

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.

1.1: Introduction

The ability to be a self-reflective practitioner is extremely important in the role of a teacher. Having the ability to see what did, or maybe did not, work well in your lessons and adapting your teaching strategies based on that. This can be done by looking for 'critical incidents' in observations of a classroom. Despite their harsh sounding name, they do not necessarily have to be bad events, although they can be. They can also be a very subjective thing, what some may consider a critical incident, others may not, depending on how they look at the situation. Tripp (1993) says that "a critical incident is a value judgement we make, and the basis of that judgement is the significance we attach to the meaning of the incident." These critical incidents are a good way of gauging your own, or someone else's, teaching techniques. Seeing how they have affected the classroom, or the learners, is a good way of gaining information that you can later reflect on and use to set out your own learning steps. This essay will set out to critically evaluate one critical incident observed during my visit to a school. I will look at literature and research that links to the chosen critical incident and relate it back to various learning theories. It will look at how the incident may affect a child's holistic development and pay attention to the ever-changing Welsh curriculum. Finally, I will look at how observing and reflecting on said critical incident can help me in furthering my knowledge as a teacher and lay out some next steps for my own learning.

Throughout this essay I will be maintaining confidentiality when talking about the school, its teachers and its students, in line with BERA's 'Ethical Guidelines for Educational Research' (BERA, 2018).

1.2: The Role of Critical Reflection

As stated previously, critical reflection is one of the most important factors in the teaching profession. This method allows constant evolution and improvement of your teaching throughout your whole career. An explanation of critical reflection is that it "blends learning through experiences with theoretical and technical learning to form new knowledge constructions and new behaviors or insights" (Shandomo, 2010). One suggested framework for looking at critical incidents and allowing reflection is the 'The What? So What? What Now?' model (Victoria State Government, 2007). This essentially means to look at what the incident was, the significance of the incident and then what you plan to do as a result of your findings from the incident. You would make the decisions through a combination of the experience and your personal research into the theories of learning, as stated by Shandomo earlier.

There has been much research into critical reflection that has birthed many theories. Professor John Dewey says that there are four attributes that a reflective individual must have: open-mindedness, responsibility, whole heartedness and directness. (Dewey, 1933). Open mindedness meaning one must "give attention to alternative views." Responsibility means to consider "what is the impact of reflection on the learners?" Wholeheartedness "implies that teachers can overcome fears," and show the persistence needed to implement their new ideas found from reflection. Finally, directness simply means that the teacher must truly believe that what they are doing is worth doing (Farrell, 2012).

In 1995, Brookfield argued that critical reflection in teaching should not just be observed from the lens of a teacher. He believes in four separate angles which should be looked at when critically reflecting. First is the autobiographical, meaning from the perspective of the teacher, essentially self-

assessment. Secondly is through the eyes of the students themselves, get feedback from your pupils to see how they felt about something. Thirdly is through the experiences of your peers, seeing if they have had similar experiences that can help in your reflection. Lastly, through literature and research, using already constructed theories to help you in your reflection (Miller, 2010).

It is important to note that there are new and everchanging theories being published around critical reflection as research continues. Another aspect that effects the research of critical reflection is the ever-changing role of a teacher. This is especially apparent when it comes to the new curriculum in Welsh education. Whereas before it would have been expected of teachers to simply make sure students get good exam results and not much else. Now there is a much more holistic approach regarding a child's education, this can be linked nicely to Donaldson's four purposes. They must now not only be loaded with knowledge from your lessons, but they must also make them ambitious, creative, ethically informed, healthy, confident, amongst many other things. Therefore, now more than ever, being a reflective practitioner is so important, as there are so many aspects of your teaching methods to keep track of. There is no one perfect way in which a teacher can critically reflect. It all comes down to personal preference and what you find the most useful in furthering your own practice.

2.1: Observation

My observations took place in an English medium secondary school in a town in South Wales. Its pupils are aged between 11 to 16 and of various backgrounds. There are 438 students in the school, as of March 2022. The number of students receiving free school meals is just below the national average. While the number of students who are classed as having 'additional learning needs' (ALN) is almost 3% higher than the national average (ESTYN, 2022). I observed 9 separate lessons between the year 7 and year 8 classes, with pupils aged between 11-12. These included a range of classes from the more academic lessons such as maths and English, to the more physical skill-based ones such as PE. This allowed me to observe a wide scope of student and teacher behaviour and gave me plenty of opportunities to find critical incidents. As it was only 4 weeks into the school year, the year 7 students were very apprehensive on how to behave in their new environment. They had not only just moved up to secondary school, but their classes were also undergoing regrouping so they may not have known their peers as well as they would have liked. The year 8 classes differed when it came to behaviour. Their year group missed year 6 completely and lost the start of year 7 due to Covid-19. The teachers made this clear to me after two particularly disruptive classes, where the teacher found it difficult to keep the class under control.

2.2: Critical Incident

My critical incident is not a positive experience, more one that I feel could have been handled slightly differently. The incident occurred during a year 7 maths class hosted in one of the music rooms, as the music teacher taught some maths lessons. As stated earlier the classes were undergoing regrouping so the classes were yet to be put into set. As a result, the class was mixed ability and no work had been set. Instead, they were told to use the computers around the room and log onto a school friendly maths games website. The games were based around simple maths equations based around times tables, addition and subtraction, mostly due to their young age.

I was observing a pupil who was playing a game based around darts. They would throw the darts at the board and then subtract their score from 501 until they reached 0. With their first 3 darts they ended up with a score of 20, so subsequently had to do the equation '501 - 20'. They struggled with

the equation so called over a teaching assistant to help them. After about a minute of trying to help them, the teaching assistant assumed the pupil had got the hang of it but did not stay to see them answer the question. Approximately 10 seconds after the teaching assistant had walked away the pupil began inputting random numbers knowing that they were incorrect. They then clicked off the game and gave up on the equation, never finding out the answer. Something similar happened later whilst playing a different game based on multiplication. This time when the student was stuck, they did not call the teaching assistant for help. They instead resorted straight to giving up and began to input random numbers by hitting the keyboard with their hands. Showing a reluctance to even try and work out the answer at all. This may have knocked the student's confidence, as a reluctance to call over for help may show that they were scared to look unintelligent in front of the teaching assistant.

When looking at this in relation to Donaldson's four purposes, it is hard to see how this experience would aid in building or improving upon any of them. The four purposes are: Ambitious & Capable Learners, Enterprising & Creative Contributors, Ethical & Informed Citizens, Healthy & Confident Individuals (Donaldson, 2015). I feel that the purpose my critical incident links to the most is 'Ambitious & Capable Learners'. This is not because it helps to nurture the skills, but quite the opposite, I feel it would have hindered the growth of the skills within the observed pupil. The purpose focuses mainly on the pupil wanting to be challenged and enjoying the process of problem solving. With one of the sub-points within the purpose stating that a pupil should be able to "use number effectively in different contexts," (Donaldson, 2015) something this incident has actively hindered. I feel that this incident would not have helped in completing this purpose for this child. There is also a link to the 'Healthy & Confident Individuals' purpose, this is shown by the fact that the pupil did not bother to call a teaching assistant the next time they were stuck, they simply gave up. Showing that their confidence had indeed taken a knock.

3.1: Literature Review

When looking at how this student reacted the way they did, it is first very important to look at the theory behind why they acted the way that they did.

3.2: Fight, Flight or Freeze and the Learning Environment

The first area of research that could link to the critical incident is fight, flight or freeze. This is the response your body will go into when it is presented with danger. Fight, be aggressive, push back against the danger. Flight, flee, run away from the danger. Freeze, panic and just stay still. This idea did not originally stem from education, but from the response being observed in animals. The term was coined in 1915 by Walter Cannon, an American Psychologist, who was looking at the causes for this behaviour. Whether it be due to physical or psychological experiences (Cannon, 1915). This was later broadened to the 'Fight, Flight or Freeze' system in 2000, due to the previous one being too narrow minded (Gray, 2000).

This more broadened outlook is much more applicable to the teaching environment. If you were to put it into context of a classroom, the danger that would be faced would be in the form of a question the student does not know the answer to. For example, fight would be to start messing around or even get aggressive with the teacher. Flight would be if the student just tried to avoid the question completely, by perhaps not putting their hand up and avoiding eye contact with the teacher. Freeze would be very straightforward, when presented with a question the student would freeze and look at the teacher without answering. Sometimes, this can just be how a child acts with no relation to

the responses, but other times it can be caused by more serious things, such as “discomfort, stress, or anxiety” (Fisher, 2021).

These feelings and the resulting responses are sometimes linked to having an inadequate learning environment, leading many academics to say that it is down to the teacher to create a relaxed environment where getting something wrong is not something to stress over. Hardiman says the creation of this atmosphere is the most important aspect of teaching, saying “reducing stress and establishing a positive emotional climate in the classroom is arguably the most essential component of teaching” (Hardiman in Bernard, 2010). This want for a more accepting and relaxed classroom seems to be consistent across most literature. Especially now as teaching looks to move towards a more holistic approach. Hanrahan says that an important aspect of a classroom’s atmosphere is to give the students a sense of “belonging to a community which values not only the end goals but also all progress towards them” (Hanrahan, 1998). What they mean by this is that as important as the end goal of good results are, it is much harder to achieve them if the classroom is not set up for successful learning. Paladino further expands this point by saying that the environment is important, but also the way they learn in said environment is just as important and closely linked, they say when “students participate in a problem-based and collaborative learning environment it increases their motivation to learn and develop ... skills” (Paladino, 2008). Meaning that once the student is in the right environment and working on appropriate problems collaboratively, they will want to do the work, solve the problems and get the correct answers. Hopefully without fear of getting it wrong. In a similar vein to looking at what the classroom environment is built around, Williams suggests there are four types of learning environment centred around certain aspects of learning. These are:

- Learner-centred: Focused on how a collective group of learners learn best.
- Knowledge-centred: Focus on the knowledge acquired through course material.
- Assessment-centred: Focus on assessment and feedback to improve skills.
- Community-centred: Focus on building a community to achieve tasks together.

(Williams, 2022)

Most of these focus more on the academic side of learning, but the community-centred classroom fits almost perfectly into the literature of Hanrahan (1998) and Paladino (2008). They stress the importance of children working together with others, not just their peers, to solve problems.

3.3: Learning Theory

After looking at how best to set up the classroom, perhaps it is now best to look at the different learning theories. There are 3 main schools of thinking when it comes to the psychology of learning theory: Constructivist, Behaviourist and Humanist. Each one has a different view on what is the most effective way for students to learn.

Firstly, the ‘Constructivist’ theory is based upon the research of Jean Piaget and his ‘Theory of Cognitive Development’ developed in the early 1900’s. Piaget suggested that a child learns differently as they grow up and intelligence is gained through different means. He suggests that there are four different stages of a child’s development in which they should be able to reach a certain target skill, they are:

- Sensorimotor Stage – From birth to age 2. The goal being object permanence.
- Preoperational Stage – Age 2 to 7. The goal being symbolic thought.
- Concrete Operational Stage – Age 7 to 11. The goal being logical thought.

- Formal Operational Stage – Age 11 to Adolescence. The goal being scientific reasoning.
(McLeod, 2022a)

There are however some who disagree with this. Singer-Freeman (2005) argues that while the model as a whole works, it is too constricted by the sharp cut off points of each stage. A child's development is not so easily categorised into stages, it is more of a continuous development through their young lives. The constructivist theory suggests that it is up to the learner to be responsible for their own learning, not the teacher. Arbaugh (2008) talks about how a teacher must take on the role of 'facilitator' when leading a class. Providing them with the base knowledge and information they need, engaging them in it, then guiding the students through building upon it.

Secondly, the 'Behaviourist' theory was originally devised in the early 1900s. At its core, behaviourism is the theory that "all behaviors are learned through interaction with the environment through a process called conditioning. Thus, behavior is simply a response to environmental stimuli" (McLeod, 2022b). Watson (1925) looked at how behaviours change through conditioning, but he only looked at the change of physically observable behaviour. Then in the 1930s, Skinner looked at how it was not only observable behaviour that could be altered through conditioning, but also emotions and cognition. He coined the term 'Operant Conditioning' and looked at reinforcement when it came to changing behaviours, reinforced behaviour would strengthen and repeat, punished behaviour would hypothetically die out (McLeod, 2018). Skinner's idea of operant conditioning is much more relevant when looking at an educational setting, especially as it looks at a change in cognition. In a study carried out by McAllister and collaborators (1969), they looked at the effectiveness of operant conditioning in a secondary school. They found that the "results indicate quite clearly that the statements of praise and disapproval by the teacher had consistent effects on the ... behaviors observed in the experimental class." Brau, Fox and Robinson (2022) say that the classroom and knowledge taking place there is far more teacher led. The role of students is to simply "be acted upon by the teacher-controlled environment." This is in direct contrast to the constructivist view, that says learning in a classroom should be student lead and guided by the teacher.

Finally, is the 'Humanistic' theory of learning. Humanistic theory has a much broader view on what a school and teacher should help a child develop. Humanistic learning has 5 key principles that should be achieved in order to create fully developed human beings, they are:

1. Student's learning should be self-directed – Essentially, students should always have a choice of what they want to learn, not necessarily complete free choice, but at least a few options. A teacher should create the least restrictive atmosphere possible.
2. Students should learn topics they are personally interested in – A teacher should be able to link any work to real life experiences or interests of their pupils. Therefore, it is essential for the teacher to know their students well.
3. The full spectrum should be considered in a student's education, not just intellectual aspects – Humanistic theory attends to a student's emotional side more so than the other two theories. A teacher should undertake a holistic approach in their teachings, in order to create well-rounded human beings.
4. Students should want to, but also know how to, learn – This is very closely linked to point 2. If a student is learning about something they are interested in, they are much more likely to want to learn. They should then be taught how to contextualise and apply what they have learnt.
5. Students learn best in a non-threatening environment – This is closely linked to the previously mentioned learning environment literature. If a child is in an environment when failure is not something to fear, they are more likely to take risks and succeed in their work.

Khatib (2013) looks at some of the critiques of the humanistic learning theory. One fear that some teachers have is that this type of learning diminished the role of the teacher, which then lessens their ability to control and have influence over a class.

4.1: Reflection, Evaluation and Next Steps

After having looked at the critical incident more deeply, and some related theory, I have been able to develop some suggestions for how maybe best to handle this scenario in future, as well as next steps for my own teaching practice.

My first suggestion is that perhaps instead of the teaching assistant walking away, they should have stayed and waited to watch the student input the correct answer. If they still could not get it, perhaps giving the pupil the answer and then showing them the workings would have been a better way to have helped the student. That way the pupil would not have been left in the dark on the answer, plus they would be aware on how to work out the answer themselves, thus avoiding the later reluctance to even attempt to work out the answer. These behaviours from the student can be attributed to the 'Fight, Flight and Freeze' theory by Gray (2002). When the student first gave up and began to hit the keyboard after requesting help but not getting the level needed, shows the fight response. Quite violently inputting random numbers in order to avoid doing the work, after first having a go and showing willing to want to do it by calling someone over. The second time shows a flight response. As they did not ask for help at all, there was no attempt at all to try and get the correct answer.

My second point relates to the learning environment the children were put into. As previously stated, they were not in a class they were usually in, had a teacher they did not normally have and had only been in a new school for 5 weeks. This would mean it was incredibly hard, perhaps even impossible, to have an established atmosphere in the classroom. This may be why the student felt reluctant to ask for help the second time, or even ask for further help to begin with. Perhaps a community-centred classroom, as suggested by Williams (2022), is the best choice for this type of student. An atmosphere where they have built a positive emotional community and are free to make mistake and feel comfortable doing so, as suggested by Hardiman (2010). However, as stated, this was not a normal observation of this class and perhaps that is the usual atmosphere of the teacher's classroom once the pupils have settled into their groups.

When looking at how this critical incident and my research is going to affect my next steps, it is extremely important to use critical reflection. To do this, I must first look at a critical reflection model to use. The 'ERA' cycle, developed by Jasper (2013) is a very simple, but effective model for critical reflection. It stands for 'Experience -> Reflection -> Action', meaning what have you seen, what do you think about the experience and what are you going to do next and finally, putting those ideas back into practice. This would then repeat itself as you put the new ideas into practice.

This model is essentially what has happened in this essay, by seeing how this critical incident was handled I am now able to mould my own practice by reflecting upon the critical incident. I now know that I want my classroom to be a community-centred one, where children are not afraid to answer questions, get them wrong or ask for help. I will try and incorporate both a behaviourist and humanistic approach to my teaching. I found that operant condition works very well whilst on my

visit and I believe that letting the students have a large degree of freedom in their learning can be very beneficial to their education and their lives as a whole. Knowing what interests the students and what they want to learn is important, so I will make sure to ask them at the end of topics. This is also easier to do than ever before, due to the new curriculum in Wales.

5.1: Conclusion

To conclude, this experience as a whole has been a very beneficial one. Not only has it given me valuable time in a school before I start my placement, but it has allowed me to critically reflect upon the incident I observed to allow me time to prepare my methods ahead of time. I intend to use the ERA cycle when I critically reflect in future as I think it allows for me to keep reinventing my teaching methods as quickly and thoroughly as possible. If I was to link this approach to “The Five Professional Standards For Teaching and Leadership” (Welsh Government, 2017), I could quite easily cover all 5 of them, as well as any sub-standards within them. Leadership and collaboration could be covered in the reflection stage, depending on how I wanted to reflect. I could use input from peers or students for collaboration, or simply use my own knowledge and intuition for leadership. To innovate I would simply keep updating my practice with new and exciting ways to teach my students. Professional learning is the easiest of all, for as long as I am critically reflecting effectively, I will always be learning as a teacher. Finally, much like the professional learning aspect, my pedagogy will always be kept up to date with critical reflection, it will change and update as I go through my teaching career.

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