

Previous Targets:

Targed/Target 1	Ensure to critically analyse points opposed to describing them.
Targed/Target 2	Do not be over reliant on limited sources – use a range of resources to build up a strong reference list.
Targed/Target 3	Proof-read work to improve accuracy.
Targed/Target 4	Carefully follow Harvard Referencing Guide to ensure referencing is accurate.
Targed/Target 5	Include examples of good practice by referring to Estyn tp support points made.



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

Can Outdoor Learning Close the Gender Attainment Gap between Boys and Girls in Language, Literacy and Communication?

Student Number: 1701043

BA (Hons) in Primary Education with QTS

University of Wales, Trinity St David

27th of April 2020

Word Count: 6263

Frontispiece

This is to certify that except where specific reference is made, the work described in this research project is the result of the investigation carried out by the student, and that neither this research project nor any part of it has been presented, or is currently being submitted in candidature of any award other than in part of the degree of BA (Hons) in Primary Education with QTS of Trinity Saint David University of Wales. I understand that any work I use without reference constitutes as plagiarism, which will lead to failure of the module.

Acknowledgement

The author would like to take this opportunity to gratefully thank the staff and pupils from the school involved in this research project for their assistance and valuable contribution. With special mention to the headteacher, teachers and outdoor learning co-ordination interviewed for their time, patience and valuable information. Thank you to the head teacher for this school for allowing access for the author to interview the staff and pupils during their final teaching practice.

The author would also like to thank all those who kindly responded to the questionnaire, their response made a large contribution to this project.

Finally, special thanks go to Sioned Hughes of University of Wales Trinity St David for their help and constant support throughout the development of this research process.

The author cannot thank everybody enough for their help.

Contents

Previous Targets.....	Page 1
Frontispiece.....	Page 3
Acknowledgement.....	Page 4
Chapter 1: Introduction.....	Page 6
Chapter 2: Literature Review.....	Page 7
Chapter 3: Methodology and Research Design.....	Page 13
Chapter 4: Results and Discussion.....	Page 17
Chapter 5: Conclusion.....	Page 25
Bibliography.....	Page 27

Chapter 1: Introduction

This study aims to justify if outdoor learning is the resolution to closing the attainment gap between boys and girls specifically in Language, Literacy and Communication within a primary school setting, for learners aged three to eleven. The attainment gap between boys and girls is not a relatively new concept, and overall, in recent years has continued to widen (Estyn, 2008). By supporting the boys in Foundation Phase in literacy, language and communication, will close the gap early in the process and provide a greater chance of them achieving Outcome 5 at the end of year 2. Outdoor learning supports many outcomes of the current and future curriculum in Wales. See Appendix 1 for examples of how outdoor learning can support the Four Purposes of the new Curriculum for Wales (Welsh Government, 2015). These benefits could be the resolution to closing the gender attainment gap. Information provided by the Welsh Government indicates that outdoor learning provides opportunities to enhance all aspects of children's development (2009a).

This topic was chosen as it is the authors opinion that in lots of schools, outdoor learning is not used to its full potential. By conducting research into the benefits of outdoor learning, the author believes that it could be used to promote good practice in education. The link between outdoor learning and language and literacy was made after research was carried out on the advantages of outdoor learning. For example, benefits of outdoor learning include improvements in speaking and listening which promotes language literacy and communication, this will be discussed further in Chapter 2 of this research project.

The objective of this research is to provide a clear link between advantages of outdoor learning and language, literacy and communication to distinguish that this would be a beneficial provision to close the gender attainment gap in primary education.

The research methods which will be undertaken are:

- Questionnaires
- Observations
- Analysis of National Reading Tests
- Interview

Chapter 2: Literature Review

2:1 Chapter Introduction

This chapter contains a literature review of research, of which the methodology, primary research was based on. Background research is provided during this chapter on outdoor learning within primary education and how the advantages can be used enhance language and literacy and close the gender attainment gap.

2:2 Outdoor learning in the current and future curriculum

As outdoor learning is a broad term, there are a range of different definitions. The Institute for Outdoor Learning (IOL) defines outdoor education as “learning about and connecting to the natural world, and engaging in environmental and adventure activities” (IOL, 2020) However, it is defined by the Welsh Government as “an attitude of mind rather than a bank of lesson plans or resources...the Foundation Phase and the outdoors are inseparable” (Gov, 2009, p.3). It is apparent from both definitions that the outdoor learning plays a vital role and resembles good practice in the Foundation Phase.

Currently, outdoor learning is not compulsory in Wales, however other countries in the UK such as Scotland, believe that all teachers at every level of involvement with the education of children have a responsibility to make the most of the outdoor environment to support the delivery of the experiences and outcomes of Curriculum for Excellence (Teaching and Learning Scotland, 2010). With Wales having very few outdoor learning policies which are vastly outdated, implies that we are one step behind the rest of the UK when it comes to outdoor learning.

All children benefit from access to outdoor spaces (RSPB, 2011) and “wellbeing, behaviour, knowledge and understanding of the world, and their physical development improve as a result of using the outdoors” (ESTYN, 2011, p.1). These benefits underpin Donaldson’s (2015) Four Purposes of our future curriculum. To encourage outdoor learning, the Qualified Teacher Status (QTS) for trainee teachers states it is mandatory to plan opportunities for children to learn in an out-of-school context (Welsh Assembly Government, 2009b). Despite these standards updating in 2019, outdoor learning is still a compulsory component of the pedagogy element.

The current standards state that children need to experience varied and appropriate learning Welsh Government (2019a). This demonstrates that even with recent changes, outdoor learning continues to play an important role in Welsh education. In spite of the benefits of outdoor learning, Estyn (2011) stated that it is not being used enough to develop children's reading and writing. Research carried out by the author during this project aims to rectify this predicament.

Regardless of these advantages, monitoring progression of using outdoor learning can be challenging. Recent studies conducted by Sackville-Ford and Davenport (2019) suggest it is difficult for educators to relate children's progress to outdoor learning. Monroe (2010) and Pavey (2006) echo this assumption, as they discuss concerns of linking progression directly with outdoor learning. As children move through school, there are other contributing factors which may lead to progression such as one-to-one support, enhanced provision, individual development plans (IDP's). As common practice shows, outdoor learning is usually conducted for approximately 1-2 hours per week in comparison to one-to-one support from a teaching assistant for most days of the week, making it difficult to determine which strategy is the most effective. Due to the nature of outdoor learning, mental and physical tests are insufficient strategies to measure the success of practice. Redmond, Foran, and Dwyer (2010) recommend that improvement should be measured through immediate reflection by using prompting questions. Prompting questions were used to measure the success of outdoor learning during this project, as discussed in Chapter 3.

Overall, even with the difficulty to measure the success of outdoor learning Article 29 of UNCRC Rights of the Child, states that education should encourage respect for the environment (UNCRC, 1989). Outdoor learning supports this right by educating children about their local environment.

2:3 Language and Literacy in the current and future curriculum

Currently, language literacy and communication skills are put into effect through the Foundation Phase Framework and are broken into three sections: oracy, writing and reading (Gov, 2015). By September 2020, language, literacy and communication will be one of 5 of learning. This area of learning aim to enable learners to communicate effectively using Welsh, English and international languages.

“Through language we communicate to form meaningful relationships and share a wide range of experiences to understand the world around us. Languages allow us to take an active part in society, to collaborate and develop into valued, confident, ambitious and successful individuals in a multilingual world” (Gov, 2017, p.4).

This statement issued by the Welsh Government (2017a), indicates the importance of literacy, language and communication to prepare children for their future.

Literacy is also one of three compulsory cross-curricular responsibilities in the Welsh curriculum. To ensure children develop a high level of competence in literacy the National Literacy and Numeracy Framework (2008). This acts as a planning tool and outlines the importance of literacy in our current and future curriculum. Though, if a “cross-curricular activity is poorly planned...there is little chance that deep learning will occur” (Barnes, 2015, p.26). It is debatable whether literacy will suffer as a result of poor planning. Nevertheless, literacy is a cross-curricular responsibility, so it can be applied across the curriculum to promote the fundamental role of language in thinking (Donaldson, 2015).

The current curriculum for language literacy and communication does not mention bilingualism as a main priority. However, speaking, writing and reading Welsh are all found in the Language, literacy and communication curriculum for 2020. As the Welsh Government aim to have 1 million Welsh speakers by 2050 (Gov, 2017b), Bilingualism is becoming a priority within language, literacy and communication. It is likely that children who have English as an Additional language will struggle as a result of this. However, both Gardner (2011) and Vygotsky and Cole (1981) believe that an additional language will enhance children’s results through social development and linking connections between verbal-linguistic and interpersonal-intelligences. They propose that there are many cognitive benefits to bilingualism and multilingualism. These include, effective communication, problem solving, and improved analytical thinking (Bialystok and Hakuta, 1994). It is arguable that by making Welsh a priority within the new language, literacy and communication curriculum will lead to improved results.

Fortunately, Estyn’s annual report in Wales (2018), indicated that all children made progress in literacy to apply their skills to all areas of the curriculum. However, in

weaker school's progress varied too much over time and children did not achieve high standards relative to their starting points.

2:4 Supporting language, literacy and communication through outdoor learning

Progress in language, literacy and communication varies across Wales. The researcher argues that outdoor learning could act as an intervention to improve results for those who are lacking progression. As discussed previously, outdoor learning can promote fundamental life skills such as communication, leadership, and collaborative problem solving (RSPB, 2012). All of which can be found on the current Foundation Phase Framework (2015) and the future language literacy and communication draft curriculum (2019b).

The clearest point of development between literacy, language and communication and outdoor learning is the oracy strand. Oracy is a combination of four key skills: collaboration and discussion, speaking and listening. All are advantages of learning outdoors (Gov, 2009a). The current curriculum also states that children should also be given the opportunity to experience "focused activities in the indoor and outdoor learning environments" (Gov, 2015, p.13) during this area of learning. It is clear that oracy can be enhanced by outdoor learning.

Also supported by theorists Piaget (1936) and Vygotsky (1978), outdoor learning can be adopted to construct knowledge through experience. Piaget's theory of constructivism suggests children build knowledge from concrete experiences. While Vygotsky indicates, the importance of others in the process of constructing meaning and particularly the role of peers when building new knowledge onto existing knowledge (Knight, 2016). The researcher proposes that based on these analogies, outdoor learning would be a successful intervention to encourage positive language, literacy and communication results, as it provides children with concrete learning experiences to construct meaning. The success of this concept cannot be solely based on Piaget's and Vygotsky's proposals as they are generally outdated. More recent research conducted by Wilison and O'Regan (2007), discuss the importance of curiosity in education and that learning is motivated by the need to know. Using activities such as nature letter making in groups, mini beast hunts etc, are motivating activities when developing oracy. Such motivating tasks would be difficult to conduct

inside. Unfortunately, Beames, Higgins and Nicol (2012) and Louv (2008) propose that children have very little experiences outdoors, and there is a genuine need for them to have more exposure. It is evident that the researcher's intervention will use the psychological benefits of outdoor learning to improve language, literacy and communication results and expose children to more time outdoors.

Overall, there is not a substantial amount of research distinguishing the link between outdoor learning and progression in language, literacy and communication. Even though, recent research shows that children "achieved higher literacy scores than children that did not take part in such learning outdoors" (Welsh Council for Learning Outdoors, 2018, p.3). Other findings suggested that "a majority of practitioners say that boys benefit the most, as the outdoors lends itself to a more active approach to learning that many boys enjoy" (Estyn, 2011, p.2). These are two significant statements for this research project issued by education organizations in Wales. The researcher aims to use results from Chapter 4 and this information to distinguish a clear link between outdoor learning supporting progression in language, literacy and communication, particularly as Estyn (2011) calls for more outdoor learning in Welsh Education.

2:5 The gender attainment gap in Wales in language literacy and communication.

Regrettably, "the gap between what boys and girls attain at the end of their compulsory schooling has widened significantly since 1988" (Estyn, 2008, p.3). This has been measured from GCSE results, however, more relevant information states that during the pre-school stage, girls have better social and cognitive skills (Estyn, 2008). This is supported by the Welsh Government (2019c) who suggested percentage of girls achieving the Foundation Phase Outcome following the introduction of the five areas of learning was 8.5 percentage points higher than boys in 2018, and then 8.8 percentage points higher in 2019. The highest difference between boys and girls occurred in language, literacy, and communication with 9.1 percentage points (Gov, 2019c). If a pattern is followed, as the gap widened followed the release of the five areas of learning, the researcher predicts the gap will widen further after the implementation of the six areas of learning and experience in September 2020.

Despite the recognition of the gender attainment gap, nothing has been put in place to rectify this increasing dilemma. The gap was recognised by Estyn in 2008, then by the Welsh Government in 2019. Over the course of 12 years, the curriculum in Wales has been modified twice. During this time the ALN transformation programme (Gov,2018a), Digital Competency Framework (2018b) and the Professional Teaching Standards (Gov, 2019a) have all been updated to suit the needs of learners and improve standards. In 2008, Estyn released 'Closing the gap between boys' and girls' in schools' recommendation document. Unfortunately, as the gap continues to widen across Wales, this programme is one of few which has not been updated since 2008.

It is questionable that addressing the gender attainment falls under differentiation within the classroom. However, Wyse, Jones and Bradford (2008) believe that additional small-group interventions will enable children to catch up with their peers. Research conducted by the author outlines how outdoor learning will be a valuable contribution to good practice to improve progression in language, literacy and communication.

The validity of how the results are generated should also be addressed. The gender attainment gap has been calculated from Welsh Government outcome results (Gov, 2019c). Estyn (2015) suggest that to ensure assessment is conducted effectively, children should be monitored regularly and consistently through tracking. This questions whether annual National Literacy and Numeracy Tests are a sufficient way to give a true indication of children's capability.

2:6 Conclusion

Based on information discussed during this chapter, the researcher believes outdoor learning would be a successful strategy to improve boy's language literacy and communication. There are potential barriers which may hinder its success such as outdated policy documents etc. Although, the "majority of practitioners feel that boys gain the most out of learning outdoors as it suits their active-learning style" (Estyn, 2011, p.7). Combining the outdoor environment, with specific language, literacy and communication tasks, will benefit boy's results.

Chapter 3: Methodology and research Design

3.1 Ethical issues

Throughout the construction of this research project the British Educational Research Association (BERA) Guidelines (2018) have been adhered to ensure that appropriate ethical practices were conducted correctly. It was made clear to all participants that all data collected would be kept strictly confidential, supporting the Data Protection Act 1998. The General Data Protection Regulation (GDPR) (2019) guidelines were followed during the ethical approval process, stating that all raw data would be protected with a password and only accessible to the university module lead and external examiner. This data would then be destroyed following submission of the research. As interviews were conducted with children in School A, the United Nations Convention on the Rights of the Child (UNCRC) had to be addressed. As Article 13 (2011) states, all children have a right to information. As a result of this children from School A were made aware of the intentions of this research project and what their answers would be used for. Consent was required from participants as they took part in the qualitative research, as recommended by Rubin and Rubin (1995). Unfortunately, Gillham (2007) suggests that anonymity in research is one major practical disadvantage. Participants may not completely value the researchers trust when they are providing a response and uncertainty of who has participated makes tracking information challenging. However, both Gordon (1987) and Rubin and Rubin (1995) suggest that being honest with participants can promote open dialogue, resulting with more qualitative research. Transparency during research is supported by BERA (2018), who recommend that researchers are open and honest with participants to avoid non-disclosure. The ethical application form was completed prior to the electives process as shown in Appendix B. A range of primary research strategies were used during this project following ethical approval from a superior figure at school A. These include questionnaires, interviews, observations and data collections from National Reading Test results from a year 3 class.

3:1 Questionnaires

Paper questionnaires were distributed to ten members of staff in School A. On reflection, increasing the number of participants would have improved the accuracy of the research conducted. Electronic questionnaires make storage safer and more efficient (Kara, 2017) which unfortunately were not used during this study. If replicated, electronic questionnaires would be used based on this reason. The hardcopy questionnaire contained both closed and open questions. Closed questions were the more favourable option, to promote convenience for the participants and making the data collected simpler to analyse. Regardless of closed questions prompting focus (Worley, 2019), both Lewis-Beck *et al.* (2004) and Foddy (1993) agree that open ended questions enable participants to express their feelings on the topic and provide a more detailed response. If repeated, more open questions would be included into the questionnaires that were distributed to gather a more in-depth response. Overall, questionnaires were a useful strategy of research during this project to collect information from staff which is supported by Beiske (2007), who suggests that questionnaires are a cost effective qualitative and quantitative research method. An example of the questionnaire is available in Appendix D.

3:2 Interviews

Interviews were also conducted by the researcher with eight year 3 children. Four boys were interviewed separately to four girls to gather their views on outdoor learning and language and literacy. Both King and Horrocks (2010) and Blumer (1969) state that group interviews are much more valuable than any other representative sample. This signifies that a group interview was a reliable primary source of research. Prior to the interview, the children were told if they felt uncomfortable at any time, they would be able to go back to their classroom. The researcher provided traffic light symbols for the children to indicate their opinions on each question as shown in Appendix C. This technique is supported by Detheridge and Detheridge (2013) and Levine and Munsch (2014) who propose that symbols and pictures can often act as a prompt or a cue enable children to discuss their feelings. This was a success as all children involved found the traffic light symbols useful when answering questions. Due to lack of time, an interview with staff

members was not conducted, upon reflection this would have been a useful source of information. Once again, as this interview was conducted with children, it was essential to consider the UNCRC Rights of the Child as “Everyone who works with children should always do what is best for each child” (UNCRC, 2011). To ensure these needs are met, the children were made aware of the authors intentions of this research and what it was going to be used for (BERA, 2018).

3:3 Observations

Observations were conducted by the researcher of year 3 children during their playtime. The researcher aimed to distinguish the children’s favourable places to play and if there was a difference between the boys and the girls. Reports from Maltz and Borker (1982) state that when playing, the girls’ preference would be inside in smaller groups in due to their capability to maintain attention to specific tasks. In comparison boys are expected to play outdoors in larger spaces as they are more likely to interrupt during speaking and listening tasks. It is questionable whether this research can be relied on when collecting data as it is outdated. More recent studies from Reed and Rae (2007) suggest that children’s behaviour and choices reflect their upbringing at home, and this was considered when conducting the observations. To get a true reflection of where the children prefer to play, they were not aware that an observation was taking place. If replicated, the researcher would aim to conduct more than one observation to increase accuracy of the figures collected. Variables such as the weather and who is in school that day may all contribute to where the children chose to play. Despite this, structured observations enable “the researcher to generate numerical data from the observations. Numerical data, in turn, facilitate the making of comparisons between settings and situations” (Cohen, Manion and Morrison, 2007, p.398).

3:4 National Reading Test results comparison

During this research project, the author also evaluated National Reading Test results from a year 3 class by comparing them with the previous year. Children in school A only take part in outdoor learning when they are in year 3. Results were used to compare the previous year with the current year to discover whether outdoor learning had a significant impact on literacy and language. This quantitative data was beneficial and made it simple to compare both year groups. If replicated, more

results would be gathered by the researcher. National Reading Test results from the year 4 class in school A would allow the researcher to assess the benefits of outdoor learning before year 3 and after, as large sample size leads to increased reliability (Cohen, Manion and Morrison 2007).

Chapter 4: Results and Discussion

The aim of this chapter is to analyse and interpret information collected from the questionnaire, children's interview, observation and the National Reading Test results. Consent to conduct this research was issued by the Headmaster of School A and can be found in Appendix F.

4:1 Response to teacher's questionnaire

The questionnaire was issued to ten members of staff in school A, including the Headmaster and Deputy Head Mistress. The paper questionnaire consisted of seven questions which were put together to support this research project. Information was provided to participants on the cover page of the questionnaire as shown in Appendix E. This informed them that participation was not compulsory, and that all information would be stored following BERA Guidelines (2019), GDPR Guidelines (2019) and would only be accessible to university module lead and external examiner, then later destroyed.

Note: 1 participant equates to 10% (10 participants)

4:1:1 Response to Question 1

Question 1
Do you think outdoor learning benefits children's learning?

Strongly disagree	0%
Sometimes agree	30%
Strongly agree	70%
Figure 1	

Question one aimed to distinguish the staff's true opinion on outdoor learning. As mentioned in chapter 3, the questionnaires were kept anonymous in hope for an honest opinion. Both Kimmel (1988) and Cohen, Manion and Morrison (2007) note that some potential

respondents in research will hesitate to co-operate when assurance of confidentiality is weak, vague, not understood. To ensure that research was valid, participants were reassured that information would be kept private. In Agreement with the RSPB (2011) and Estyn (2011) mentioned in Chapter 2, results from this question showed that most practitioners find outdoor learning beneficial to education. This was an interesting statistic, as some children in School A do not take part in any outdoor

learning as it rotates each term. It is uncertain why the school promotes so little outdoor education if 70% of teachers agree that its benefits children's learning. Kitwood (1977) and Cohen, Manion and Morrison (2007) propose that when partaking in research, participants might lie, through fear of being judged and wanting to show themselves in a positive light. Based on this analogy, the researcher believes that teachers at School A may want to agree with Estyn recommendations, however, they do not actually put these views into practice. Unfortunately, some teachers may be passionate about outdoor learning, but their views are overruled by more senior members of staff.

4:1:2 Response to Question 2

Question 1
Do you think enough time is spent outdoors?

Leading on from Question 1, as shown in Figure 2, 90% of staff stated that they only occasionally agree that enough time is spent outdoors. Even Though 70% would agree that outdoor learning is beneficial, not enough is being done in School A to benefit the children's learning. Beames, Higgins and Nicol (2012) and Louv (2008) in

Strongly disagree	10%
Sometimes agree	90%
Strongly agree	0%
Figure 2	

Chapter 2, propose that children have very few experiences outdoors, and there is a genuine need for them to have more exposure, unfortunately, School A falls under this statement.

4:1:3 Response to Question 3

Question 3
Do you think outdoor learning can benefit skills such as language, literacy and communication?

Figure 3 shows results of Question 3. This was a significantly important question to this project as it connected both areas of the research title. Supported by, the Welsh Council for Learning Outdoors (2018) in Chapter 2 who stated that

Strongly disagree	10%
Sometimes agree	20%
Strongly agree	70%
Figure 3	

children achieved higher literacy scores than those who did not take part in outdoor learning. This statement replicates results from Question 3, as the majority of teachers believe that outdoor learning can be used to improve language, literacy and communication. Once Again, the teacher's opinions and actions do not match. Reasons such as cost, shortage of staff and safety may lead to the lack of outdoor learning in School A.

4:1:4 Question 4 Results

Question 4
Do you think outdoor learning benefits boys more than girls?

Strongly agree	10%
Sometimes agree	40%
Strongly disagree	50%
Figure 4	

Question 4 results found that 50% of teachers did not believe that boys benefit from outdoor learning more than girls. This was not supported by Estyn's statement, (2011) found in the Literature Review about outdoor

learning being more suited to boys due to its active approach. As results were taken from just one school, it is debatable whether they can be reliable. As so little outdoor learning is conducted in School A, it may be difficult for teachers to notice a pattern between boys and girls during this short amount of time.

4:1:5 Question 5 Results

Question 5
Do you think girls work better at collaborative tasks opposed to boys?

Quantitative data collected from Question 5, is shown in Figure 5. There is no clear opinion shown in the results from this question. Despite previous research

Strongly agree	40%
Sometimes agree	30%
Strongly disagree	30%
Figure 5	

indicating that girls can maintain attention to specific tasks in comparison to boys who are more likely to interrupt (Maltz and Borker, 1982). Abilities of children in School A may be the cause of the contrast between results in Figure 5 and previous research.

4:1:6 Question 6 Results

Question 6
Do you think outdoor learning could improve behaviour difficulties or make it worse?

Question 6, as shown above, was an open question therefore quantitative data was not collected. Qualitative data was collected from question 6 to express teacher's opinions on behaviour which was uncovered as a contributing factor to the lack of outdoor learning in School A after talking to members of staff.

Figure 6: Comments collected from Question 6

"outdoor learning improves children's knowledge and practical skills...however children with behaviour difficulties can struggle to conduct themselves"
"outdoor learning can definitely improve behaviour providing there are boundaries and structured activities"
"Boundaries need to be specific and access issues addressed"
"Depends on structure of the activities"

Key comments suggest that structure and boundaries of the activity can influence behaviour when participating in outdoor learning. However, some teachers believe that outdoor learning could aid behaviour difficulties and improve children's knowledge and practical skills. Generally, staff believe that outdoor learning could have a negative impact on poor behaviour. However, as mentioned previously, programmes have been adapted to tackle these issues such as the ALN transformation programme (Gov,2018a). The researcher believes that if the programmes being used effectively to provide support for those who need it, these children should not have to miss out on outdoor learning.

4:1:7 Results to Question 7

Question 7
Do you have a gender attainment gap (Boys underachieving) in language, literacy and communication in your class?

Finally, as shown in Figure 7, the final question aimed to distinguish how many teachers had an attainment gap between

Yes	70%
No	30%
Figure 7	

boys and girls in their class, specifically in language, literacy and communication. Alarming, Figure 7 shows that 70% of teachers stated yes, indicating that gender attainment is a major issue in School A. This is not a surprising trend as “the failure of boys to keep pace with girls in language skills affects performance across the board” (Estyn, 2008, p.10). While conducting this project, the researcher has found that plenty of data has been gathered from the Welsh Government to address the gender attainment gap in Wales, though, very little has been done to tackle this issue. One of the few ways Esyn (2008) aimed to tackle the issue was through basic skills funding designed for ‘catch-up’ sessions. This was only issued to Secondary Teachers to support those in Key Stages 3 and 4. It is arguable if, support systems would be more useful in Foundation Phase and Key Stage 2, before the problem is past repair.

4:2 Response to pupil interview

An interview was conducted with eight year 3 children who were taking part in outdoor learning this year to gather their opinions on outdoor learning and if it benefits their language, literacy and communication skills. The group was chosen by the class teacher as she believed they would be able to provide clear and honest feedback. Girl’s responses can be found in Appendix G and boy’s responses can be found in Appendix H. Opinions were gathered using a traffic light system as shown in appendix G and H. The boys and girls were interviewed separately to determine if there was a difference in opinion.

The first question aimed to outline children’s opinions of learning outdoors. The researcher believes that after 4 out of 4 boys stated that they enjoyed working outdoors, it would be a well-suited provision to improve standards. Slightly fewer girls claimed they enjoyed outdoor learning as they stated it is ‘cold’ and ‘tiring’.

Question two within the interview was aimed to distinguish if children believe outdoor learning is important. With 2 out of 4 boys giving a green response and 4 out of 4

girls providing an orange response, the researcher expanded the question to develop responses on why not all children believe it is important. After asking to justify their answers, comments were made such as 'we should do both', 'it is important for the environment' and 'we need fresh air'. The responses from the traffic light system and comments made from the children did not correlate. This highlighted the limitations of using interviews as a source of research. To overcome this matter, Silverman (1993) and Cohen, Manion and Morrison (2007) recommend conducting a highly structured interview with the same format and sequence of words and questions for each respondent which will control the reliability of the interview. Although, conducting a structured interview is difficult with children and this may be the reason for these results.

The third question during the interview asked children if they enjoyed working as a team which is a major component of outdoor learning. As shown in Appendix G, just 1 girl responded green, 2 amber and 1 red. Overall, it appeared that girls preferred to work independently. In comparison to the boys who all gave a green response to show they enjoy working as a team. This was supported by Estny's (2008) research about why girls do better than boys. They suggested that girls have a better level of concentration in relation to independence.

The fourth and final question of the interview asked the children if they thought outdoor learning helped them to learn speaking and listening skills. 4 out of 4 boys agreed with this question and just 3 out of 4 girls agreed. Overall, both groups gave a generally positive response to this question which provided a link between language, literacy and communication with outdoor learning.

4:3 Analysis of National Reading Test results

During this project the researcher gathered National Reading Test Results Class X in School A. The researcher aimed to find out if outdoor learning had an impact on their results in year 3. These results were then compared to the previous year, when the children had not been participating in outdoor learning.

These results can be found in Appendix I and were significantly useful to this research project. The first issue that was assessed was how much progress children made between year 2 and 3. From year 2 to year 3, there is 54% of improvement for

boys based on National Reading Tests. This improvement takes place a year after the boys have taken part in outdoor learning twice a week. In comparison to year 2 where they do not take part in outdoor learning. From this year, girls' improvement is just 52%. Despite Welsh Government statistics stating that the largest attainment gap between boys and girls occurs in literacy (2019). It should also be noted that as children are moving through school improvement is expected. However, it is arguable that, an increase of time spent outdoors has had a positive impact on the boys National Reading Test Results as the attainment gap is just 2%, and they are outperforming the girls.

4:4 Results to observation

As mentioned previously, observations were also conducted during the children's lunch break to classify their favourable places to play. Appendix J shows the information which was collected of the course of one hour. As time progressed, the contrast between boys and girls on the school yard became clear. Most girls chose to sit down and socialise, whereas the boys chose to play on the grass bank and play games. There is a vague link between this research and evidence from Maltz and Borker (1982) as discussed previously. They suggested that boys preferred to play in larger spaces outdoors and girls preferred to play in smaller groups.

4:5 Limitations to the research

Despite the research that was collected being useful to this project there were many limitations to how valid the results are. Firstly, in regard to the questionnaire, to ensure confidentiality is being practiced this should have been issued electronically. As mentioned previously, it is debatable whether a questionnaire is a reliable source of information as Cohen, Manion and Morrison (2007) suggest that participants often lie to show themselves in a positive light. Despite the National Reading Test results being a useful source of information, if replicated, results would also have been collected from the year 4 class. This would allow the researcher to uncover if not participating in outdoor learning after Year 3 had an impact on results. Finally, to overcome limitations when conducting interviews with the children, the researcher would use research from Silverman (1993) and Cohen, Manion and Morrison (2007) who suggest using a more structured interview to control the reliability of information.

Chapter 5: Conclusion

After reviewing the information provided by the practitioners during the questionnaire, the children's interview, the National Reading Test Results and the observations on the school yard, it is evident that outdoor learning could be used as a successful provision to improve literacy, language and communication. Despite this, several barriers were identified that teachers must overcome for this to be successful.

Unfortunately, in Wales, outdoor learning is not referred to in our future curriculum. As a result of this, teachers may not see it as a priority and certainly will view it as a support strategy. However as mentioned previously, countries such as Scotland are enforcing outdoor learning as part of their Curriculum for excellence. As shown in Appendix K, Scotland continues to outperform Wales up until the children are aged 11. It is debatable that, by enforcing outdoor learning in the Foundation Phase has had positive results on the children's language, literacy and communication. Despite this, it is mandatory for Newly Qualified Teachers (NQT's) to plan opportunities for children to learn in an out-of-school context (Welsh Assembly Government, 2009b) to obtain their QTS. As mentioned in Chapter 2, if a pattern is followed with the gender attainment gap in Wales results will continue to decline as the new curriculum is introduced in September 2020. The researcher believes that now is the time for outdoor learning to be introduced to enhance literacy, language and communication results for those who are struggling.

Reflecting on the aims and objectives of this research project, Chapters two and four have outlined examples of how outdoor learning is a well-suited provision to close the gender attainment gap in language, literacy and communication. The psychological benefits highlighted by Vygotsky (1978) and Piaget (1936) indicate how outdoor learning can build knowledge from concrete experiences, supporting those with poor language, literacy and communication results. This implies that outdoor learning could be used throughout education in Wales to promote good practice.

This research project has uncovered that teachers consider outdoor learning as a valuable contribution to education, however, evidence gathered from electives contrasts these opinions. Staff at School A believe that it is important to carry out

outdoor learning, yet they promote very little as a school. This may be due to the many challenges that outdoor learning raises such as weather, safety, cost and disregarding staff opinions by more senior members of staff. Although, it is quite clear that outdoor learning has a lot to offer despite these drawbacks. If the gender attainment gap continues to widen as children pass through primary school, based on this research, outdoor learning will make a significant positive impact on education.

Bibliography

Barnes, J. (2015) Cross-curricular Learning 3-14. London: Sage Publications Ltd.

BBC (2011) Estyn calls for more outdoor learning in Welsh schools.

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

Beisk, B. (2007) Research methods: Uses and limitations of questionnaires, interviews, and case studies. München: GRIN Verlag GmbH.

Beames, S. and Higgins, P. and Nicol, R. (2012) Learning Outside the Classroom: Theory and Guidelines for Practice. New York: Routledge.

Bialystok, E. and Hakuta, K. (1994) In other words the psychology and science of a second language acquisition. New York: Basic Books.

Blumer, H. (1969) Symbolic Interactionism. Perspective and method. London: University of California Press, Ltd.

Children's Commissioner for Wales (2011) UNCRC. Available at:
<https://www.childcomwales.org.uk/uncrc-childrens-rights/uncrc/> [Accessed on 10th of March 2020]

Cohen, L., Manion, L. and Morrison, K. (2018) Research Methods in Education.

Detheridge, T. and Detheridge, M. (2013) Literacy Through Symbols: Improve access for children and adults.

Donaldson, G. (2015) Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales. Available at:
[file:///C:/Users/molly/Downloads/Donaldson%20Report%20%20Successful%20Futures%20%20Independent%20Review%20of%20Curriculum%20and%20Assessment20Arrangements%20in%20Wales%20\(31\).pdf](file:///C:/Users/molly/Downloads/Donaldson%20Report%20%20Successful%20Futures%20%20Independent%20Review%20of%20Curriculum%20and%20Assessment20Arrangements%20in%20Wales%20(31).pdf) [Accessed on 10th of March 2020]

Estyn (2008) Closing the gap between boys' and girls' attainment in school.

Estyn (2011) Outdoor learning: An evaluation of learning in the outdoors for children under five in the Foundation Phase.

Estyn (2018) The Annual Report of Her Majesty's Chief Inspector of Education and Training in Wales 2017-2018.

Foddy, W. (2011). Constructing Questions for Interviews and Questionnaires. Cambridge, GBR, Cambridge University Press.

Gardner, H. (2011) Frames of mind: The theory of multiple intelligences.

Gillham, B. (2007) Developing a Questionnaire. London: Bloomsbury.

Gordon, D. (1987) Getting Close by Staying Distant: Fieldwork with proselytizing groups. Qualitative Sociology, 10(3), 267-287.

IT Governance (2019) EU General Data Protection Regulation (GDPR): An implementation and compliance guide.

Institute for Outdoor Education (2020) About Outdoor Learning. Available at: <https://www.outdoor-learning.org/Good-Practice/Research-Resources/About-Outdoor-Learning> [Accessed 12th of March 2020]

Kara, H. (2017) Research and Evaluation for Busy Students and Practitioners. A time saving guide.

King, N. and Horrocks, C. (2010) Interviews in Qualitative Research. London: Sage Publications Ltd.

Kitwood, T. M. (1977) Values in adolescent life: towards a critical description. School of Education, University of Bradford.

Kimmel, A. J. (1988) Ethics and Values in Applied Social Research. Newbury Park: Sage

Knight, S. (2016) Forest school in practice: for all ages. Los Angeles: SAGE.

Learning and Teaching in Scotland (2010) Curriculum for Excellence Though Outdoor Learning.

Lewis-Beck, M. S., Bryman, A., and Liao, T. F. (2011) The Sage encyclopaedia of social science research methods. Thousand Oaks, Calif: Sage.

Levine, L. E. and Munsch, J. (2014) Child Development: An active learning approach. [Erscheinungsort nicht ermittelbar] SAGE Publications.

Louv, R. (2008) Last Child in the Woods: Saving our children from nature-deficit disorder. New York: Atlantic Books.

Maltz, D. N. and Borker, R. A. (1982). A cultural approach to male-female miscommunication. Language and Social Identity / Edited by John J. Gumperz.

Monroe, M. C. (2010) Challenges for environmental education evaluation. Evaluation and Program Planning.

Pavey, B. (2006) The Forest School and Inclusion: A project evaluation. Paper presented at British Educational Research Association Annual Conference, September 2005.

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

Rae, T. and Raphael, R. L. (2007) Creating Gender-Fair Schools and Classrooms: Engendering Social Justice (for 5 to 13-year Olds). London: SAGE Publications.

Ridgeway, C. L. (2010) Gender, interaction, and inequality. New York: Springer.

RSPB Cymru (2012) Every child outdoors Wales. children need nature: Nature needs children. Cardiff: RSPB Cymru.

Rubin, H. J. and Rubin, I. S. (1995) Qualitative Interviewing: The Art of Hearing Data. London: Sage.

Sackville-Ford, M. and Davenport, H. (2019) Critical issues in forest schools.

Silverman, D. (1993) Interpreting Qualitative Data. London: Sage.

UNRCR (1989) A summary of the UN Convention on the Rights of the Child.

Vygotsky, L. and Cole, M. (1981) Mind in society: The development of higher psychological processes. Cambridge, Mass: Harvard Univ. Press.

Welsh Council for Outdoor Learning (2018) High Quality Outdoor Learning for Wales.

Welsh Government (2008) National Literacy and Numeracy Framework: To support schools in introducing the National Literacy and Numeracy Framework.

Welsh Government (2009a) Foundation Phase, Outdoor Learning Handbook.

Welsh Government (2009b) QUALIFIED TEACHER STATUS STANDARDS WALES 2009.

Welsh Government (2015) Curriculum for Wales: Foundation Phase Framework.

Welsh Government (2017a) Languages, Literacy and Communication AoLE (Revised following CAG feedback during AoLE workshop 13 December 2017).

Welsh Government (2017b) Cymraeg 2050: A Million Welsh Speakers.

Welsh Government (2018a) Additional Learning Needs (ALN) Transformation Programme.

Welsh Government (2018b) Digital Competence Framework Guidance.

Welsh Government (2019a) Professional Standards for Teaching and Leadership.

Welsh Government (2019b) Draft Statutory Guidance Area of Learning and Experience: Language, Literacy and Communication.

Welsh Government (2019c) Statistical First Release: Academical achievement for pupils aged 4 to 14 in core subjects, 2019.

Wilson, J and O'Regan, K. (2007) Commonly known, commonly not known, totally unknown: a framework for students becoming researchers.

Worley, P. (2019) 100 Ideas for Primary Teachers. London: Bloomsbury.

Wyse, D. and Jones, R. and Bradford, H. (2008) Teaching English Language and Literacy. New York: Routledge.