

“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.”

The Effects of Video Games within Education

Word Count: 4386

Observation Introduction

Gone are the days of VAK theories in the education world, the nation is now looking towards education pioneers such as Jean Piaget, Lev Vygotsky and David Tripp to understand their practises and how they can change the educational system for the better. Critical incidents are allowing professionals to reflect on practise and develop themselves and their teachings by arming themselves with literature to look into an incident further.

Also included in the movement is the names of ‘Graham Donaldson’ and ‘Dylan Wiliam’ who’re playing large roles in changing the national curriculum to cater for a modernising digital world and the theories in which children are best learning with, in the classroom setting. The chosen incident looks into how video games can be used within the educational system with some highlighting of the positives and negatives effects on children and how it can be used to help students with ALN. Taxonomy models such as ‘Bloom’ and ‘Marzano’ are providing different methods of how the educational system can ‘create lessons, create assessments, plan project-based learning and use a wide range of values to understand how a person learns based on research systems such as self, metacognitive and cognitive’.

School Context Observation

Before conducting the observations within the school setting, the researcher wanted to know more about the school's information along with some strategies of how to best carry out the observations. Using resources such as 'MyLocalSchool', the researcher has allowed themselves to obtain some prior knowledge of the setting before recording any incidents, this is further discussed in the methodology section as to why this can have positive and negative meaning when performing and recording observations.

Furthermore, when gathering information within the school setting, the researcher also has made sure to keep in-line with anonymity techniques mentioned in the 'BERA Ethical Guidelines for Educational Research' to meet the guidelines [\[1\]](#) requirement of;

“researchers minimise the possibility that traces of identity retained within anonymised digital data can lead to the identification of participants.”

The statistics from the 'MyLocalSchool' [\[2\]](#) search have shown the researcher that the school has a rough average attendance statistic of '95%' and comparing this attendance statistic to the national average of '93.9%' from the 'bridgend.gov.wales website' [\[5\]](#), it's clear that the school see attendance as a major factor to achieve highly in with their students. The school averages a '14%' of pupils claiming free school meals compared to the average of '12.4%' discussed by the 'SFR template national statistics' [\[4\]](#) across secondary schools, meaning they're slightly above average in that area suggesting the area is that of a more deprived compared to others across Wales.

The school in discussions 'Estyn report' [\[3\]](#) has allowed the research to see that the 'School's current performance is hitting an Excellent along with their "Prospects for improvement also achieving an Excellent'. The report continues to state that;

“In relation to their age and ability, most pupils have extremely strong reading, writing and numeracy skills” [\[3\]](#).

Again allowing the researcher to clearly see that the Estyn report is suggesting that the school in discussion is achieving greatly with the expected standards in Wales. Relating into observations the report also mentions that;

“There are very high levels of pupil involvement in all aspects of school life” [\[3\]](#).

The Estyn reports findings could then be suggesting that the pupils are playing an important role in not only their education but also their peers for great effectiveness based from their above average attendance and strong skills.

Theories & Observation Methodologies

The caution also to be considered here is that the researcher should be careful that no pre-judgements are made of the setting before entering the schools context that may have an effect on how and what incidents are recorded. Having knowledge of the schools statistics could also play an important role when researching, as the data set could have a relation to how the incident has occurred and if another researcher has obtained similar results from within a similar context, future assumptions could possibly be made about other schools based on their statistics. Observation techniques such as written records, graphs, charts, histograms, videos, audio files and sociograms (taken from the Moodle resources) can possess their own positives when used in their relative environments properly.

Observations allow;

“real-time specific insights from user behaviour and the observer can avoid the bias of people telling them what they want to hear, rather than what they need”

(from 10 pros and cons of information recording) [\[8\]](#). The negatives discussed by the author however say that observations;

“are limited to a point in time and it can be difficult to recruit participants and gain approval to go ahead” [\[8\]](#).

The overall argument here is that observations do not work everywhere but can be used as useful insights to see how interactions are made between students and their surrounding environment.

For the researchers observations they undertook a written approach using a [template](#) provided by the University of Wales Trinity Saint David. The researcher also chose to undertake the written methodology with the template because the researcher could then also undertake an unstructured approach in the classroom setting and see where it took them along their time in the setting. The researcher was also cautious of the 'Hawthorne Effect' where the behaviour within the environment may change due to the subjects involved knowing they're being observed.

In the book "Research methods in Education edition 6" by Louis Cohen, [\[12\]](#) one of the methodologies discussed is the 'Critical theory and critical educational research'. This specific section of Cohen's book mentions how

"Schools reduce inequality, the social construction of knowledge and curricula and who defines worthwhile knowledge"

The book discusses three main methodologies of 'scientific and positivistic', 'naturalistic and interpretive' and 'methodologies from critical theory'. Cohen then states that with specific situations, there cannot always be specific advice on how to deal with it, and it is at that point in which the professional must use their

"Integrity and consciences, informed by an acute awareness of ethical issues, underpinned by guideline codes and regulated practise, which should decide what to do in a specific situation and this should be justified, justifiable, thought through and defensible". [\[12\]](#)

Another book named "Research Methods and Methodologies in Education" by James Arthur [\[13\]](#) talks of how those starting out with researching can grasp concepts easily through the books use of "tables, diagrams and keyphrases" to help the reader.

Case studies and Critical Incidents [\[10\]](#)

"are descriptions of situations which are as close to reality as possible".

The source states that case studies are most often used as more complex methods of recording information and often contain several varieties of information sources, whereas critical incidents are small and provided limited context of background information.

Critical incidents are important to researchers as 'David Tripp' discusses in

"Critical Incidents in Teaching (Classic Edition) : Developing Professional Judgement" [\[9\]](#)

that they can be used to highlight 'highly significant events' as well as 'expose the problems of schools'. Tripp also sees them as important pieces of professional reflection and are only rendered as critical incidents should an analysis be made of an incident. It is further discussed that there are 'two stages' to critical incidents involving one which

"some phenomenon is observed and noted, which produced a description of what happened producing a 'what' and 'why' section".

And secondly;

"The critical incident is created by seeing the incident as an example of a category in a wider, usually social context."

Comparing both approaches, forming critical incidents provide short context of information that the purpose is found after the information is recorded whilst case studies have a purpose before they're conducted, the opposite of an incidents recording. For the researchers chosen incident, focusing on video games within the learning environment, it has been identified in Donaldsons' new curriculum with relating towards the 'Digital Competence Framework' aspect that the world is becoming more aware of the effect computing can have within the education system and the new curriculum aims to prepare students for an "increasingly digital world" (from the government's website on the new curriculum) [\[11\]](#) and the new curriculum heavily focusing on "introducing digital skills across the curriculum".

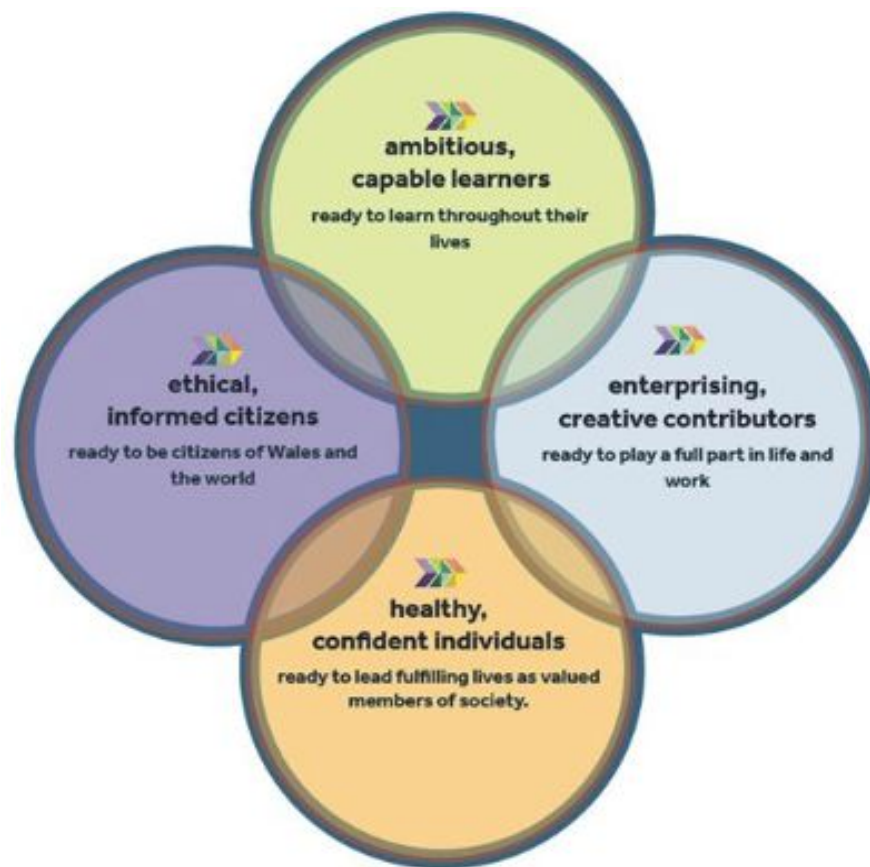
Chosen Incident & Donaldsons' Four Purposes

Having knowledge of observation strategies and methods of recording incidents, the four incident and reflection sheets recorded by the researcher discuss;

1. The first incident identified by the researcher ([appendix entry 1](#)) discusses a Year 8 10am Mathematics class which was lead by a supply teacher with an open classroom door. The main incident chosen in this classroom was a student shouting to the teacher which then lead to the register being taken.
2. The second incident ([appendix entry 2](#)) consisted of a Year 8 IT class at 2pm working in Microsoft Publisher on their work booklets. The main incident chosen from this setting was 3 students choosing to work together to do their workload, using peers as agents of learning in the class.
3. Thirdly, the researcher identified an incident ([appendix entry 3](#)) containing a Year 8 Science class at 9am discussing dietary requirements and what foods go under what category. During the lesson, a child asked the teacher 'How is sugar grown?' and a peer chose to reply before the teacher that it 'grows beside water on sand', a reference to the popular game 'Minecraft'. The researcher wants to use this incident to highlight the effectiveness / influence video games can have in learning looking from both positive and negative angles.
4. For the fourth incident ([appendix entry 4](#)), it was observed that a Year 8 Design & Technology class who were designing mugs and coasters. The chosen incident here is that a student chose to put the boxing on YouTube whilst continuing to fill out their work booklet at a fully acceptable speed compared to other students in the classroom.

The researchers chosen incident is number: 3, to look into for the critical incident evaluation. This particular incident was chosen as the researcher feels most passionate about this area and felt this incident contained the most interesting and relevant features to apply into their teaching style for their professional future and has a meaningful purposes relating to the incident's next steps.

To discuss the selected incident further, the researcher would like to link the incident as to how and why video games get so much engagement, the positives and negatives of video games within learning and how do video games cater towards ALN (additional learning needs) in the context of learning.



[Figure 1] Professor Donaldsons proposed 'Four Purposes' in his 'Successful Futures' article of his "Independent Review of Curriculum and Assessment Arrangements in Wales".

Professor Donaldson's four purposes discuss what children should be becoming during their time in education and large efforts are being made to re-design the entire curriculum within Wales. With the researchers chosen incident being [entry 3](#), the specific sections of Donaldson's Four Purposes that are going to be discussed by the researcher are;

1. "Ambitious capable learners who are ready to learn throughout their lives" (Donaldson Four Purposes) - going into learning outside of the school context, learning something and then bringing that learnt information back into the school setting.
2. "Healthy, confident individuals who are ready to lead fulfilling lives as valued members of society" (Donaldson Four Purposes) - looking into students having confidence in the information taught by video games and being confident enough to relay that information to not only their peers but also in answering classroom questions.

The researcher sees the chosen incident making links to the given 2 categories above of the four purposes by having the incident being able to create links between video games and what the two purposes are being described as meaning.

Linking the incident into the first chosen purpose, the researcher wanted to bring the information that the student has learnt from outside the school setting and has then re-entered the setting with an increase in their memorized information and has positively affected their classroom experience as well as others by enabling themselves as "agents of learning" discussed by Dylan Wiliam in

"Formative assessment and contingency in the regulation of learning processes", [\[7\]](#)

where he discussed that peers play a major role in a child's learning along with themselves and teachers also acting as "agents in the classroom". The researcher has also identified the incident relevant to the second chosen purpose because the student has enabled themselves to self-learn and be confident in answering others within the school, as Donaldson quotes in 'Successful Futures' that

"In order to fully engage with learning, children should collaborate actively with their peers". [\[6\]](#)

In the diagram below, the researcher has highlighted how the seating arrangement can be seen to allow peers to easily discuss with each other and has allowed the incident to occur.



[\[Figure 2\]](#) Demonstrating a similar context to the given incident within the science class of how having peers seated opposite each other can play an important role with easily allowing peers to act as “agents of learning” from Dylan Wiliams’ findings as communication means are easier between peers.

Incident Literature Review

To look into why the research feels their incident is significant enough to have chosen out of their four potential incidents, it’s important to now look at what supporting literature has been produced to justify why such an incident could occur in the first place. With the incident relating to how video games can have effects within education, the specific aspects the researcher wishes to look into further for the incident include;

1. Why do video games achieve such great engagement?
2. Both positive and negative effects of video games within the context of learning.
3. How can video games help those with additional learning needs (ALN) within the school setting and curriculum?

To begin looking into how and why video games achieve great levels of engagement, the researcher has identified a source named “Sure, I Would Like to Continue: A Method for Mapping the Experience of Engagement in Video Games” by authors Henrik Schønau-Fog and Thomas Bjørner who proposed a method aiming at

“classifying the experience of engagement in video games”. [\[14\]](#)

They began by focusing their study on the desire within people to want to continue playing a video game where strategies are used to constantly introduce new features and concepts to players to keep the feeling of the game new and that progression is being made and they can see what is around the corner after they achieve one thing, then another and then another. They say that a player ‘needs to want to continue playing’ to keep feeling the

“flow, fun, enjoyment, immersion, involvement and incorporation”

within games. They continued to explore a person's first minutes within the game to see if giving them a positive or negative first experience would hinder the fact of whether or not they wanted to keep playing the game or would stop when given the opportunity to. They linked these first experiences with games into their ‘causes for engagement’ containing sensory stimuli, social interaction (multiplayer games) and how the game itself chooses to interact with the player either through dialog or something positive and/or negative happening to their character. The researcher used “A grounded investigation of Game Immersion” by Emily Brown [\[16\]](#) to further their general reading / understanding of the engagement of video games, to help towards forming a conclusion later on.

At the end of their study they found that they’ve identified six aspects being “intellectual, physical, sensory, social, narrative and emotional” that all have differing effects between each human and that a certain mixture of the aspects will relate to some more than others depending on personal preference. What the research wants to take away from this is that for a successful engagement experience within the school / learning context, a vast blend of approaches need to be taken to cater for all rather than some, comparing this thought to the traditional proposal of learners falling into one of three categories (Visual, Auditory and Kinesthetic) discussed by John G. Sharp in ‘The Trouble with VAK’ [\[17\]](#) that have been disproven to be an official solution to how people learn and professionals should use a blend of approaches within learning to see the best performance from learners.

Another source discussing engagement within video games is a paper produced by XEODesign [15] that discusses a company wanting to know what keep engagement levels high depending on the experience people had already. They gathered a range of experienced and non-experienced participants for their study and looked at four main areas of

“What players like most about playing, creating unique emotion without story, what is already present in largely popular games and what psychology theory and large studies are saying”.

Supporting the research by Henrik Schønau-Fog and Thomas Bjørner, [14] the paper also talks about how the individual players personal views have an effect on

“how important each part of the game is to have fun”

And continued to mention how large game titles such as

“Bejeweled, Halo, Grand Theft Auto, EverQuest and MarioKart”

are aiming to enhance experiences as a whole in every category of the game a player can run into, and make the most positive and relatable experiences within these categories.

An alternate path the researcher also chose to look at is the general positive and negative effects that video games in general can have within learning. To begin looking into this vast area, the researcher identified a source named “The Benefits: Positive Effects of Video Games” containing several snippets of positive and negative statements by academics about video games. The positive aspects discussed throughout the snippets include positives such as causing children to

“Play together and are great bonding activities, whilst providing interactivity and challenges that come with rewards. Cognitive development of using the controller and making the game perform accurate calculations”. [18]

are also massive skills for children to be achieving alongside their learning. Video games can also increase decision speeds and a child's confidence levels after having played the game for a significant proportion of time. Video games cause

“exploration and risk taking”,

As players traverse the games; skills that can prepare them for the wider world when they're older.

On the contrary to the above positive aspects, the video gaming industry also faces several backlashes from the educational community as video games such as Grand Theft Auto can cause children to experience violent encounters at very young ages and potentially have psychological consequences such as 'violence and aggression' emotional increase. Another major issue argued negatively against video games is the addiction side video games can have over not only the younger generation, but potentially anybody who uses video games.

In 2018,

“The World Health Organization in June 2018 declared gaming addiction as a mental health disorder and that kids’ addiction to video games increases their depression and anxiety levels”. [\[18\]](#)

Highlighting a ‘correlation between video games and children’s health’. On the educational aspect however, the source argues that;

“kids addicted to video games see their school performance suffer”. [\[18\]](#)

A point also supported in;

“Do Video Games Promote Positive Youth Development?” [\[19\]](#)

where similar comparisons are made between addiction and the educational development within children being hindered by video game addiction.

Possibly then with this fact in mind, the research has identified a caution that if they are to implement games within their professional career within education, it is extremely important to be mindful that the games being used are age appropriate and provide a healthy aspect to the children with allowing important skills to be developed and a success level to be achievable for all.

Lastly, the researcher wants to investigate into how video games could play a potential role in the additional learning needs sector within education to link into their own professional and personal development. Looking at a resource named “Using Video games in Special Education” [20] and mentions that because

“video games are learning tools since they are deemed as active elements in classrooms”. [20]

meaning that ideas are also being invented for video games to be used in special education as a large market opens for companies to develop alternative methods of learning.

The paper by José proposes that;

“new design mechanisms must be proposed to develop these kinds of games. This should enable people to overcome their cognitive deficiencies and to increase their social integration level by applying the suitable techniques during the design of these games”. [20]

To conclude the literature in this section it is clear that when designing the games, it's difficult to cater for a large group of additional learning needs so most focus their efforts into helping a certain area and then possibly having to design something completely different for another learning difficulty, showing how diverse that video games need to be within special needs education. Due to this fact, it is also difficult to have the professionals who will be delivering the information to the ALN students fully trained to use the game alongside the child to see if they're receiving a positive experience with an educational factor.

It's also extremely important that alongside the professional having appropriate training to teach with the video game, the video game selection and the effects it can have must also be thoroughly thought against what specific set of students are going to be using the video game and do they have an additional needs to benefit their experience within education.

Reflection / Evaluation & Next Steps

After looking into the critical incident and the possibilities for such an incident to occur, the researcher now wants to 'reflect and evaluate' their focus of the critical incident and provide some suggestions as to how the next steps can be identified and possibly carried out.

Reflecting on a critical incident plays an important role in a professionals' development as 'Reflections on Critical Incidents' by Thiel and Teresa states they can be used "as a tool for self-reflection". [\[21\]](#) It's also discussed that critical incidents require the recorder to explore their actions and feelings requiring them to looking into literature to form a conclusion of the recorded occasion. The researcher used ARC (assisted reflective conclusion) sheets to allow an entry to be made on the critical incident on how in the moment the researcher believed it could tie into the context of learning and what the possible solutions could be. The ARC sheets provided a good model for recording a critical incidents experience as they touch upon what the researcher was feeling and how they currently feel the incident can be changed or acted upon without reading any literature relating to the situation.

The researcher thus wants to use their ARC sheet relating to the [chosen incident](#) to recall how they felt just after the incident had happened and will now make additions or change their original opinion on how they felt about the experience. Just after the incident had happened the research held mixed feelings about the class that had been observed and still maintains those feelings as they feel that the 'Hawthorne Effect' could have played a role within the setting as the students were all-round well behaved (which could be the usual situation), and all were making high levels of engagement with the task on dietary requirements. Touching back into the issue it could be that some students did not feel challenged enough during the lesson and could easily go through the workload with their prior knowledge whilst others had none.

The incidents ARC sheet discusses that the disruptive students were distributed around the classroom setting which could have also played an effective role in the peer learning aspect of the incident as the voice of the answering student would have to be significantly raised for the other person to hear them, allowing others to also hear the answer. What the researcher would change here with what they originally recorded is that the researcher stated they would 'keep encouraging students to give answers in the classroom' and now believes that this is a majorly

important aspect for a pupils development and should be pushed even further to highlight to them that the trying factor and the mindset to come back even after giving the incorrect answer is just as important as giving the correct answer and thinking nothing of it.

With the lesson having a dietary requirement game of dragging the appropriate foods into the correct categories and the student demonstrating prior knowledge within the subject, it's clear that specific games should within the next steps be used within the classroom that all can engage with and that after reading the literature the best games use large mixtures of strategies in an attempt to allow a wider audience to have successful experiences.

For the researchers own 'Professional and Personal development' and next steps they now are aware of that a balance between what games are used in education and the effects they can have on children both positively and negatively play an extremely important role in the classroom and the researcher also does wish to introduce video games into their lessons to build positive experiences for learners and therefore create long-term memories of information.

Conclusion

Assessing the chosen approach to record the critical incidents (unstructured and written) the researcher feels they've been able to capture enough information to be able to form a conclusion for the next steps for their professional and personal development as discussed above. Comparing the approach taken to other methods of recording critical incidents, the researcher feels they could have captured further information about the classroom setting and how the teaching professional in the classroom was interacting with the students for the dietary requirements game they were doing. Linking the researchers chosen approach into the 'Professional Standards that apply to Practitioners in Wales', the researcher has met the intentions of the standards such as being able to 'reflect on their practise' and the expectations of the practitioner when 'entering the profession'. Now armed with the knowledge that all learners should be put into their struggle zones within the classroom to allow them to achieve higher, it's also of utmost important to also give appropriate workload to those who not only are higher achievers, but also do not grasp concepts as quickly and should be given a varied workload to bring them up to the national standards and to prepare them for real life, and the researcher wishes to use the concept of video games in learning to aid these efforts.

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Appendices List

Incident 1

OBSERVATION / FIELD NOTES
(Questions adapted from Fletcher Wood (2016)) Date: 26th September 2019
Lesson details: - 10am Maths Class - Supply teacher giving a worksheet and lesson presentation. - BIDMAS Topic of lesson.
Classroom culture (Are the students focused on learning?) • Year 8s first introduction to BIDMAS, hooked on starter task of counting how many squares in an image, then went into lesson. • Quiet and collaborative work being done with starter task.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) • Solve starter activity to get brain going. • Solve BIDMAS worksheet after presentation on how the ruleset works.
Direction (Are the students clear about what they are doing and how to do it well?) • Students are made aware of how to complete the worksheet and after a set time period for each section, self mark with red pen if you got it correct. • Apply rules to equations to achieve success.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) • Before self-marking, hands up and ask around class to see who thinks they have the correct answer. • 3 section worksheet and a new topic 'BIDMAS', I saw meant all were finding the work interesting and enough to do.



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Yr Athrofa
Addysg a'r Dyniaethau
Education and Humanities

Assessment

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

- Before: "Today will be a self & class follow-through marked worksheet".
- During: Follow along with teacher when reading and asking for answers to worksheet.
- After: Any questions ask teacher at end for any confusing points.

Specifics / Critical Incidents

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

Observation Potential Incidents List

1) Day 1: Maths Class

Incidents:

- Student X shouts out the answer after the teacher has asked for hands up, teacher continues to ask student Y for the answer despite the shout out.
- Student X shouts to the teacher that the students who ran past the door "should be in this lesson", the teacher quietens down X then proceeds to do the register.
- Student X begins to glue in a worksheet on BIDMAS before being told to do so, teacher then says they want the sheets back at the end.

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

Dyddiad/Date: 26th September 2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Incident 2 - student shouting to teacher

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	- A mixed ability class being firstly introduced onto BIDMAS with some doing the worksheet easily & others creating distractions - Most disruptors towards the front of the class for easier help with the teacher
Cofio a Deall/ Remember and Understand "Allwch chi restru elfennau'r achos yng nghyd-destun y dysgu?" "Can you list the aspects of the incident in the context of learning?"	- Teacher has quietened down student after the shouting to keep other students from focusing on the distraction - The students who witnessed the incident were drawn away from their worksheet and thoughts on the work
Gwerthuso a dadansoddi/ Evaluate and analyse "Beth y gellid ei gadw yr un fath i sicrhau addysgu a dysgu effeithiol yn y dyfodol?" "What could be kept the same to ensure effective teaching and learning in the future?"	- Bringing students away from the distraction by silencing the creator of the incident - Moving on quickly so students forget about the incident & engage with something else
Casgliadau a chymau Conclusions and actions "Beth yw eich atebion posibl i'r mater a nodwyd?" "Beth y gellid ei wneud nesaf?" "What are your possible solutions to the issue identified?" "What could be done next?"	- Close the classroom door so 'outside' situations can't be interacted with by the students - Next is to get students into lessons on-time so they cannot cause distractions for others in the classroom trying to learn.
Y profiad newydd / Transformed experience	

Incident 2

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 26 th September 2019
Lesson details: 2pm IT Class. - Theme Park Worksheet Continuation. - Working on PCs in Publisher to design their own theme park.
Classroom culture (Are the students focused on learning?) - All students on a PC to themselves (sufficient equipment). - All begin to continue on worksheet with some friendly off-topic chatting but generally friendly environment and work being done as teacher instructs.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) - Continue through given worksheet steps to proceed in theme park design for future lessons activities.
Direction (Are the students clear about what they are doing and how to do it well?) - Aware of how to use Publisher to complete tasks by using given task template for each section.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) - All are on same worksheet and is vast enough to not finish quickly and become distracted within the hour period. - All interested as freedom for their own theme park ideas.



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Assessment

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

- After doing a task, self assess yourself, get a peer to assess your work and then the teacher will mark that task when the workbook/templates are all completed.
- Before lesson all are shown where templates are and are then indicative of what to do.
- During lesson hovering around and helping.

Specifics / Critical Incidents

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

2) Day 1: IT Class

Incidents:

- Student X has forgotten to save their Mind Map and must redo it before being on the same task as the rest of the students.
- Students X, Y & Z (High computer knowledge vs Other Students, are in the Code Club and enter School Competitions with Techno Camps etc) are filling out their work booklets and end up working together to get ahead in workload by doing one person's booklet at a time together. Reflection: (stretch zone reached for these students?). (more knowledgeable other improvements in learning & grouping MAT children pros vs cons in the classroom & providing MAT children with stretch activities). Explaining stuff to others aids self-learning.
- Student X wants to sit by student Y to peer mark a piece of work, teacher tells them to swap seats instead, so they aren't sitting beside each other -> Less distraction and stay on task?

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

Dyddiad/Date: 26th September 2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Incident 2 - Peers helping each other's workload

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	Some passionate people with high computing abilities all sitting together and getting on with the work, other friend groups separated out due to mis-behaviour & often need attention to keep them on track during the lesson but overall a nice class to be in with.
Cofio a Deall/ Remember and Understand "Allwch chi restru elfennau'r achos yng nghyd-destun y dysgu?" "Can you list the aspects of the incident in the context of learning?"	- Peer working on the lessons content with a combination of abilities being used to speed-through the workload - Students not self-struggling with the lessons content - only in the comfort zone
Gwerthuso a dadansoddi/ Evaluate and analyse "Beth y gellid ei gadw yr un fath i sicrhau addysgu a dysgu effeithiol yn y dyfodol?" "What could be kept the same to ensure effective teaching and learning in the future?"	- Encourage peers using themselves to teach others & therefore improve their own understanding of the work. - Students go to their peers before the teacher → 3 before the concept
Casgliadau a chymau gweithredu/ Conclusions and actions "Beth yw eich atebion posibl i'r mater a nodwyd?" "Beth y gellid ei wneud nesaf?" "What are your possible solutions to the issue identified?" "What could be done next?"	- Separating these MAT students around the room so they can enter their struggle zone sometimes & solve issues themselves but don't discourage activating peers as agents of learning - Next use both self & peer specific work pieces so students get multiple ways of learning.
Y profiad newydd / Transformed experience	

Incident 3

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 2 nd October 2019
Lesson details: - Jam Science Class. - Dietary Requirements Lesson. - Identifying what foods go into what categories.
Classroom culture (Are the students focused on learning?) - All are interested in the new topic to find out what categories their favourite foods fall into. - Ability to design their own dish and see its pros and cons.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) - Finding out what foods fall into what categories then freedom to create your own meal. - Understanding good vs bad foods (healthy vs unhealthy diet).
Direction (Are the students clear about what they are doing and how to do it well?) - Instructions on board and explained with class questions to see all are aware of what the board wants students to do.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) - Two worksheets of categorising foods and then doing it as a class. - Designing own meal, highlighting pros and cons of their choices.

Assessment

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

- Told to categorise the foods themselves then as a class they will do it (12 mins to do by themselves).
- Have to self think (struggle zone), then given criteria for success with whole class marking after.
- Freedom to design a good balanced diet meal with what they can think of to achieve a balanced diet requirement.

Specifics / Critical Incidents

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

3) Day 2: 9am Science Class – Year 8 (Mixed Ability Group)

Incidents:

- Student X has asked the teacher how sugar is grown during a lesson about dietary requirements, Student Y then tells them it must be grown on sand beside water, transferrable knowledge from Minecraft? Reflection: How/Why do games get so much engagement in children & adults and its effects positively and negatively in learning for Children? In Games: Create / Explore concepts for a better understanding? – Safe environment (Mixing chemicals in Games has no real-world consequences but do you develop an understanding of what happens?). Games & ALN?

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

Dyddiad/Date: 2nd October 2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Incident 1 - Games in the classroom

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	- Disruptive pupils separated around the classroom but majority around friends group with some quiet discussions - Classroom layout allows peers to sit 'in front' and 'beside' of others which allows easier communication
Cofio a Deall/ Remember and Understand "Allwch chi restru elfennau'r achos yng nghyd-destun y dysgu?" "Can you list the aspects of the incident in the context of learning?"	- Students encouraged to answer questions in the classroom - Students confident in giving answers to their peers & engaging with the lesson
Gwerthuso a dadansoddi/ Evaluate and analyse "Beth y gellid ei gadw yr un fath i sicrhau addysgu a dysgu effeithiol yn y dyfodol?" "What could be kept the same to ensure effective teaching and learning in the future?"	- Encourage students to give an answer to questions despite if the answer is going to be correct or not - Students answer each other instead of asking teacher - 3 before me concept
Casgliadau a chymau gweithredu/ Conclusions and actions "Beth yw eich atebion posibl i'r mater a nodwyd?" "Beth y gellid ei wneud nesaf?" "What are your possible solutions to the issue identified?" "What could be done next?"	- I would keep encouraging students to give answers in the classroom without them thinking if its correct or not by praise for giving a thought - Next step: Encourage students to keep helping each other

Y profiad newydd / Transformed experience

Incident 4

OBSERVATION / FIELD NOTES

(Questions adapted from Fletcher Wood (2016))

Date: 2 nd October 2019
Lesson details: - 11-1 D&T CLASS. - Doing workbook for mugs + coasters they've designed and physically made. - Process taken to achieve completed mug & coaster.
Classroom culture (Are the students focused on learning?) - All on their own PC (sufficient equipment). - Large space and a few students occasionally go on a stroll but worksheet gradually completed anyhow. - Some become disengaged due to others quick workbook progression.
Objectives (Is there a clear purpose to the lesson? How do the lesson activities promote that purpose?) - Follow workbook instructions and mark scheme to show the processes they took when creating a mug & coaster.
Direction (Are the students clear about what they are doing and how to do it well?) - Workbook given and tasks filled in relevant to how the mark scheme on back is asking for. - Teacher hovering around and asking in personal space if student understands and is okay to continue workload.
Access and challenge (Are all students able to engage in the lesson? Are all students challenged?) - All able to say how they created their mug & coaster as they'd already done it. - Mark scheme on back explained and all know what a task is therefore asking for to achieve the tasks marks.



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Assessment

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

- Before & During: Following res mark scheme to easily know what a task is looking for to achieve the marks.
- After: Starting new Topic next lesson so this lesson is finishing up the current task.
- Shows them how to achieve goals by reading & understanding what's being asked of them.

Specifics / Critical Incidents

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

4) Day 2: D&T Class

Incidents:

- The printer has leaked ink from the cartridge and has fried itself internally, students need to print their work this lesson so must email it to the teacher so they can use another printer around the school.
- Student X is filling out a work booklet about a design for a mug and the process they will take and puts on the Live Boxing during filling out the booklet but continues to fill the booklet at a decent pace.
- Student X hasn't finished the booklet yet whereas A, B, C, D & E have finished and are all playing a time-trial game together on the computers, X asks the teacher why "they're allowed to play games and they aren't" and becomes frustrated that they have to do the work before they can join.

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

Dyddiad/Date: 2nd October 2019

Digwyddiad critigol (Ffocws)/Critical incident (focus): Incident 2- Youtube during lesson

Profiad/ Experience	
Teimladau/ Feelings Beth yw eich teimladau ynghylch y profiad? "What are your feelings regarding the experience?"	Computers all around the edges of the classroom with tables in the middle, some students are ahead in the work & some are struggling so they choose to become disruptive & are made to log off and sit at the tables in the middle
Cofio a Deall/ Remember and Understand "Allwch chi restru elfennau'r achos yng nghyd-destun y dysgu?" "Can you list the aspects of the incident in the context of learning?"	The student used some background attention mechanism to stop himself from getting bored of the workload & possibly leading to disrupting others.
Gwerthuso a dadansoddi/ Evaluate and analyse "Beth y gellid ei gadw yr un fath i sicrhau addysgu a dysgu effeithiol yn y dyfodol?" "What could be kept the same to ensure effective teaching and learning in the future?"	- Good to keep students engaged on the work & possibly look into alternatives for the student for some more methods - Praise work being done with the reward of being able to watch e.g. boxing during work being done
Casgliadau a chymau gweithredu/ Conclusions and actions "Beth yw eich atebion posibl i'r mater a nodwyd?" "Beth y gellid ei wneud nesaf?" "What are your possible solutions to the issue identified?" "What could be done next?"	- I would continue looking into why the student may need something in the background to maintain concentration during the lesson - Next to work ~~with~~ with the student on alternatives to potentially work in all their classes for the best amount of production
Y profiad newydd / Transformed experience	