesson? How is this used in their teaching? N/A
Specifics / Critical Incidents