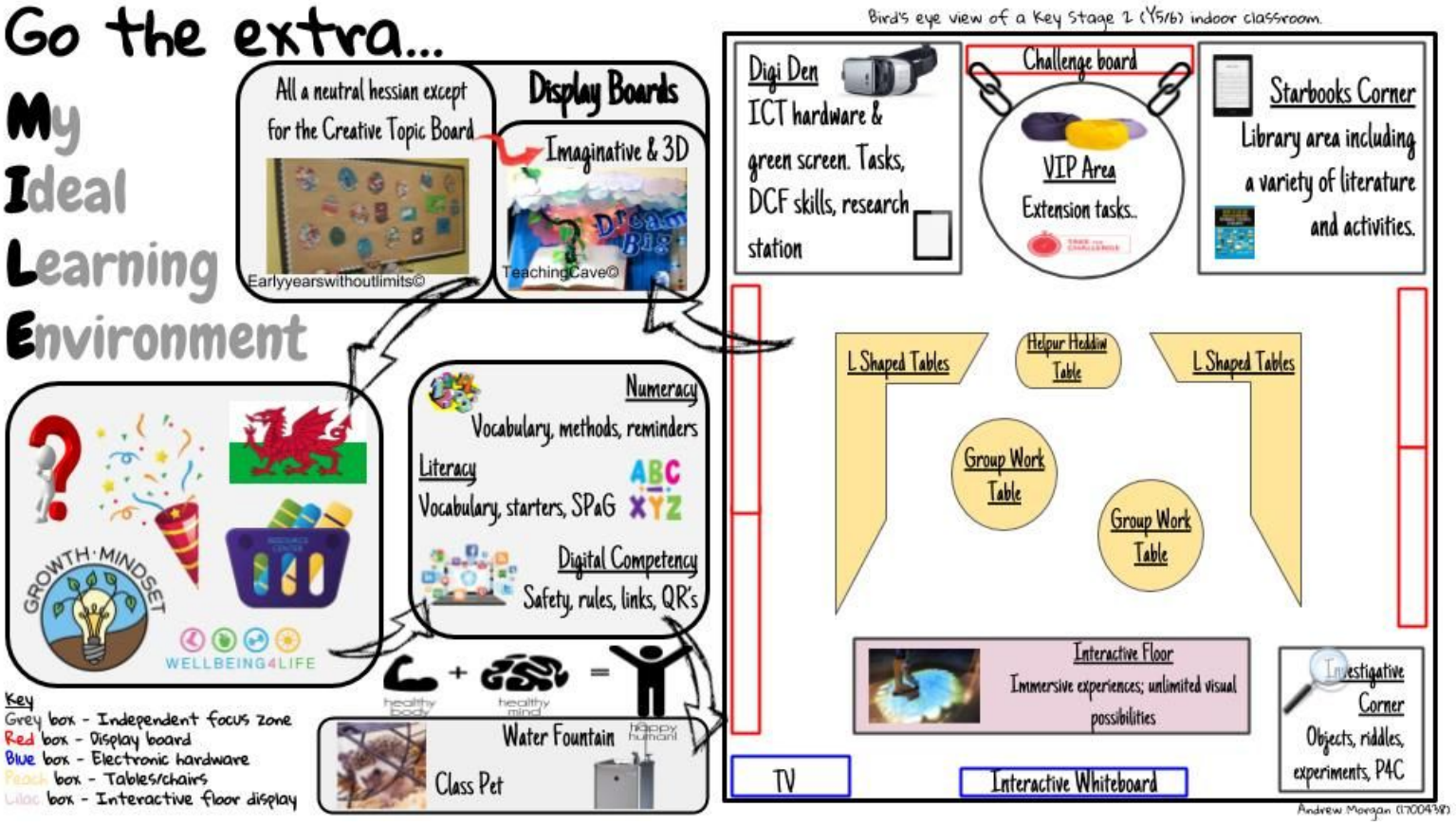
Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

APPENDIX GA36c

LEVEL 6 ASSESSMENT SPECIFICATION

Student name:		**Student ID number:**	**1700438**
Programme:	**Primary**		
Module:	**Principles of Pedagogy**		
Module code:	**M6X01438/C**	**Contribution to Overall Module Assessment (%):**	**100%**
Lecturer:	**Siân Brooks**	**Internal Verifier:**	**Siân Brooks**
Assignment Title:	**'Describe a learning event which has happened during your recent school experience. Reflect upon what took place, connecting events to theories of learning and teaching. Make recommendations about how you could improve your own practice in the light of this. Produce a poster to illustrate how you would develop the elements of an effective learning environment.'**	**Word count (or equivalent):**	**5,000 or equivalent.**
Submission deadline:	**17/10/18 (23.59)**	**Return date of provisional marks & written feedback:**	**14/11/18**
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) **Alternative submission method (if applicable):** **Late submission of the assessment will result in a late penalty mark.** Penalties for late submission: Up to one week late, maximum mark of 40%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

‘Describe a learning event which has happened during your recent school experience. Reflect upon what took place, connecting events to theories of learning and teaching. Make recommendations about how you could improve your own practice in the light of this. Produce a poster to illustrate how you would develop the elements of an effective learning environment.’



Submission Date: 17/10/2018

Word Count: 5348

Introduction

The observation that forms the basis of the following piece of writing was discovered at a large primary school in an area of South West Wales on Wednesday 19th October 2018. All persons involved in the collection of qualitative data were asked for consent and for the purpose of the following report, precautions have been taken so that all whom are involved are anonymised ([BERA], 2018). Therefore, the main subject shall be referred throughout as Child A. Other key members, such as the teacher, will be referred to as Teacher A and Child A's peers will remain stated as peers. In the school's latest Estyn report, they were praised for pupils imagination and enquisivity, two skills that consist of many variables, most notably the asking of exploratory questions and exploring multiple knowledge domains (Aljarrah, 2017; Craft, 2000). Both variables link with curiosity - the critical underpinning of the writing as Child A pursued to explore and gain new knowledge.

The assignment aims to identify a key learning experience that happened during a one day visit to the school. The aforementioned learning experience will be outlined in detail in Part One along with strengths and weaknesses of the chosen observational approach. Part Two will aim to connect the learning experience with important theories and discuss contrasting theorists with the five key concepts forming the basis of the analysis. A learning poster of the candidate's ideal learning environment will be created, annotated and justified in Part Three. The writing will be succinctly concluded in Part Four.

Part One: Observe

The chosen method of observation was participant focused as i, the observer, did not withdraw from the child, therefore the constant and primary focus was on one child (Child A). Observational notes were immediately written down in action with comments made on behaviour and the child's interaction with the activity, as well as the activity itself (Palaiologou, 2008). The written observation started by setting the scene i.e. activity, group size, location; as well as recording the dialogue. Whilst the chosen method was most suitable for the intended outcome, Watts (2011) suggests

that the distant observer and 'not being noticed' has a positive benefit to the research, but conversely the ethical practice is questioned due to the possible extent of modified behaviour by a child. During my observation, i ensured that i kept a distance from the child to try to diminish any modified behaviour in order to get a true representation of the child and their interactions. I also withheld any collecting of information about Child A until the learning event had concluded, as i didn't want to open any dialogue that may steer the the child's thoughts or attention. Due to the distance kept throughout, i feel the child was in their natural state and would not have reacted any differently to normal. Educational theorists use the term "Educational Flow", a concept developed by Csikszentmihalyi (1990) and describes someone as being in "total absorption in the task at hand" (Schmidt, 2010, p. 605). Child A was deemed to be in flow and was not distracted or disturbed by any internal or external source. Through this natural state of being, a critical learning event that emerged was that of epistemic curiosity, a strand of wanting new ideas and a motivation to know (Eren, 2016). In Part Two, curiosity as a concept will be discussed, applied and evaluated in relation to the learning event.

Child A was a year three pupil (7 years and 5 months old) whose first task of the day was a small guided group reading response with the class teacher. This crucial learning event happened at 09:30 and the progressive learning focus was to read a chapter per day, and respond to the text in numerous ways i.e. written response, predictions, retelling using ICT. Child A was reading chapter two with Teacher A and five peers. The teaching approach was using their 'magic fingers' to follow the words on the page as they collectively read the words aloud. At the end of each page, Teacher A would ask a variety of closed and open questions to both check for understanding and give pupils the chance to extend their thinking or improve inference skills (Phillips, 2013). Spörer *et al*. (2009) stresses the importance the role of questioning has on learners understanding of text, but many teachers are confused about the content of questions which results in a lack of progress in developing confident, individual readers (Rowles *et al*., 2010). Ford & Opitz (2008) pose that closed questioning does nothing other than test memory recall. Despite this, Teacher A's use of closed questions does check for understanding immediately

after reading thus allowing Teacher A to structure questions in the best way to enhance learning and inference.

Once the chapter was completed, Teacher A continued to pose questions and create discussions before presenting the children with the learning objective on individual pieces of paper for them to independently stick in their book. The learning objective (LO): “To rewrite a page of the chapter using better adjectives and more imaginative vocabulary”, was also read collectively, reaffirming the task in hand and gauging understanding. Discussions were teacher led with the planned outcome of completing the written task in a mental way that allowed children to plan in their minds. The discussions also served the purpose of collating ideas and thoughts to aid the children in developing their own sound ideas in relation to the LO. Teacher A had forgotten to collect thesauruses to aid the children in this piece of work, so left the table to go to the opposite end of the room and yield them. When unsupervised by an adult, here follows a conversation between Child A and one of their peers:

Child A: “*I wonder what happens next!*”

Peer: “*Take a peek at the rest of the book*”

Child A: “*I can’t, we only do a chapter a day*”

Following this, a five second pause of contemplation occurs in Child A. During this extremely brief moment, one can only imagine the trail of many contrasting thoughts circulating the mind of this young person. However, the outcome of the internal debate Child A had was to lower their head to the desk and flick through the following pages in the most discrete possible way. Thinking aloud, expressing feelings and identifying characters were what Child A exhibited during a twenty second gaze of the next ten or so pages. Critically, when Child A heard Teacher A’s voice coming closer, the book instantly reverted back to the last page of chapter two. The velocity of the book being turned back to the original page is an interesting moment to explore with many questions arising, some such as:

- Why couldn’t he wait until tomorrow to read on?
- Was he afraid of what might have been said if Teacher A caught Child A looking ahead in the book?

- What would have happened if Teacher A had not of left the table?

As practitioners it also evokes thoughts and questions of what would you do if you caught a child looking at the rest of a book when you specifically told them not to? Would there be questioning, scolding, praise? For the new curriculum that is being progressively phased into Wales, one would like to think that onus is given to children to have courage to explore; to be creative in personal interpretation and prediction, two key messages underpinning Donaldson's (2015) recommendations.

Throughout the module Principles of Pedagogy (POP), a module with a purpose of identifying key notions of effective practice when teaching. Many niche and broad areas were discussed and challenged students to digest, interpret and apply in the primary classroom setting. In relation to the critical learning event and the topic underpinning the writing, curiosity falls under two areas covered in the series of POP lectures: Thinking Skills, specifically critical thinking skills and Children as Learners. Critical Thinking Skills (CTS) have an important contribution to people's interpretation of a stimulus, particularly in English Language (Facione & Facione, 1994; Brown, 2014). A child's imagination and creativity are also directly impacted by the level of CTS; the higher order of CTS nurtures an enhanced level of creativity and imagination, thus allowing children to self-express their natural wonders (Ghanizadeh, 2017; Howard *et al*., 2015; Leicester & Taylor, 2010). It is here where the essence of Guided Group Reading (GGR) enabled Child A to express personal views and interpretations through discussions about the chapter the group had collectively read. Child A had the opportunity not only to form personal thoughts, but also listen and engage with peers so that their thoughts could be added to or extended. This additional realm promotes deeper thinking and collaborative learning to benefit all involved. The critical learning event also coincides with the work on Children as Learners, specifically what practitioners feel make up good learners. The important thread being discussions on what skills do children need in order to best learn? Skills such as a desire to learn new things, patience and perseverance to name just a few. These key skills were then paired up with how we as teachers can

deliver the curriculum through our knowledge of how children learn. By understanding the relationships between *skills* of good learners and *how* children best learn, practitioners are able to create activities and deliver learning in a way that excels the process of learning. During Teacher A's planning of the activity, clever use of discussion and allowing individuals expression was a positive method of delivery. The careful and appropriate choice of book ensured that children were so engaged with the book that they would be excited and forthright in discussing its content and offering questions to further their own knowledge.

Conclusively, i chose this critical incident because it is a prime example of a natural ability that children have when they are young, but not always when an adult. It is my belief that as children grow up, there is a decreasing amount of time where they have the freedom to explore and satisfy everyday curiosities. In this learning event it was powerful to see an urge of curiosity in a child that was left alone with no adult interference or pressure in the first instance. It was then interesting to see the change in Child A when a adult reappears, and so relating this incident to climacteric learning theories and comparing behaviours in relation to those will help understand how teachers should deal with curious behaviours in the classroom.

Part Two: Connect

The definition of curiosity is widely ambiguous in the literature with many researchers in the field posing multiple concepts and ideas (James, 1889, p.45; Litman *et al*., 2005; Jirot & Klahr, 2012), but ultimately not concluding in a universal definition. Perhaps the two most noted theories in curiosity research is Berlyne's (1954) discovery of "Epistemic Curiosity", and Cattell's (1943) identification of "Intellectual Curiosity". Although both theories are dated, they both have informed preceding research and are still consistently used in modern academic work. The work of Berlyne correlates more closely with the critical learning event as it resolves around the idea that epistemic curiosity is the "desire for knowledge that motivates (learning) new ideas" (Litman, 2008, p. 1586). As opposed to Cattell's widely regarded intellectual curiosity, Child A did not seem to want to invest in personal knowledge

but instead perceived to have the desire to find new ideas. Pluck and Johnson (2011) provides further evidence by stating that the levels of curiosity become stronger as an individual closes the gap on the outcome of achieving the knowledge. The nearer an individual is to closing the gap to achieving new knowledge means that an individual is less likely to be bored as their levels of motivation and satisfaction is higher than those with lower levels of curiosity (Abraham & Eastwood, 2016). In Abraham and Eastwood's (2016) study of the relationship between curiosity and boredom, they concur that, yes, there is a link, but only in individuals who possess naturally high levels of curiosity. Contrary to this, Saunderson (2018) proposes that curiosity is a transient state-of-mind that can be initiated for all individuals, but notes that there is a certain level of curiosity that are born in children e.g. some are born with high levels and some with low levels. From the most modern research into curiosity it could be agreed upon that children usually possess higher levels of natural curiosity, but it is the innate levels that determine the extent they possess into their adult life. Specifically to education, suggestions for more research into how schools encourage, nurture and preserve curiosity would be recommended.

There are three principal learning theories that are widely used in psychology: Constructivism, Behaviourism and Humanistic. The chosen learning theory to underpin the critical incident is constructivism, defined as "...learning as the result of mental construction… we learn best when we actively construct our own understanding" (Pritchard, 2009, p. 17). The work of Abraham Maslow (1943) and the Humanistic learning theory has little relevance to Child A's learning incident so will not be discussed at length. Perhaps one element of Maslow's theory that is evident is Child A's momentary self-direction in learning and not requiring Teacher A's motivation to read on. However, this is where the relationship to the Humanistic approach concludes as the group task wasn't a pupil-centred task nor did learners have any decision on the process of the task and/or the outcome. This is by no means a criticism of Teacher A as the GGR task could not be child led, the teacher is needed to facilitate and guide the learning - something constructivism, particularly the social constructivist approach of Lev Vygotsky provides in abundance. The context of group work and asking the learners to mentally predict and plan things out

further evidence the concept of constructivism in the learning event. Piaget, Vygotsky and Bruner are the three stalwart theorists within constructivism and whilst there are many similarities and agreements, there are also contrasting views and beliefs between the three. Central to the constructivist pedagogy are five key concepts; discovery learning, active learning, children at the centre of learning, observing children and theory informed practice (Halpenny & Pettersen 2014).

Jean Piaget, a Swiss psychologist created the Theory of Cognitive Development in 1936 and based it specifically on children as learners. Piaget produced two models that are central to his theory - the 4 Stage Model of Cognitive Development and the 5 Features of the Adaptation Process (see Figure. 1.).

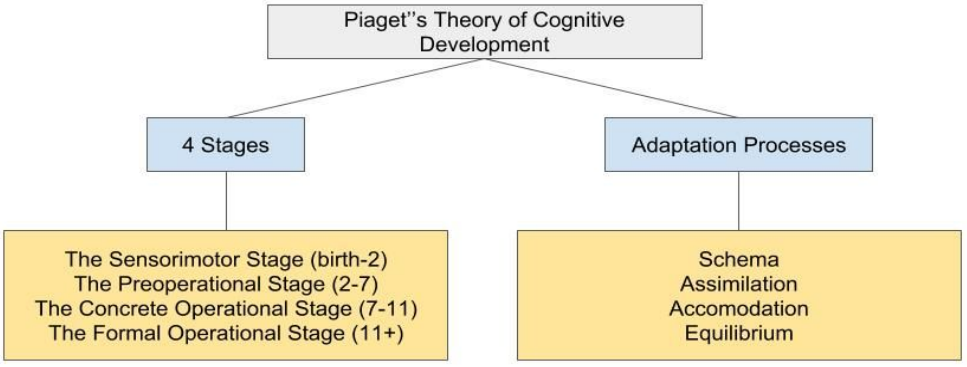


Figure. 1. Piaget's theories on the 4 Stage Model of Cognitive Development and the 5 Features of the Adaptation Process.

The four stage model proposed that development occurs in stages with the first two years of life the most important for developing language, something all three theorists place high importance on as it is the foundation to all learning (Lourenço, 2012). The shared importance of language is particularly prevalent in the realms of social-constructivism as poor language skills would hinder a child's ability to interact with adults or more knowledgeable others. As children grow older, their skills become broader and they begin to understand how to logically apply communication and thinking skills in everyday scenarios. In reference to this, Child A would be bridging between the preoperational and concrete stage, where the child will begin to extend thinking from being constricted and literal, to being able to think logically and

with more awareness of others. The four processes of adaptation relate to how children acquire and process knowledge and grow it further. Piaget suggests that children best develop when applying knowledge already known, and then creating new schemas through new knowledge; known as assimilation and accommodation respectively. The learning process particularly links to curiosity and exploratory behaviour with Child A using assimilation and accommodation. This is because there was a desire to find new knowledge through understanding of what had previously been read, but adding to it through looking ahead in the book (Gorlitz, 1987). A balance must be struck to maintain equilibrium in so smooth progress can be made through the process of cognitive development.

Vygotsky agreed with much of Piaget's work although the key criticism Vygotsky highlighted was that children learn best through social interaction with adults, opposing Piaget's theory of children being 'lone scientists'. Piaget's studies of children led him to believe that children learn best when they independently explore and interact with their environment, making sense of the world by themselves. However, Vygotsky argued that children self-exploring everything was not sufficeable and that they needed social interaction with a More Knowledgeable Other (MKO) to form new knowledge. The interaction with a MKO emerged from the belief that cognitive abilities exist on a continuum that when children collaborate with adults, along with exploring their environment, cognitive abilities can be grown through the opportunities that are provided to stimulate and extend curiosity (Henderson, 1984). The proposal of an MKO was demonstrated through the creation of the Zone of Proximal Development (ZPD), with the role of the MKO being a facilitator of learning responsible for answering queries, encouraging interaction and working together to form new connected learning (Vygotsky, 1978). The ZPD (Figure. 2.) was designed to visually show appropriate challenge levels for children and how instrumental the MKO was in bridging the gap between what the child knows, and what the child doesn't know. Contrary to the name, the MKO doesn't always need to be a person but instead could be a resource or facility that aids children in their learning. Bruner, another social constructivist had very similar proposals to Vygotsky. The American theorist researched further into the role of scaffolding and linked with Vygotsky's

ZPD proposal by stating that the adult MKO and peer interaction is an important aspect of scaffolding learning (Pritchard, 2009). Whilst wholly agreeing with Vygotsky, Bruner also identified the importance of discovery learning and allowing children to explore the world around them. Bruner almost brought the two prominent and marginally opposing theories together by accepting both arguments and regurgitating the importance of sufficient child-led discovery time, but also using MKOs to build, structure and cement new and existing knowledge. In the learning event, Child A was using Teacher A as the MKO as knowledge was imparted and shared, but also Teacher A allowed Child A independent time to form interpretations and leading oneself to a personal conclusion. It is in this instance that Teacher A highlighted the approach of Bruner by allowing child-led discovery but also providing some scaffolding and knowledge to further the learning.

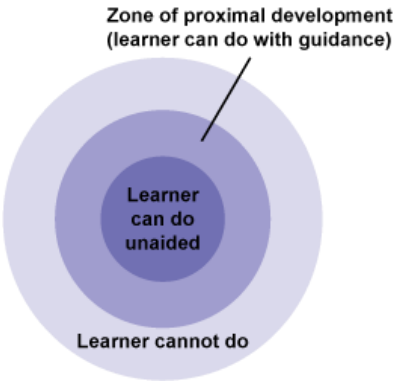


Figure. 2. Vygotsky's proposal of the Zone of Proximal Development.

As much as constructivism underpins the learning event, the learning theory has not been without its criticisms. Perhaps the biggest opposal to constructivism is that learning shouldn't be self-directed or connected to experience as this isn't enough for children to learn (Tully, 2005). Tully (2005) also proposed that learning should be solely tagged onto an already sound body of knowledge that can only be further added to if teachers exclusively deliver direct instruction. Anderson (2000) adds a deeper level to the argument by proposing that independent exploration and children constructing their own knowledge is a waste of time that should instead be used for direct and explicit teacher instruction. The age of the theory has meant that many academics have researched and proposed many interpretations of what

constructivism is. Harlow *et al*., (2006) raised the query that there are many newer interpretations that disservice the extensive work of the early researchers. Harlow *et al*., (2006) continued to raise worries about the ever increasing emergence of one-sentence definitions of constructivism. Something he says misleads people into thinking an extensively complex theory is just simply defined as 'people constructing their own knowledge'. Due to this there is a real concern that readers are not exploring the theory on a deeper level and are therefore misusing the learning theory in an uninformed manner.

Costa & Kallick (2008) suggested that there are sixteen behaviours that individuals who excel in multiple domains posses and labelled these as the 16 Habits of Mind (HoM). In relation to the critical incident, two of Costa's behaviours emerge; Managing Impulsivity and Taking Responsible Risks. Child A's curiosity challenged their ability to manage impulsivity but on this occasion, impulsivity prevailed victorious. The inability to manage impulsivity then formed Child A's decision to take a responsible risk and read ahead to satisfy the curiosity. Curiosity brought out two of the HoM in contrasting ways. The negativity of not being able to manage impulsivity, in turn, lead to the behaviour of taking risks to find out and broaden experience. It is these responsible risks that practitioners should encourage learners to take, as it often takes them to the ZPD zone where deeper learning can really occur.

The critical learning event extensively relates to the constructivist approach to learning. Piaget's 'lone scientists' view is interesting and i am of the agreement that it is important for children to independently explore the world they live in and have no pressure or influence on their interpretation. This is something that is important to children and helps develop them as a person, so unstructured time to explore their environment is something that i will try to implement in the classroom. As both Piaget and Vygotsky agreed upon the importance of curiosity, i will endeavour to provide opportunities for children to satisfy any curiosity they have for learning tasks or in general. This shall be done both independently and in groups, as the social interaction is an important part of forming deeply rooted language and

communication skills. I, as the teacher, will provide resources to be the MKO as well as imparting my knowledge and thoughts on any queries they have. Vygotsky's ZPD will work in tandem with planning to ensure that children are sufficiently challenged to prevent boredom, improve confidence and help create exceptionally confident and ambitious learners. With specific reference to Child A, as the teacher, i would foster the curiosity by encouraging the child to look forward in the book and digest thoughts so that when it comes to reading the next chapter, Child A would have high levels of confidence and engagement with the task. The role as teacher would then look to see if Child A has understood the text during independent exploration, and work with them to discuss any misconceptions or abstract thoughts.

Part Three: Reflect and Innovate

The accompanying poster is an illustration of ones ideal learning environment. Whilst there are multiple features to this, three chosen aspects of the indoor learning space will be discussed at length. These are: Digi Den Zone, Starbooks Corner and the Display Boards around the classroom. The former two are defined learning zones within the classroom that children can independently access to develop and enhance skills. Estyn (2018) highlighted effective use of learning zones at Monnow Primary School with special commendation of learners self-managing the environment and teachers affording children the opportunity to work independently, or in a group without adult input. These learning zones within the classroom will allow children to explore activities for themselves or with others, whilst simultaneously always having a MKO in the classroom to enhance and collaborate on learning. It also means that children can satisfy any classroom curiosities they have as well as develop specific skills in different zones.

<u>Digi Den</u>

One corner at the rear of the classroom will be a Digi Den, a specific zone for the use of all Information Communication and Technology (ICT) devices within the classroom. 2017 (Ofcom.org.uk, 2018) figures show that approximately 13% of five to eleven year olds have a social media account, and 33% have an electrical device.

To work in tandem with these figures and as we look towards the new curriculum in Wales, the Digital Competency Framework (DCF) was created to underpin the whole curriculum alongside Literacy and Numeracy. This shift means that there is an important need for children to be digitally literate as we prepare them for future vocations in a world where the growth of technology usage is exponential year on year (Hammond, 2014). The Digi-Den in my learning environment will have various forms of hardware to develop skills across the curriculum. Apple iPads will be stationed in the area as they allow children to take them anywhere in the school and gather evidence of work. The portability is the greatest feature of the iPad but they also allow for educational apps to be used to aid and support most skills children need i.e. handwriting, problem solving, speaking and listening etc. Further benefits to the iPad include that they are versatile enough to be used as a research tool as well as supporting learning through use of dictionaries, thesauruses and synonym/antonym instruments. IPad's also provide an outlet for children with ALN which means that they feel included and able to participate in activities. With more complex ALN children, iPad's can often provide an alternative form for them to access the curriculum, as well as evidencing successes and targets (Istenic Starcic & Bagon 2014). For children who have any social difficulties, it can provide a method of communication and be a safe haven for them. However, a major drawback is the dependance upon using a finger as the prominent form of control. In turn, this means that children do not use all fingers, negatively affecting their fine motor skills. To combat this, stationery computers and laptops will also be placed in the Digi-Den so that children's fine motor skills continue to develop through use of the touchpad, keyboard and mouse control. There will also be a Green Screen in the Digi-Den which can be used for every topic or AoLE. When given freedom, children will be creative individuals to compose activities for every subject whilst consistently enhancing STEM skills. Finally, Virtual Reality headsets will be used to offer an abstract experience to pupils that will verifiably engage children. These can be used to provide stimuli for thinking and contribute to creating ethically informed citizens of the world.

As useful and important ICT is, there have been many criticisms and drawbacks of the extensive use of it in classrooms. Deterioration of vision has been attributed to extensive use of screen time whilst the advancement of computers question whether children's' thinking skills are reduced due to automated results on the computer. Elston (2007, p.63) concluded that “ICT encourages innovation and benefits learning at every level” so with careful planning, carouselling hardware and monitoring screen time, ICT will play an important part in my learning environment.

Starbooks Corner

The importance of having a literature rich environment for development of language, reading and attitudes towards reading are why there is a defined reading zone in my learning environment. The Starbooks Corner will include a variety of literature including all genres of books and magazines as well as topic books and newspapers to develop understanding of the world and inspire ethically informed citizens. There will also be a number of Kindles available as these provide a wide range of accessible books without taking up valuable physical space. Children would have their own section on the Kindle to download, store and read books that they choose. Giving them onus and encouraging them to read what stimulates them the most will foster the love of reading as the freedom ensures no pressure to read something they do not like. In this learning zone, mindfulness activities such as calming music, colouring and body awareness will be available for children to use if they feel they need some calming time. Alongside contributing to the wellbeing of the children, literature has been shown to increase emotional intelligence, an important part of healthy and confident individuals who are positive contributors to their surroundings (Sullivan & Strang, 2003).

Display Boards

Display boards, particularly learning walls enhance pupil voice by giving them input on the curriculum, thus improving behaviour, wellbeing and transforming attitudes towards learning (Estyn.gov.uk. 2018a). All displays in the classroom will be purposeful meaning ownership is given to children by providing the scaffolding and opportunity to reflect on their own learning. This ownership and self-evaluation is

critical to successfully developing and implementing the new curriculum (Estyn.gov.uk, 2018b). It also benefits the teachers as AfL strategies will form a part of the board. A questionnaire board will allow children to post questions about school life, topic work or general knowledge to encourage pupils to be inquisitive and ambitious learners. A celebration wall will enhance pupil wellbeing and confidence whilst contributing to a positive learning environment. Growth Mindset and a wellbeing wall will further develop pupils' self-awareness and how important it is to be healthy, confident and ambitious. A tool station with fresh stationery will allow children instant access to usable and quality learning tools whilst the Welsh display will promote Y Cwricwlwm Cymraeg used to celebrate the cultural, historical and linguistic elements of our home country. There will be further display boards specific to the LNF and DCF, the three components underpinning the new curriculum in Wales. These will have specific information relevant to the identified skills but will also be used to highlight how all three of them will be used in the delivery of the curriculum, ensuring children are aware and buy in to the importance of these skills. These display boards will have hessian backgrounds as the neutral colours contribute to a calm environment that is welcoming for every child, especially any with sensory or ALN difficulties. However, the Topic display will be an exception as this will be class created with input from every child. By including children in the development of this board, it will allow them to be imaginative and creative, highlighting any particular talents within the cohort. Further to this it will allow them to make connections with their class work and will encourage children to take utmost pride when completing the work as they may choose to put it on the display for all to see. Wanting ambitious and creative pupils in the class, by having somewhere for children to use those skills in a realm of the Arts will do this expansively.

The learning environment will help develop learners' skills in all four of Donaldson's (2015) recommendations: ambitious and capable, enterprising and creative, ethical and informed, healthy and confident. With emphasis on creative contributors, activities in the learning zones and display boards around the room will hopefully prod, nurture and develop children's curiosities with the hope of preserving them throughout life.

Part Four: Conclusion

In conclusion, a critical learning event was observed and connected to the constructivist view of learning with many similarities identified and discussed. Child A had independent time to discover, satisfying Piaget's theory whilst in addition to this, Teacher A proved an MKO to fill any gaps and scaffold learning that were absent through the child's independent learning. Building upon Part One, it was clear that the communication and interaction between two persons satisfies the social constructivists theories more than Piaget's, although as discussed both were evident. There was a brief discussion of Maslow's Humanistic learning theory, however reasons were given for why it was deemed unsuitable for this learning event. Part Three focused on three keys of the self-designed learning environment with academic research and Estyn's effective practice reports used as justification. Criticisms were offered against the extensive use of ICT but personal justification resulted in the benefits outweighing negatives. Despite this, relevant precautions were undertaken and would be implemented upon completion of the created learning environment. The four key skills from the Donaldson (2015) report were used to underpin all elements in the learning environment as we look to begin implementing a curriculum with more creativity, flexibility and pupil-led learning. Finally, the learning environment was designed to encourage and preserve curiosity in children as research has shown that it is a skill lost with increasing age. Curiosity is a key element of the new curriculum so the learning environments needs to stimulate thinking and allow children freedom to explore, predict and gain new knowledge.

References

Abraham, E. & Eastwood, J.D. (2016). "Mitigating Boredom: Trait Curiosity, Condition, and Their Interaction in Reducing the Experience of Boredom Personality and Individual Differences", vol. 101, pp. 462-462.

Aljarrah, A. (2017). “Play as a manifestation of children’s imagination and creativity”, J*ournal for the Education of Gifted Young Scientists*, vol. 1, iss. 1, pp. 23-36.

Anderson, J. R., Reder, L.M., & Simon, H.A. (2000). “Applications and misapplications of cognitive psychology to mathematics education”, *Texas Educational Review*.

Berlyne. (1954). “A theory of human curiosity”, *British Journal of Psychology*, vol. 39, pp. 184-185.

British Educational Research Association [BERA]. (2018). “Ethical Guidelines for Educational Research”, 4th edn,, London.

Brown, N. (2014). “Assessment of Critical-Analytic Thinking”, *Educational Psychology Review*, vol. 4, iss. 26, pp. 543–561.

Cattell, R. B. (1943). “The measurement of adult intelligence”, *Psychological Bulletin*, vol. 40, pp. 153-193.

Costa, A., & Kallick, B. (2008). “Learning and leading with habits of mind : 16 essential characteristics for success”, Alexandria, Va.: *Association for Supervision and Curriculum Development*

Craft, A. (2000). “Creativity across the primary curriculum”, London: Routledge

Csikszentmihalyi, M. (1990). “Flow The Psychology of Optimal Experience”, Harper and Row.

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

Earlyyearswithoutlimits©. www.earlyyearswithoutlimits.wordpress.com/2016/05/13/a-classroom-without-colour/ [accessed 30/09/2018]

Elston, C. (2007). “Using ICT in the primary school”, London: Paul Chapman.

Eren, A. (2016). “Students' level of boredom, boredom coping strategies, epistemic curiosity, and graded performance”, *Journal of Educational Research*, vol. 109, iss. 6, pp. 574–589.

Estyn.gov.wales. (2018). Putting pupil voices at the centre of planning to develop independent learning | Estyn. [online] Available at: https://www.estyn.gov.wales/effective-practice/putting-pupil-voices-centre-planning-develop-independent-learning [Accessed 13/10/2018].

Estyn.gov.wales. (2018a). *Pupil voice shapes the curriculum | Estyn*. [online] Available at: https://www.estyn.gov.wales/effective-practice/pupil-voice-shapes-curriculum [Accessed 14 Oct. 2018].

Estyn.gov.wales. (2018b). *Striving for independent learning for all pupils | Estyn*. [online] Available at: https://www.estyn.gov.wales/effective-practice/pupil-voice-shapes-curriculum [Accessed 14 Oct. 2018].

Ford, M.P., & Opitz, M. F. (2008). “A national survey of guided reading practices: What we can learn from primary teachers”, *Literacy Research and Instruction*, vol. 47, iss. 4, pp. 309–31.

Ghanizadeh, A. (2017). “The interplay between reflective thinking, critical thinking, self-monitoring, and academic achievement in higher education”, *Higher Education*, vol. 74, iss. 1, pp. 101–114.

Halpenny, A.M. & Petterson, J. (2014). “Introducing Piaget : a guide for practitioners and students in early years education”, London: Routledge.

Hammond, M. (2014). “Introducing ICT in Schools in England: Rationale and Consequences”, *British Journal of Educational Technology*, vol. 2, iss. 45, pp. 191–201.

Harlow, S., Cummings, R., & Aberasturi, S. M. (2006). “Karl Popper and Jean Piaget: A Rationale for Constructivism”, *Educational Forum*, vol. 1, iss. 71, pp. 41–48.

Harrison, S. H. & Dossinger, K. (2017) “Pliable Guidance: A Multilevel Model of Curiosity, Feedback Seeking, and Feedback Giving in Creative Work”, *Academy of Management Journal*, vol. 60, iss. 6, pp. 2051–2072.

Henderson, B. B. (1984). “Social support and exploration”, *Child Development*, vol. 55, pp. 1246-51.

Howard, L., Tang, W. & Jill Austin, T. (2015). “Teaching Critical Thinking Skills: Ability, Motivation, Intervention, and the Pygmalion Effect”, *Journal of Business Ethics*, vol. 128, iss. 1, pp.133–147.

Istenic Starcic, A. & Bagon, S. (2014). “ICT-supported learning for inclusion of people with special needs: Review of seven educational technology journals 1970-2011”, *British Journal of Educational Technology*, vol. 45, iss. 2, pp. 202–230.

James, W. (1899). “Talks to teachers on psychol: And to students on some of life’s ideals”, Henry Holt & Company, New York.

Jirouta, J. & Klahr, D. (2012). “Children’s scientific curiosity: In search of an operational definition of an elusive concept”, *Developmental Review*, vol. 32, iss. 2, pp. 125-160.

Leicester, M. & Taylor, D. (2010). “Critical thinking across the curriculum developing critical thinking skills, literacy and philosophy in the primary classroom”, Maidenhead: Open University Press.

Litman, J.A. (2008). “Interest and deprivation factors of epistemic curiosity Personality and Individual Differences”, vol. 44, pp. 1585-1595.

Litman, J. A., Collins, R. P. & Spielberger, C.D. (2005). “The measurement of sensory curiosity Personality and Individual Differences”, iss. 39, pp. 1123-1133.

Lourenço, O. (2012). “Piaget and Vygotsky: Many resemblances, and a crucial difference”, *New Ideas in Psychology*, vol. 30, iss. 3, pp. 281–295.

Ofcom.org.uk. (2018). [online] Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0020/108182/children-parents-media-use-attitudes-2017.pdf [Accessed 13 Oct. 2018].

Palaiologou, I. (2008). “Childhood observation”, Exeter [England]: *Learning Matters*.

Phillips, E. (2013). “A case study of questioning for reading comprehension during guided reading”, *Education Journal 3-13*, vol. 41, iss. 1, pp. 110-120.

Piaget, J. (1936). “Origins of intelligence in the child”, London: Routledge & Kegan Paul.

Pluck, G. & Johnson, H. L. (2011). “Stimulating curiosity to enhance learning”, *GESJ: Education Sciences and Psychology*, vol. 19, iss. 2.

Pritchard, A. (2009). “Ways of learning” 2nd ed., Abingdon, Oxon ; New York, NY: Routledge.

Rowles, L., K. McInnis, & K. Lowe. (2010). “A reading revolution in classrooms: Focus on reading 3–6”, *Literacy Learning: the Middle Years*, vol. 18, iss. 2, pp. 23–30.

Saunderson, R. (2018). “Fostering Curiosity: The Hunger to Learn”, vol. 55, iss. 55, pp. 124-126

Schmidt, J. A. (2010). “Flow in Education”, Elsevier, pp. 605-611.

Sullivan, Amie K. & Strang, Harold R. (2003). “Bibliotherapy in the Classroom: Using Literature To Promote the Development of Emotional Intelligence”, *Childhood Education*, vol. 79, iss. 2, pp.74–80.

TeachingCave©. www.teachingcave.com/displays/foundation [accessed on 30/09/2018]

Tully, D. (2005). “The Schools We Need and Why We Don’t Have Them”, *Catholic Education: A Journal of Enquiry and Practice*, vol. 8, iss. 3.

Vygotsky, L. S. (1978). “Mind in society: The development of higher psychological processes”, Cambridge, MA: Harvard University Press.

Watts, J. H. (2011). “Ethical and practical challenges of participant observation in sensitive health research”, *International Journal of Social Research Methodology*, vol. 14, iss. 4, pp. 301–313.