

Supporting pupil progress: a detailed analysis of one child's holistic development, with justification for the next steps in learning.

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School Development and Pupil Progress

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Introduction

Holistic development is the consideration of the whole child's education and their development and learning. There is a focus on moral, social and emotional development as well as academic development (O'Flaherty and McCormack, 2019). Holistic development takes into account skills, knowledge understanding and attitudes and how these may interlink (Nottingham, 2013). It is essential - that as practitioners working with children – we have an understanding of the needs of children and child development (Welsh Government, 2008). This assignment will focus on one child, Child X, using the Mosaic Approach to gauge an understanding on the child's development (Clark and Moss, 2011), academically and socially, highlighting areas of improvement and progression.

In adherence with BERA (2018) guidelines and to uphold the confidentiality and anonymity of the child, the child will be referred to as Child X. Child X is in Year 5 and is ten years old. She is in a class of 34 children in which the class is split equally in terms of boys and girls. Child X's school is located north of Swansea city centre. The school opened in September 2012 following the amalgamation of two schools (Estyn, 2017). There are 559 pupils (Welsh Government, 2018). Around 30% of the pupils are eligible for free school meals. The free school meal average for Wales is 19% which means the children eligible for free school meals at the school is considerably higher than the average. At the school 28% of pupils have additional learning needs which is slightly higher than the national average of 25%. Most of the pupils in the school are of white British ethnicity, including Child X, and the main language spoke at home is English. There are very few students who speak Welsh at home (Estyn, 2017).

Data Collection

The data for this assignment was collected using the Mosaic approach. The name Mosaic refers to bringing together multiple pieces of data to create a picture from a child's perspective (Greenfield, 2011). By viewing children as experts in their own lives, the Mosaic approach offers a framework for listening to children's perspectives through walking, talking and reviewing together (Clark and Moss, 2011). Using children's photographs, maps and

tours combined with the use of interviews and observations, allows practitioners to gain a deeper understanding on children's lives (Clark and Moss, 2011). By empowering children in this way, the children are providing the data and the researcher does not have control of what is photographed (Greenfield, 2011). The Mosaic approach allows children to be seen as experts of their own lives, skilful communicators and active participants (Clark, 2007). This approach draws on views from social constructivists whereby children play an active role in the search for meaning and their learning (Vygotsky 1978). Greenfield (2011) states how social constructivist theory challenges researchers to explore and consider innovative ways of research so the multiple voices of children can be heard. Therefore, using the Mosaic approach will enable a deeper understanding of Child X's holistic development.

Observation is a qualitative research method which focuses on the interpretation and meaning of data. Whereas research using numerical data is known as quantitative (Wragg, 1994). By observing children and noting their involvement, progress and enjoyment, practitioners should be able to plan more appropriately allowing progress and pupil development according to individual needs (Welsh Government, 2008). Thus, by using the mosaic approach, a qualitative method, I will be able to get a deeper understanding of Child X's holistic development.

As well as observations, I will conduct semi-structured interviews with Child X. By using a semi structured interview, the interviewee can expand their answers providing the interviewer a deeper insight (Denscombe, 2014). Also, a reflective practitioner continually aims to improve their professional development by critiquing their own practice (Schon, 1991). Therefore, I will also be using my evaluations to analyse and make suggestions on how progression can occur.

Ethical Considerations:

In order to adhere with safeguarding policies of the school and university, ethical considerations need to be made. As previously mentioned, this research will ensure confidentiality, in accordance to BERA (2018) guidelines, by excluding the name of the research child and school. In addition to this, any data will be anonymised and stored on an

encrypted memory stick to comply to the General Data Protection Regulation (GDPR) (Gov.uk, 2018) and UWTSD data management policy (UWTSD, 2017).

Joffe (2001) states how informed consent is a necessity when conducting research. Due to Child X being under 18, a consent form (Appendix 1) was sent home to their guardian. However, I also needed consent from the child. Therefore, I explained their right as a participant to withdraw at any time and not participate. The school and class teacher were also made aware of the research and gave permission for the research to be conducted in their school (Appendix 2).

When conducting research, the researcher needs to minimise any potential risk. Therefore, the interview took place in a communal area easily supervised by a member of staff. Also, it was important that Child X did not miss out on any learning opportunities, therefore I conversed with the class teacher to ensure that the interview would take place at a suitable time.

Analysis of Learner

This next section will analyse Child X in five subject areas: Literacy, Maths, Health and Wellbeing, Physical Education and Welsh. It is important to be mindful when levelling a child using the Welsh Government curriculum documents because, the Welsh Government (2010) highlights how important it is not to make inaccurate judgements of a child's level over a short period of time.

Literacy, Language and Communication:

When asked about English in the semi-structured interview, Child X has a positive attitude towards the subject, which can be seen in the interview transcript (Appendix 3). It is important to understand the attitude a child has towards a subject because this can be an indicator of their willingness to progress (Nottingham, 2013).

Child X has good intellectual skills in English. She is in the higher ability group for English and is confident in her reading and in the interview exclaimed how she really enjoyed reading (Appendix 3) which was why she took a photo of the library (Appendix 4). She is in the top

group for reading and this is evident in her reading records (Appendix 5) as they show when she reads independently with someone her words are clear and fluent and she reads at a good pace. During the interview Child X discussed how her parents have been pivotal in her enjoyment for reading in which she highlighted how they encourage her to read at home. Thus, highlighting how the home environment is essential to the teaching of reading and gaining a love for reading (Clark and Rumbold, 2006). Clark and Douglas (2011) highlight that there is a positive relationship between attainment and reading for pleasure. This is shown in Child X because her love for reading has allowed her to increase her knowledge within the subject (Nottingham, 2013) allowing her to succeed.

Also, Child X took several photographs related to English (Appendix 6). When I queried her in the interview about this, she stated that she took pictures of them because they help her improve her learning. Nottingham (2013) states that knowledge is gained by becoming familiar with information, concepts and practices. Thus, by using the English displays and resources, Child X can expand her learning and knowledge.

Although Child X is succeeding in both the reading and writing element of Literacy, Language and Communication, through observations I found that she struggles with the oracy aspect. Talk is essential to children's learning and their engagement in the classroom especially during primary years (Alexander, 2013). Child X is quite shy and on many occasions during my observations (Appendix 7), Child X showed self-doubt and a lack of confidence during oracy tasks whereby she did not contribute to the lessons. This is also portrayed in other areas of the curriculum in which she is hesitant to put her hand up and discuss her opinion orally. Language can be used as a tool for individual thinking and thinking collectively (Cambridge University Press, 2018). Vygotsky proposed that a child's experience and language learning was linked to their cognitive development and that meaningful learning occurs when learners are engaged in which communication plays an important part in this (Vygotsky, 1978). Therefore, it is important that moving forward both Child X and the class teacher focus on improving her oracy. Overall, after spending a few weeks with this child, which does limit my level judgement, I would grade Child X as a level 4 in Oracy and a level 5 in reading and writing.

Maths:

At the school, the two Year 5 classes are split into higher-and lower-ability sets. Child X is in the lower set, however, within her class she is one of the more able at mathematics. In the interview Child X expressed how maths was her favourite subject because she enjoyed working out questions and likes playing maths games on the laptop (Appendix 3). Students with positive perceptions of maths normally develop positive attitudes towards maths which may help them achieve (Ayob and Yasin, 2017). In relation to the ASK model (Nottingham, 2013), this suggests that Child X possesses a positive attitude towards mathematics which allows her to succeed in class and develops her resilience as a learner. Johnston-Wilder and Lee (2010, p. 38) state that 'mathematically resilient pupils learn mathematics effectively' suggesting that even though work can be challenging, those that are resilient will find strategies to overcome the initial struggle. Child X's attitudes allows her to do this, and it is clear when observing her in maths that she tries to overcome challenges herself before asking for help.

Her positive attitude can also be seen in the photos she took of 'what helps her learn'. Whereby she only took one photo which was maths related (Appendix 8). When I addressed this with her in the interview, she stated how she knows a lot of the information on the displays and so they do not help her learn anymore. This further shows her positive attitude towards maths, but also highlights that displays need to be changed more regularly so they are beneficial to students.

It is also important to mention that, while she is confident in completing her work, I observed numerous times within the lesson where she would not participate in class discussion or volunteer her answer. Making mistakes is often seen as a sign of stupidity (Johnston-Wilder and Lee, 2010) and there is often pressure to be correct (Hintz and Kazemi, 2014) which is a potential reason why Child X does not want to volunteer her answer because after engaging in conversations with her, it was clear she knew the answer. Therefore, moving forward teachers need to emphasise that children do not need to feel anxious about making a mistake, because children can learn by making mistakes and learning from them (Johnston-Wilder and Lee, 2010).

When analysing the mathematical skills Child X has been developing within lessons, it is clear that Child X is showing positive development and engagement. Child X has developed numerical reasoning as shown in the Literacy Numeracy Framework (LNF), in which they are able to transfer mathematical skills to a variety of contexts (Welsh Government, 2014). This was shown in a History lesson (Appendix 9) where the children needed to put World War Two events in chronological order (Appendix 10), in order to achieve this Child X needed to have a clear numerical understanding for ordering numbers. Child X also made considerable progress in 'using number skills' over a two-week period where I taught her multiples and factors (Appendix 11). Initially she found this concept challenging, however, due to her perseverance, she has further increased her knowledge regarding these concepts (Appendix 12). Due to having spent a limited period of time within the school, I would level Child X at Level 3 with some aspects of Level 4. It is important to mention that this is based on my own observations during my time, therefore it is possible that Child X is working at a Level 4, but I personally have not seen enough evidence to grade them this.

Health and Wellbeing:

Child X has many friends and is a happy student with a very positive attitude towards school which is evident in her interview (Appendix 3). She states how she enjoys coming to school to see her friends and likes her teacher. It is often assumed that children like school due to the peer interaction they have, although research also indicates that certain teacher traits can be linked to a positive or negative attitude of school (Mercinah and Nirmala, n.d.). A positive teacher student relationship is pivotal in a child's development whereby improving students' relationships can have constructive, long-lasting and essential implications for students' social and academic development (Mercinah and Nirmala, n.d.) because there is a good learning environment (Al Nasser et al, 2014).

Through my observations of Child X (Appendix 7), it is clear that she cares about her education and is motivated to do well. Child X is in a challenging class where a few of the children have behavioural problems. Bandura (1977) highlights how self-efficacy and motivation are key factors for the learning and development of children in which children

who can observe others and not allow these observations to impact their learning or motivation are more likely to succeed.

Referring to the skill aspect of the ASK model, when comparing the child against the draft curriculum for Health and Wellbeing in Wales, Child X is showing a good range of skills. Following on from the motivation she has for school, using the draft curriculum she is becoming more self-regulated because she takes personal responsibility for her actions and learning (Welsh Government, 2019). Child X also is friends with a lot of children in her class and shows awareness of her peers and other learners (Welsh Government, 2019).

Although I have made these observations, it is important to note that wellbeing is not a universal term, in which, it can be defined differently in different countries (PISA, 2015). Children need to be looked at as individuals, so it is important to listen to their pupil voice as shown by Article 13 (UNICEF, 2010). By doing this, us as practitioners will be able to understand a child as whole and help their progression to becoming confident, healthy individuals (Donaldson, 2015).

Physical Education:

Through my observations, Child X shows a positive attitude towards physical education. She also stated in her interview that she liked to do lessons outside, which is why she took a photo of the outdoors area (Appendix 13). She is highly engaged in the lesson, has a natural sporting ability and is part of the netball team. Normally Child X is shy within classroom teaching (Appendix 7), however I found that during Physical Education she has a newfound confidence. This involved volunteering her ideas, taking part in demonstrations and also providing a guidance to her friends in which she took on a leadership role. By utilising their bodies while learning, children are typically more engaged in the learning process. Thus, Klem and Connell (2004) highlight how student engagement has been found to be a predictor of student achievement in school. Therefore, it is evident how Child X's involvement in Physical Education lessons has resulted in her succeeding within this subject.

In relation to Nottingham's (2013) ASK model, it is evident that Child X has a good level of skill and ability which enables her to carry out the actions necessary that provide her with achievement and understanding. Child X has been able to work closely with others

cooperatively and competitively (Welsh Government, 2008) due to the effective relationship she has with her class peers. She has also been able to develop, consolidate and apply the techniques and skills needed to take part in a variety of competitive activities (Welsh Government, 2008). Thus, resulting in her having a good knowledge of the subject.

Therefore, due to Child X's control, performance, communication, cooperation and understanding of Physical Education, I would grade her as Level 4, and she is showing some elements of Level 5.

Welsh:

Child X has a very negative attitude towards Welsh. She expressed in her interview that Welsh is her worst subject and that she is not very good at it because she struggles to remember and pronounce certain words (Appendix 3). According to Nottingham's (2013) ASK model, Child X's attitude towards Welsh, could potentially be stopping her own achievement due to her negativity.

Child X lacks confidence in her pronunciation. This was evident in a Welsh lesson I observed (Appendix 14), whereby she did not want to answer in Welsh when she was asked to. While observing Child X during 'slot drillio' in the morning, it is evident that she does know some Welsh and able to pronounce Welsh words correctly (Appendix 7). There is an incentive for her to answer these questions in Welsh because she is awarded Dojo points. Also, due to her positive relationship with her teacher, I observed that she was trying to please her class teacher. In contrast, when I observed her in a Welsh lesson with the teacher that covers when class teachers are on PPA, her confidence and motivation was minimal. Therefore, this highlights the importance of a positive teacher student relationship and that if foundations for a good relationship is lacking, it will impact student behaviour and the classroom environment will no longer be fulfilling for the teacher or students (Varga, 2017).

There is evidence that Child X has acquired some skills in Welsh and does have knowledge and understanding of the subject to a certain extent, although, more support is needed within the subject. However, due to national tests, limited Welsh lessons and the short period of time I have observed her, I am unable to make an accurate judgement on her level in Welsh.

Next Steps

The Welsh Assembly Government's approach to lifelong learning and education focuses on the vision for children. In order to achieve this, there needs to be a deeper understanding of the children we are teaching. Therefore, using the Mosaic Approach has enabled me to develop a deeper understanding and analysis of Child X. Donaldson (2015) states how a child needs to be at the heart of learning. Thus, in this next section I am able to comment on the next steps for the learner because I have a deeper understanding of the child's holistic development.

Literacy, Language and Communication:

Language, Literacy and Communication is one of the six areas of learning and experiences in the new Welsh curriculum. Donaldson states that "developing oracy – the capacity to develop and express ideas through speech – is of central importance to both thinking and learning" (Donaldson, 2015, p. 48). Furthermore, Riley et al. (2004) highlight how development of oracy within the classroom needs to be at the forefront of school's priorities. As previously highlighted Child X struggles with the oracy aspect. She commented in her interview that she wanted more displays to motivate her. Therefore, one of the next steps to ensure her progression would be to ensure that she has access to an oracy display in the classroom. The display would include drafts of speeches, sentence starters and oracy motivation (Mercer and Mannion, 2018). This would enable oracy to be constantly visible in the classroom allowing her to access key prompts if needed.

Another initiative to continue her development within oracy, would be to use listening and speaking assessments more regularly. One way of doing this would be the use of the oracy Assessment Toolkit (Mercer and Mannion, 2018). The toolkit task cover three types of spoken communication: an instructional activity, a group discussion and a formal presentation. The teacher is able to give pupils a rating after each task and this rating can be used by the teacher to draw skill profiles of pupils. This process would enhance the opportunity to plan relevant teaching for spoken language. The Oracy Assessment Toolkit also allows pupils to set their own short-term targets focusing on how they can improve their listening and speaking (Mercer and Mannion, 2018).

By making listening and speaking assessments a regular norm in the classroom, Child X will become more confident and progress with her oracy. Furthermore, the use of the oracy Assessment Toolkit, would enable Child X to create her own targets to motivate her to succeed, allowing her to become more independent in her learning (Donaldson, 2015).

Maths:

After analysing Child X in maths, it is evident that she is a capable mathematician within her class however, she does not like to volunteer her answer due to a lack of confidence and impact of boisterous boys within her class. As previously mentioned, there is pressure within class to be correct (Hintz and Kazemi, 2014) and making mistakes can make a child feel embarrassed (Johnston-Wilder and Lee, 2010). Lopez (2019) also states how sometimes girls know the answer and although they are not willing to share in front of the class, they generally are more open to learning to improve if it is not obvious that they are struggling.

Therefore, in order to help Child X progress, I need to emphasise that it is okay to make mistakes and that very often children learn by making mistakes (Johnston-Wilder and Lee, 2010). In order to do this, a growth mindset approach (Dweck, 2016) needs to be introduced within the classroom. Leighton (2019) believes that one of the most important messages that the growth mindset provides is that making mistakes should be seen as a learning opportunity. Thus, by showing Child X that it is okay to make mistakes this should help build her confidence (Allmond et al, 2016).

One way to do this would be to use an interactive programme, Brainology (Chao et al, 2016). Brainology is an award-winning, research-based learning programme that teaches a growth mindset (Mindsetworks, 2017). The programme uses the concept that the brain is like a muscle – the harder you work it the stronger it grows. By using interactive resources and games, students begin to understand that they can find appropriate strategies to help them achieve in maths. This would be beneficial for Child X because this resource would help grow her confidence and uses technology which she has said she enjoys using in maths. By showing Child X the positive impact of making mistakes, she will be less afraid to make them which will allow her to develop her learning because mistakes can enable more progression and learning experiences (Lemov, 2015).

Health and Wellbeing:

Within this module (Student Development and Pupil Progress), I was given the opportunity to explore student data and discuss my findings in a presentation. One aspect that I focused on within the presentation was the need for person centred reviews to be used more in school and for them to be inclusive. When Child X was asked how the school could improve her learning, she suggested that there needs to be more motivation around the school which encourages them to succeed (Appendix 3). Thus, I believe that by using person centred reviews would be beneficial for Child X and other students within the school. Traditionally these reviews are designed for children with Additional Learning Needs, however, I believe this approach could be adapted allowing it to be inclusive for all students.

Person-centred reviews highlight what support is needed for a learner (Welsh Government, 2015). The reviews emphasise what is important to them and focus on planning for their future and success (Corrigan, 2014). A person-centred review would be offered to Child X to help motivate her to achieve. This approach links to Vygotsky's theory 'Zone of Proximal Development' (ZPD) which analyses where a child is and how they can bridge the ZPD and achieve the best they can (Lloyd & Fernyhough, 1999). Using person-centred reviews puts the student at the learning process and their views are considered and voice heard (Mills, 2012). This approach promotes pupil voice and the importance of children having an opinion as stated in Article 13 of children's rights (UNICEF, 2010).

Child X has a growth mindset in which she wants to develop her learning and puts a lot of effort into her learning (Dweck, 2016). Therefore, a person-centred review, provides the motivation she wants to continue her holistic development by focusing on how she can achieve, academically and socially.

Physical Education:

Regarding the next steps in Physical Education, it is very evident that Child X has the attitude, skills and knowledge to succeed in Physical education. Therefore, her progression needs to focus on bridging the gap between a Level 4 and Level 5. To achieve Level 5, there is more of an emphasis on developing leadership and students controlling their own

learning (Welsh Government, 2008). Therefore, to keep Child X engaged and aid her progression to the next level, a sporting leadership programme is needed.

Youth Sports Trust are committed to ensure that Physical Education is relevant and motivating for girls. They are focused on helping schools understand what motivates girls to take part and how to make necessary changes. Child X would benefit from the Girls Active project created by the Youth Sport Trust. This project supports thousands of girls and focuses on developing girls to become role models in sport and to empower them to design and deliver sport lessons (Youth Sport Trust, 2017).

Therefore, engaging in this programme would enable Child X to progress to the next level in Physical Education. She would develop her leadership skills and gain further knowledge and understanding in the subject.

Welsh:

The Welsh Government aims to take increased responsibility for the promotion and facilitation of the use of Welsh, which will result in one million welsh speakers by 2050 (Welsh Government, 2017). To achieve this the Welsh Government is encouraging language transmissions at home and for people to use the language daily (Welsh Government, 2012). Therefore, there is a strong emphasis on children learning Welsh in schools.

After analysing Child X attitude, skills and knowledge of Wales, it is clear that there are aspects she needs to improve on, especially pronunciation. However, in order to facilitate her learning and progression, it is key that I also improve my understanding and knowledge of the Welsh language and critique my own practice (Schon, 1991). Currently, I have little confidence in my Welsh speaking because I started learning Welsh this year. Therefore, in order to help Child X achieve her potential in Welsh, I need to reflect upon my own teaching. According to Rowland's (2009) knowledge quartet, having a foundation of subject knowledge is fundamental when teaching. Thus, in order for Child X to improve in Welsh, I need to continually strive to improve my own Welsh Language skills.

Also, communication with parents about the benefits of learning the language and how they can support their child is essential. For Child X to improve her confidence and pronunciation, she needs to be able to practise the language outside of school. During the

semi structured interview, it was clear to see how involved Child X's parents are in supporting her learning at home, however, her family does not speak Welsh. As a result, she is unable to practise and increase her confidence in Welsh when at home. After analysing Child X, it is evident how parental engagement in her learning has increased her reading ability.

Therefore, monthly meetings should be held with Child X's parents to ensure they understand how the Welsh language enhances a sense of Welsh identity and how they are able to provide Child X opportunities to use the language beyond the classroom. These meetings would provide information to her parents on how they can support her and, provide her parents with an opportunity to learn Welsh (Welsh Government, 2017).

Therefore, improving my own Welsh language ability and knowledge and increased parental engagement is pivotal for Child X's progression. By using these next steps Child X will increase her use of Welsh and improve her pronunciation. Ultimately this will improve her confidence in the Welsh language which will allow her to have a more positive attitude towards the subject which will fuel her progression.

Conclusion

In conclusion, the Mosaic Approach promotes pupil voice in which they can become an expert in their learning journey and express themselves in different ways to further their holistic development (Clark and Moss, 2011). However, there are limitations within this research method. The Mosaic Approach is not a simple way to research due to the multiple data collection tools whereby there is a greater time commitment in the research process (Greenfield, 2011). This is evident in the data I collected. Due to a limited time period to collect the data and National Tests, I have not had the opportunity to observe Child X for a long period of time. Thus, the extent to which I have understood her holistic development is limited which hinders her progressions steps.

However, if there was a longer period of time to complete the research, I believe the benefits of using the Mosaic approach to understand holistic development outweigh the limitations. Due to the variety of methods used, known as triangulation, the Mosaic

Approach increases the validity of the research in which different dimensions of the holistic development of a child can be captured (Greenfield). Therefore, by promoting pupil voice, the Mosaic Approach allows a practitioner to gain a deeper understanding of a child's individual holistic development, academically and socially, resulting in relevant and meaningful learning with the pupil at the centre (Donaldson, 2015).

Reference List

Al Nasser, Y.S., Renganathan, L., Al Nasser, F. and Al Balushi, A. (2014). Impact of Students-Teacher Relationship on Student's Learning: A Review of Literature. *International Journal of Nursing Education*, 6(1), p.167.

Alexander, R. (2013) Improving oracy and classroom talk : achievements and challenges. Primary First. pp. 22-29

Allmond, S., Hillman, J., Huntly, K., Makar, K. and O'Brien, M. (2016). Assessing Children's Progress in Taking Intellectual Risks in a Mathematical Inquiry Classroom with a Positive Learning Approach. *Mathematics Education Research Group of Australasia*.

Ayob, A. and Yasin, R.M. (2017). Factors Affecting Attitudes towards Mathematics. *International Journal of Academic Research in Business and Social Sciences*, 7(11), pp.1100-1109.

Bandura, A. (1997). *Self-efficacy : The Exercise of Control*, W.H.Freeman.

BERA, (2018) Ethical Guidelines for Educational Research. Fourth ed. London: British Educational Research Association.

Cambridge University Press (2018) The development of Oracy skills in school-aged learners. Available at:

https://languageresearch.cambridge.org/images/Language_Research/CambridgePapers/CambridgePapersInELT_Oracy_2018.pdf (Accessed 28th May 2018)

Chao, T., Chen, J., Star, J.R. and Dede, C. (2016). Using digital resources for motivation and engagement in learning mathematics: Reflections from teachers and students. *Digital Experiences in Mathematics Education*, 2(3), pp.253-277.

Clark, A. (2007). A hundred ways of listening: Gathering children's perspectives of their early childhood environment. *YC Young Children*, 62(3).

Clark, A. and Moss, P. (2011). *Listening To Young Children: The Mosaic Approach (2nd ed.)*. London: National Children's Bureau.

Clark, C. and Douglas, J. (2011) Young People's Reading and Writing An in-depth study focusing on enjoyment, behaviour, attitudes and attainment National Literacy Trust.

Clark, C. and Rumbold, K. (2006). Reading for Pleasure a research overview. The National Literacy Trust.

Corrigan, E. (2014). Person centred planning 'in action': exploring the use of person-centred planning in supporting young people's transition and re-integration to mainstream education. *British Journal of Special Education*, 41(3), pp.268-288

Denscombe, M. (2014) The good research guide: for small scale social research

projects Fifth., Maidenhead: Open University Press.

Donaldson, D (2015) Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales. Available at: <https://gov.wales/docs/dcells/publications/150225-successful-futures-en.pdf> (Accessed 21st May 2019)

Dweck, C. (2016) What Having a "Growth Mindset" Actually Means. Available at: <https://hbr.org/2016/01/what-having-a-growth-mindset-actually-means> (Accessed 28th May 2019)

Estyn (2017) A report on [REDACTED] Primary School. Available at:

[https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/\[REDACTED\]](https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/[REDACTED]) (Accessed 27th May 2019)

GOV.UK (2018) Guide to the General Data Protection Regulation (GDPR) Available at: <https://www.gov.uk/government/publications/guide-to-the-general-data-protectionregulation> (Accessed 27th May 2019)

Greenfield, C. (2011). Personal reflection on research process and tools: Effectiveness, highlights and challenges in using the Mosaic approach. *Australasian Journal of Early Childhood*, 36(3), pp.109-116.

Hintz, A. and Kazemi, E., 2014. Talking about Math. *Educational Leadership*, 72(3), pp.36-40.

Joffe, S., Cook, E.F., Cleary, P.D., Clark, J.W. and Weeks, J.C., (2001) Quality of informed consent: a new measure of understanding among research subjects. *Journal of the National Cancer Institute*, 93(2), pp.139-147

Johnston-Wilder, S. and Lee, C. (2010). Mathematical Resilience. *Mathematics Teaching*, 218, pp.38-41.

Klem, A.M. and Connell, J.P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of school health*, 74(7), pp.262-273.

Leighton, D. (2019) How to Get Growth Mindset Right in Primary Schools. Available at: <https://thirdspacelearning.com/blog/get-growth-mindset-right-primary-schools-free-poster-resource/> (Accessed 27th May 2019)

Lemov, D. (2015) *Teach like a champion 2.0: 62 techniques that put students on the path to college*. John Wiley & Sons.

Lloyd, P. and Fernyhough, C. eds., (1999). *Lev Vygotsky: critical assessments* (Vol. 4). Taylor & Francis.

Lopez, J. (2019) Girls and Maths: 5 Ways to Boost Confidence in Primary Maths Lessons. Available at: <https://thirdspacelearning.com/blog/girls-and-maths-increase-confidence/> (Accessed 27th May 2019)

Mercer, N. and Mannion, J. (2018) Oracy across the Welsh curriculum. Available at: <https://oracycambridge.org/wp-content/uploads/2018/07/Oracy-across-the-Welsh-curriculum-July-2018.pdf> (Accessed 29th May 2019)

Mercinah, R. and Nirmala, D (n.d.) The importance of student-teacher relationship in schools. Available at: https://www.academia.edu/8058067/THE_IMPORTANCE_OF_STUDENT-TEACHER_RELATIONSHIP_IN_SCHOOLS (Accessed 28th May 2019)

Mills, B., (2012) Person centred reviews: pupil voice. Available at: <http://www.complexneeds.org.uk/modules/Module-2.1-Planning-to-meet-needs/C/video/bro/bro13.pdf> (Accessed 28th May 2019)

Mindsetworks (2017) Promoting a Culture of Ongoing Learning and Growth. Available at: <https://www.mindsetworks.com/about-us/default> (Accessed 29th May 2019)

Nottingham, J. (2013). *Encouraging Learning: How you can help children learn*. Routledge.

O'Flaherty, J and McCormack, O. (2019) Student holistic development and the 'goodwill' of the teacher, *Educational Research*,61:2, 123-14

PISA (2015) PISA 2015 Results: Students' Well-being. Available at: <https://www.oecd.org/pisa/PISA-2015-Results-Students-Well-being-Volume-III-Overview.pdf> (Accessed 29th May 2019)

Riley, J., Burrell, A. and McCallum, B., 2004. Developing the spoken language skills of reception class children in two multicultural, inner-city primary schools. *British Educational Research Journal*, 30(5), pp.657-672.

Rowland, T. (2009). *Developing primary mathematics teaching reflecting on practice with the knowledge quartet*, Los Angeles: SAGE.

Schon, D.A., (1991). *The reflective practitioner*, Aldershot: Avebury.

UNICEF UK, (2010). *The United Nations Convention on the Rights of the Child*, London: UNICEF UK. Available at: https://www.unicef.org.uk/wpcontent/uploads/2010/05/UNCRC_united_nations_convention_on_the_rights_of_the_child.pdf (Accessed 25th May 2019)

UWTSD, (2017). *Research Ethics & Integrity Code of Practice*. Available at: <https://www.uwtsd.ac.uk/media/uwtsd-website/contentassets/documents/research/research-ethics-integrity-code-practice.pdf> (Accessed 27th May 2019).

Varga, M. (2017) *The Effect of Teacher-Student Relationships on the Academic Engagement of Students*. Available at:

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https://mdsoar.org/bitstream/handle/11603/3893/VargaMeagan_paper.pdf?sequence=1&isAllowed=y (Accessed 28th May 2019)

Vygotsky, L.S. (1978) *Mind in Society. The Development of Higher Psychological Processes*. Harvard University Press. Available at: <http://ouleft.org/wp-content/uploads/Vygotsky-Mind-in-Society.pdf> (Accessed 27th May 2019)

Welsh Government (2008) *Observing Children*. Available at: <https://learning.gov.wales/docs/learningwales/publications/140828-observing-children-en.pdf> (Accessed 27th May 2019)

Welsh Government (2008) *Physical education in the National Curriculum for Wales*. Available at: <https://learning.gov.wales/docs/learningwales/publications/130425-physical-education-in-the-national-curriculum-en.pdf> (Accessed at: 28th May 2019)

Welsh Government (2010) *Making the most of assessment 7-4*. Available at: <https://learning.gov.wales/docs/learningwales/publications/130425-making-the-most-en.pdf> (Accessed 28th May)

Welsh Government (2012) *A living language: a language for living*. Welsh Language Strategy 2012-17. Available at: <https://gweddill.gov.wales/docs/dcells/publications/122902wls201217en.pdf> (Accessed 27th May 2019)

Welsh Government (2014) *National Literacy and Numeracy Framework*. Cardiff: Welsh Government. Available at: <https://learning.gov.wales/resources/browse-all/nlnf/?lang=en> (Accessed 28th May 2019)

Welsh Government (2015) *Person-centred reviews for professionals*. Available at: <https://gov.wales/sites/default/files/publications/2018-12/person-centred-reviews-for-professionals.pdf> (Accessed 25th May 2019)

Welsh Government (2017) *Cymraeg 2050: A Million Welsh Speakers*. Available at: <http://www.assembly.wales/laid%20documents/gen-ld11108/gen-ld11108-e.pdf> (Accessed 28th May 2019)

Welsh Government (2017) *Welsh in education: Action plan 2017-21*. Available at: <https://gweddill.gov.wales/docs/dcells/publications/171212-welsh-in-education-action-plan-2017-21-en.pdf> (Accessed 27th May 2019)

Welsh Government (2018) *My Local School: [REDACTED] Primary School*. Available at: [http://mylocalschool.gov.wales/School/\[REDACTED\]](http://mylocalschool.gov.wales/School/[REDACTED]) (Accessed 27th May 2019)

Welsh Government (2019). *Draft curriculum for Wales 2022 Health and Wellbeing*. Available at: <https://hwb.gov.wales/draft-curriculum-for-wales-2022/a-guide-to-curriculum-for-wales-2022/> (Accessed 28th May 2019)

Module: M7X02153-C
Student Number: 1803104
Word Count: 4,941

Wragg, E.C. & Open University. Postgraduate Certificate in Education (1994) An introduction to classroom observation., London: Routledge

Youth Sport Trust (2017) Girls Active. Available at: <https://www.youthsporttrust.org/girls-active> (Accessed 29th May 2019)

Appendix List:

Appendix 1 – Permission letter from the guardian of Child X. Personal information has been removed to ensure anonymity. A master copy is available on request.

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

 Yr Athrofa
Institute of Education
Addysg i Gymru Education for Wales

Dear Parent/Guardian,

Your child's school is a partner with Yr Athrofa at the University of Wales Trinity Saint David in Carmarthen and Swansea. This school offers placements to students who are learning to be teachers.

The student-teacher in your child's class has been given the task of analysing children's learning so that he/she can consider how he/she would support pupils in making progress. As part of this, student-teachers will be observing the children's learning and asking about what things and places in the school help children learn. This is designed to inform students' own practice and support children's learning.

Any information collected would remain confidential, and both the school and the children would remain anonymous in work produced. The work undertaken would be in line with the University's ethical guidelines. If, at any time, your child does not want to share ideas, they would not be required to do so.

If you are happy for your child to contribute to the project, please complete the parental consent form below and return directly to the school as soon as possible. If you are interested in the outcome of this project or if you have any questions, please contact the University Partnership Office - partnership@uwtsd.ac.uk.

Yours faithfully,

Mathew Jones
Module lead – School Development and Pupil Progress

As Parent/Guardian of..... (pupil name),
☒ I do / ☐ do not give consent (please delete) for my child to take part in this project.

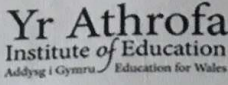
Signed..... (Parent/Guardian).

Date.....

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Appendix 2 – Permission letter from the school the research took place in. Personal information has been removed to ensure anonymity. A master copy is available on request.

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

 Yr Athrofa
Institute of Education
Addysg i Gymru Education for Wales

RE: Primary PGCE student assignment: permission and confirmation that work has been undertaken in school for assignment 'School Development and Pupil Progress', Summer 2019.

Dear Class/Senior mentor,

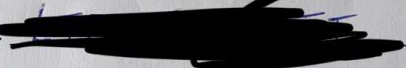
For the university module named above, trainees are required to identify one learner within the class in which they are based and, over the course of the Professional Teaching Experience, explore their learning in detail. The evidence that they need to gather could include:

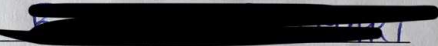
- observation;
- asking the learner to identify places/things that help him/her learning;
- discussing what helps the pupil learn and how they feel about learning with the pupil and/or teacher;
- collecting samples of work which might show something about the learner's progress and development.

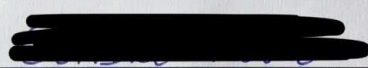
They are asked to focus on knowledge, attitude and skills in language, mathematics, wellbeing and at least two other areas of the curriculum to gain an holistic picture of the child. They then suggest the next steps for the learner, and indicate how these will be achieved. Trainees are expected to undertake this work independently where-ever possible, and have been given ethical guidelines to follow (although undertaking the work above would be in line with typical classroom practice). The trainees have been asked not to reveal the identify of the learner or the school within their assignment. Students have been asked to:

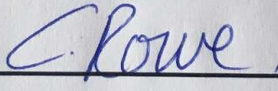
1. Seek permission for this work (by consulting with the class teacher and learner)
2. Provide verification that the work has taken place.

We would therefore be grateful if you could confirm that permission has been sought and that tasks have been undertaken by signing below:

STUDENT NAME (PLEASE PRINT): 

SCHOOL NAME (PLEASE PRINT): 

SENIOR MENTOR/CLASS MENTOR NAME (PLEASE PRINT):


SENIOR MENTOR/CLASS MENTOR NAME (PLEASE SIGN):


If you have any queries regarding this, please contact the module lead, Mr Mathew Jones.
M.Jones@uwtsd.ac.uk

Many thanks in advance
SIGNED COPY TO BE INCLUDED IN APPENDIX OF ASSIGNMENT

Appendix 3 – Interview with Child X

Interview Transcript from audio recording with Child X for SDPP module assignment

Do you like school?

Yes, I really like school. I like learning and Miss X and I can see my friends every day.

What is your favourite subject and why?

Maths. I like working out questions and playing maths games on the laptop.

I noticed only one of the photos you took was related to maths, why is that?

You said to take photos of things that help me learn and the stuff in the classroom in maths I know most of it so it doesn't really help me learn.

Do you enjoy English?

Sometimes. I mostly enjoy reading.

That's nice. Do you read much at home?

Yes. I read a lot at home and my parents help me. I used to read to them lots when I was little but now it is only sometimes.

How do you like to learn? Do you prefer teacher led or student led?

I like to be told by the teacher first and then like to learn by myself. The best lessons are when we go outside and its more fun than the classroom.

Is there anything that helps you learn in the classroom?

I use the English word board and the pyramid when I am writing. But I love going on the ipads and laptop and playing games.

What is your favourite place in the school?

The learning lounge (library).

Are there any lessons you dislike and why?

I don't like welsh, it's my worst subject and I don't think I'm good at it. Also, the teacher Miss Y, shouts a lot and is a bit mean.

Why do you think you are not good at it?

I can't pronounce things that well and forget like everything.

How do you think I could help you in improving that?

You could help me practise more. I don't do Welsh a lot.

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You said your parents help you with reading, do you think they would be able to help you with your Welsh?

No. I don't use Welsh at home. Mum and dad can't speak it so they can't help me. I do like telling them about what I have learnt.

It sounds like you are teaching them.

I do sometimes.

How can the school improve your learning more?

I'd like erm posters telling us we are doing good and more motivation on the walls to help me learn.

Thank you for answering my questions. Do you have any questions?

Nope.

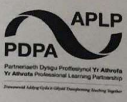
Module: M7X02153-C
Student Number: 1803104
Word Count: 4,941

Appendix 4 – Photo Child X took of the school library



Module: M7X02153-C
 Student Number: 1803104
 Word Count: 4,941

Appendix 5 – Child X Reading Record


C11b

Reading record

Name of learner: 

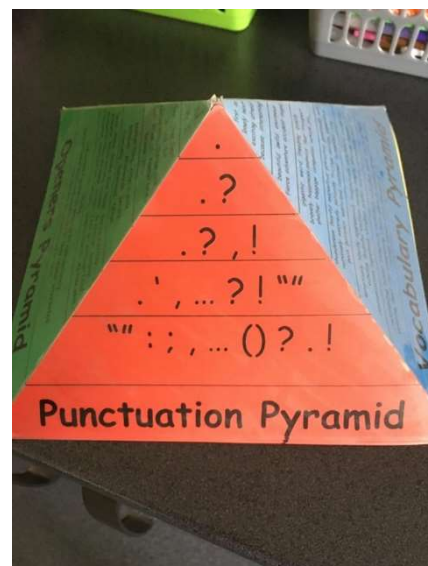
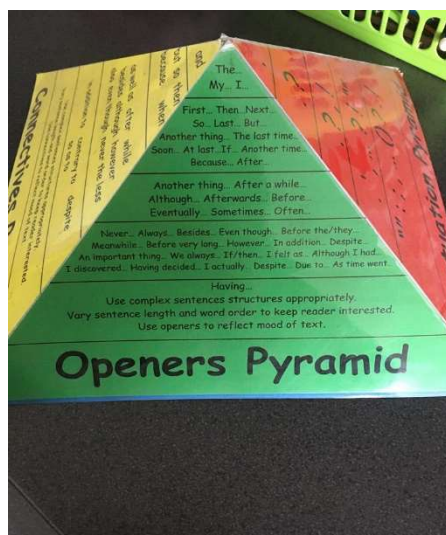
Date	Title of book and page numbers read	Type of book e.g. fiction, play, poetry	Comments (e.g. reading for enjoyment, recognition of words, understanding of text, interpretation, range of reading)
01/05/2019	Harry Potter & The Goblet of Fire - pg 153-163	Fiction	Discussed the story so far. Said she is really enjoying the book. Can read confidently and fluently, rarely gets stuck on any words
08/05/2019	Matilda - pg 30-40	Fiction	Understands the story so far. Changes her voice depending on who is talking in the book. Reads at a good pace.
16/05/2019	Matilda - 211-221 (Page)	Fiction	Able to retell the story and we had a discussion about what the ending might be. She has interpreted the text well and reads confidently
23/05/2019	BlitzCat - pg 39-44	Fiction	Spoke about why she decided to read the book (links to topic lesson). She was able to make links between the book and our history lesson. Read really well at a good pace.

This form should be used after reading the school's reading policy, if available

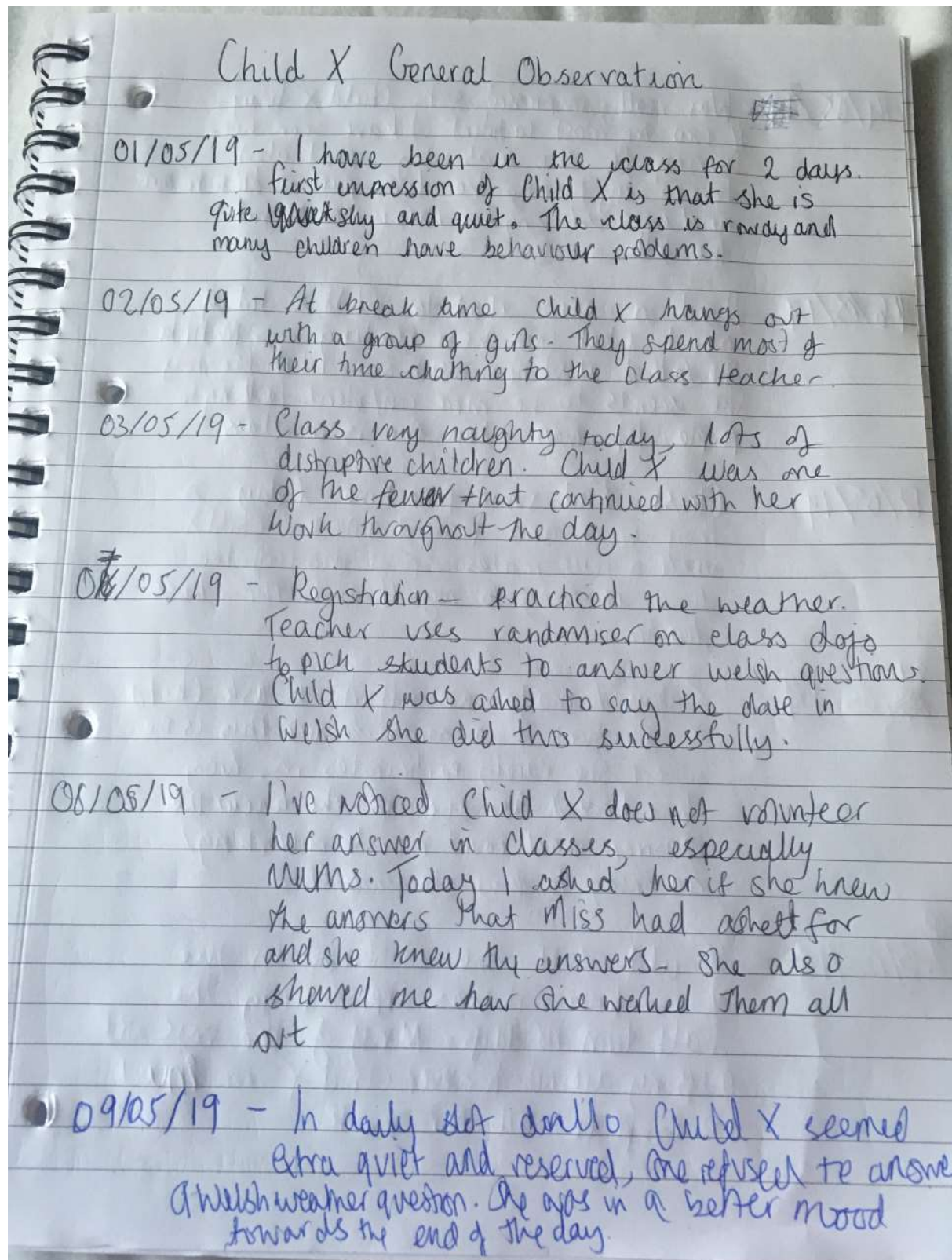
Word Count: 4,941

FANBOYS

, for	This is the posh word for because. E.g. They struggled to reach the mountain peak (for / when their plane was lifted offcourse).
, and	The seltzerose conjunction. E.g. I can't be the class, and I can't be a teacher.
, nor	This is used for two negative sentences. E.g. He does not just dance, nor does he not breathe.
, but	This is used to give the other view. E.g. I am busy, but I don't see anything. We were all happy, but we felt sad at the same time.
, or	This is used to show two choices. E.g. The meeting was held, or the day after on 17 June this century.
, yet	This changes the direction of the sentence. (positive-negative or negative-positive) E.g. I am excited, yet I don't pass the test.
, so	This is when you say something and then explain why. E.g. When we finished our trip, we were exhausted.



Appendix 7 – Two pages of observations on Child X



14/05/19 - Was really impressed with Child X today. It was the most confident I have seen her. During PE she was very vocal about how to play tennis. She took part in demonstrations and was showing her partner how to hit the ball.

16/05/19 - Had a nice chat to Child X today about what book she is reading → Mahilda. She talked about how much she liked the story. She seems to be more confident talking to people 1:1 than when she is in class.

17/05/19 - Class had some free time today so they went and played outside. Child X and a few mates spent most of the time chatting to myself and the class teacher.

21/05/19 - Today I made an effort to ask Child X questions in maths because this is the subject she rarely participates in. Every time I asked her if she knew the answer and could provide reasoning/working to show she understood.

23/05/19 - Could tell the children in the class knew it was approaching the half term holidays. Many of the boys were messing around however Child X continued to complete all her work.

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Appendix 8 – Maths photo Child X took



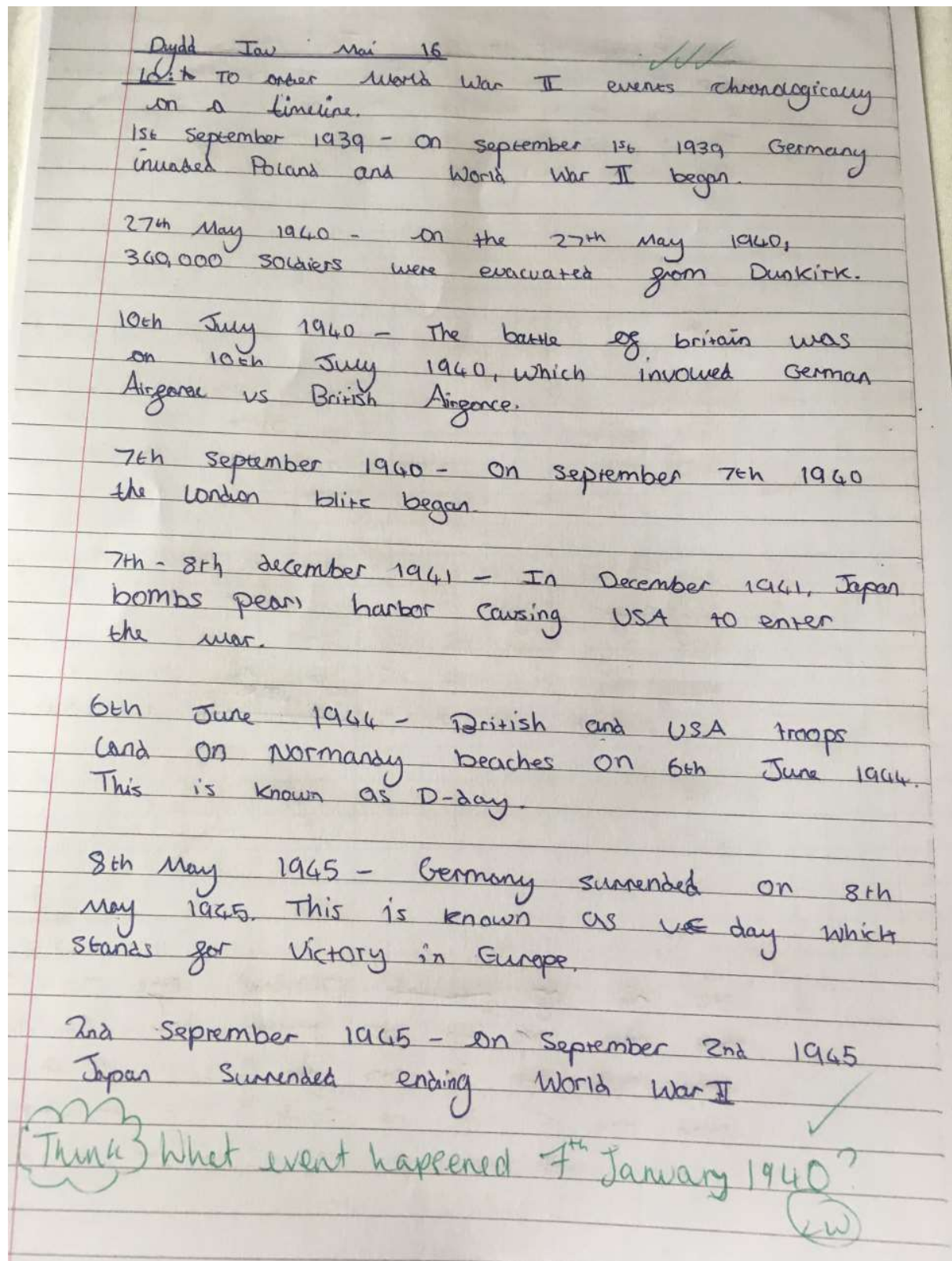
Module: M7X02153-C
 Student Number: 1803104
 Word Count: 4,941

Appendix 9 – History Chronological Order Lesson Plan

Canolfan Addysg Athrawon De-Orllewin Cymru			 The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2							
Name of trainee: [REDACTED]				Session ref: 16/05/19			
Personal target(s) in relation to QTS:							
Year group: 5		No. of learners: 34		ALN: [REDACTED]			
Additional Adults: [REDACTED]							
Learning objective(s): To order ww2 events chronologically on a timeline.				Success criteria: I can order events chronologically. I know what chronological means. I know how to input dates into a timeline. I can highlight key information in a text			
Links to previous learning: World War 2, evacuation, Blitz							
Curriculum coverage (range, skills) - Historical knowledge and understanding - Identify significant people - Understand consequences							
<i>Literacy(LNF)</i> To explore information and ideas beyond their personal experience. Select and use information and ideas from texts.				<i>Numeracy (LNF)</i> Transfer mathematical skills to a variety of contexts and everyday situations. To order events.			
<i>DCF</i> Use of iPads to mirror on to the interactive whiteboard		<i>Thinking</i> Identify and make links with prior skills and knowledge related to context. Plan, organise and present ideas and information.		<i>ESDGC</i>		<i>YCC</i> Gaining knowledge of one's own community and its values and traditions - Swansea Blitz	
Key vocabulary(English/Welsh): World War 1, World War 2, war, Germany, Britain, pimp, pedwar, tri, dau, un, da iawn, dim siarad, gwrandewch, Swansea Bltiz, Blitz, evacuation, Dunkirk, D-Day, chronological, timeline							
Time	Session activities, organisation and management				Key questions & Assessment for Learning opportunities		
15/20 mins	Introduction Activate their prior knowledge – what do they already know about the war? What have they learnt? Talk about the 58 countries → who were they? Axis vs Allies (might help them understand the events more?) What dates do they already know? They should know the start and end dates				What do we already know about World War 2? What does chronological mean? What is a timeline? How is a timeline laid out?		

	What does chronological mean and what is a timeline? Think Pair Share activity Powerpoint Presentation activity – in pairs can they sort the dates into chronological order Spacing of a timeline – brief discussion on how a timeline is laid out.	
30mins	Main activities To produce a timeline with key events of World War 2. Will be given numerous dates and events; they must sort them into chronological order. Once this is done, they will transfer the dates and events into their books in order. Key dates – start, finish, London/Swansea Blitz, evacuation, Dunkirk etc. Differentiation: LA – 8 dates for them to put in order, they will cut them out and stick them in their book in order MA = they will match 8 events and dates and write them into their book in order HA = they will match 12 events and dates and write them into their book in order	
15 mins	Plenary What have we learnt this lesson? What event interests you most? Quiz on the dates to see what they remember. https://www.youtube.com/watch?v=HUQy-OQvVtI	What have you learnt this lesson? Did you achieve the success criteria? What event interests you most? Are there any events you want to find out more about?

Appendix 10 – Chronological order work done by Child X



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 Word Count: 4,941

Appendix 11 – Multiples of and Factors of Lesson Plans – Introductory Lesson

Canolfan Addysg Athrawon De-Orllewin Cymru  The South West Wales Centre of Teacher Education			1B	
Session Plan – Key Stage 2				
Name of trainee: [REDACTED]			Session ref: 13/05/19	
Personal target(s) in relation to QTS: [REDACTED]				
Year group: 5	No. of learners: 32	ALN: [REDACTED]		
Additional Adults: 2 – [REDACTED]				
Learning objective(s): To understand what a multiple is.		Success criteria: • I can answer multiples of questions • I know what multiple means • I can work out multiples of 2, 5 & 10 (LA) • I can work out multiples of 3, 5 & 10 (MA) • I can work out multiples of 3, 4 & 5 (HA)		
Links to previous learning: multiplication, times tables (2, 3, 4, 5, 10)				
Curriculum coverage (range, skills) Identify multiples of 2, 3, 4, 5 and 10 and use the term multiple				
<i>Literacy (LNF)</i> Understand how something can be represented in different ways.		<i>Numeracy (LNF)</i> Select appropriate mathematics and techniques to use		
<i>DCF</i> Powerpoint presentation Use of technology – multiplication online games	<i>Thinking</i> Build on existing skills, knowledge and understanding Sort objects using one or more criteria.	ESDGC	YCC	
<i>Key vocabulary (English/Welsh):</i> take pride in work, pimp, pedwar, tri, dau, un, barod, dim siarad, multiples, times tables, multiplication				
Time	Session activities, organisation and management		Key questions & Assessment for Learning opportunities	
15 mins	Introduction Class repetition of timetables Powerpoint presentation: Think Pair share: What is a multiple? Some questions will be on the powerpoint slides for the children to answer on whiteboards. Some will ask for a multiple of... and some will question whether something is a multiple, e.g. is 10 a multiple of 5 - true		What is a multiple? Is this a multiple? How would you work out if a number was a multiple?	

30 mins	Main activities Multiples of Snakes and Ladders game. Children will play a game of snakes and ladders, for them to go up the ladders they will have to answer a multiples of question. If they get it wrong, they have to stay where they are. The game will be played in pairs. Students partners will have an answer sheet for the question so they can check if their partner is correct. Differentiation Lower ability will be focusing on their 2, 5 and 10 times tables. Middle ability will be focusing on their 3, 5 and 10 times tables. Higher ability will be focusing on their 3, 4, 5 times tables Extension → Can they think of any other multiples?	What other multiples are there which I haven't included?
10/15mins	Plenary Use topmarks website to access multiplication games.	

Canolfan Addysg Athrawon De-Orllewin Cymru		 The South West Wales Centre of Teacher Education	1B
Session Plan – Key Stage 2			
Name of trainee: [REDACTED]		Session ref: 20/05/19	
Personal target(s) in relation to QTS: S3.2.1 They make appropriate use of a range of monitoring and assessment strategies to evaluate learners' progress towards planned learning objectives, and use this information to improve their own planning and teaching.			

S3.2.2 They monitor and assess as they teach, giving immediate and constructive feedback to support learners as they progress. They involve learners in reflecting on, evaluating and improving their own performance.			
Year group: 5	No. of learners: 34	ALN:	
Additional Adults: 1 –			
Learning objective(s): To understand what a factor is.		Success criteria: • I know what a factor is. • I can answer factors of questions. • I can answer questions that include factors – 2, 5, 10 (LA) • I can answer questions that include factors – 3, 5, 10 (MA) • I can answer questions	
Links to previous learning:multiplication, times tables (2, 3, 4, 5, 10)			
Curriculum coverage (range, skills) Identify multiples of 2, 3, 4, 5 and 10 and use the term factor Understand what a factor is.			
Literacy(LNF) Understand how something can be represented in different ways.		Numeracy (LNF) Select appropriate mathematics and techniques to use	
DCF Powerpoint presentation Use of technology – multiplication online games	Thinking Build on existing skills, knowledge and understanding Sort objects using one or more criteria.	ESDGC	YCC
Key vocabulary(English/Welsh): take pride in work, pimp, pedwar, tri, dau, un, barod, dim siarad, multiples, times tables, multiplication			
Time	Session activities, organisation and management	Key questions & Assessment for Learning opportunities	
15 mins	Introduction Class repetition of timetables Powerpoint presentation: Think Pair share: What is a factor? Some questions will be on the powerpoint slides for the children to answer on whiteboards. Explain the main activity to them. https://www.mathsisfun.com/numbers/factors-multiples-table.html	What is a factor? Is this a factor? How would you work out if a number was a factor?	
30 mins	Main activities 'Factors of' Snakes and Ladders game. Children will play a game of snakes and ladders, for them to go up the ladders they will have to answer a factors of	What other factors are there which I haven't included?	

	question. If they get it wrong, they have to stay where they are. The game will be played in pairs. Students partners will have an answer sheet for the question so they can check if their partner is correct. Differentiation Lower ability will be focusing on their 2, 5 and 10 times tables. Middle ability will be focusing on their 3, 5 and 10 times tables. Higher ability will be focusing on their 3, 4, 5 times tables Extension → Can they think of any other factors? .
10/15mins	Plenary Use topmarks website to access multiplication games. Check student understanding against the success criteria.

Appendix 12 – Child X work for the Multiples and Factors Lessons

16.05.14

10. To know what is a multiple is

1. $4 \times 5 = 20$ ✓

2. $8 \times 3 = 24$ ✓

3. $11 \times 4 = 44$ ✓

4. $9 \times 5 = 45$ ✓

5. $12 \times 3 = 36$ ✓

6. $8 \times 5 = 40$ ✓

7. $9 \times 4 = 36$ ✓

8. $7 \times 5 = 35$ ✓

9. $11 \times 3 = 33$ ✓

10. $14 \times 5 = 70$ ✓

11. $3 \times 7 = 21$ ✓

12. $3 \times 11 = 33$ ✓

13. $4 \times 12 = 48$ ✓

14. $13 \times 5 = 65$ ✓ ✓

Gwain bendigedig
 (W)

True or false

1. 34 is a multiple of 5 True or false? false ✓

2. 28 is a multiple of 4 - True or false? True ✓

3. 26 is a multiple of 3 - True or false? false ✓

4. 84 is a multiple of 5 - True or false? false ✓

5. 340 is a multiple of 10 - True or false? True ✓

Numbers that have more than one multiple

240 is a multiple of:

~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~8~~ ~~10~~ ~~12~~ ~~15~~ ~~20~~ ~~30~~ ~~40~~ ~~60~~ ~~80~~ ~~120~~ ~~240~~ ✓

2, 2, 5, 1, 1

10: To know what a factor is and how to find the factors of a given number. ✓✓

1. 7 is a factor of 56. True or false? True. ✓

2. 6 is a factor of 26. True or false? false. ✓

3. 6 is a factor of 18. true or false? True. ✓

4. 4 is a factor of 42. True or false? false. ✓

5. 7 is a factor of 67. True or false? false. ✓

Find all the factors of 45:

1. $45 = 9, 5, 45, 1, 15, 3$ ✓

2. Find all the factors of 24:

$24 = 6, 4, 8, 3, 2, 12$ ✓

3. Find all the factors of 36:

$36 = 6, 6, 4, 9, 3, 12$ ✓

4. Find all the factors of 35:

$35 = 5, 7, 15, 35$ ✓

5. Find all the factors of 21:

$21 = 3, 7, 1, 21$ ✓

Find all the factors of 46:

$46 = 1, 2, 23, 46$ ✓

Find all the factors of 38:

$38 = 38, 1, 2, 19$ ✓

Find all the factors of 28:

$28 = 28, 1$ ✓

Think!

Write 3 factors of 30. (LW)

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Student Number: 1803104
Word Count: 4,941

Appendix 13 – Picture of the outside from the classroom window that Child X took.



Appendix 14 - Welsh lesson I observed

