

“How can the use of the outdoor environment contribute to pupils’ engagement in KS2?”

	Targed/Target	Yr hyn yr wyf wedi'i wneud yn yr aseiniad hwn. What I have done in this assignment.
Targed/Target 1	Ensure writing is unambiguous by ensuring that spelling, verbs, sentence structure and punctuation are accurate	Used external support. Revised my grammar and punctuation.
Targed/Target 2	Greater synthesis of research informed literature	Use of a wider range of research and sources

Introduction:

My first block of placement (PTE) was based in a Reception class, in where the outdoor environment played a great contribution to the setting of the lessons. The lessons wouldn't always incorporate the use of outdoor features, however, were predominantly focused on being located beyond the classroom walls. Potential reasoning behind these decisions is highlighted by H. Bilton (2010), portraying that learning within the outdoors, creates a comfortable, non-threatening environment, evidentially being a vehicle for enhancing learning for young children. However, as I progressed into KS2 for my PTE, learning beyond the classroom walls was not so evident and as a result of this, became a real strong interest to why it's not being used within the KS2, considering its contribution to advancing the learning within early years.

Research Context:

The following assignment will critically reflect on the use of the outdoor environment within teaching, and its potential contribution to pupils' engagement within KS2. Presenting results from three observed, lesson studies and semi-structured interviews. The schools that the research was carried out are located within socially deprived areas, potentially impacting on levels of academic achievement. Emphasising this point, The Welsh Governments documentation on “Rewriting the future”, states that at the end of primary school in Wales three out of 10 children from deprived backgrounds fail to achieve the expected levels compared with only one out of 10 of their more affluent peers (Welsh Government, 2013). The three classes that the research has been carried out, all struggle with engagement, as a result of consistent disruptive behaviour within the classrooms. The locations around the school have great opportunity for outdoor learning to take place, however due to behaviour are not often explored.

Relevant Literature:

The newly formed curriculum creates emphasis on how learning environments should go beyond the classroom walls, enforcing a high-quality learning experience. Many individuals link outdoor learning to the subject area of Physical Education. However, the document draws attention to the importance of allowing opportunity for pupils to explore all areas of learning within rich outdoor environments (Welsh Government, 2020). Bottrill, (2018) supports this by underlining the idea that the outdoors can offer potentials for pupils' developments, that the classroom cannot, viewing the outdoors as an extension to the classroom (Burriss & Burriss, 2011). This is evident in the Estyn report regarding Crwys Primary School, concluding engagement of nearly all pupils to have heightened, as a result of their teachers creating effective practical outdoor learning (Estyn, 2019).

As a result of analysing various means of research such as, journals, books, articles and other online sources, I have discovered beneficial impacts, of taking learning outdoors, with specific focus to pupils' engagement. Firstly, Siraj-Blatchford and Sylva (2004), express that engagement can be heightened as a result of taking learning outside due to creating greater opportunity for practical, experimental and real-life problem-solving activities. With the Welsh Curriculum now emphasising the importance of preparing our pupils to explore and develop real-life skills, to enable them to progress for life after education (Welsh Government, 2020).

In addition to this, removing the constraints of being in a classroom, and learning amongst the outdoor environment, allows children to remove themselves from confrontational situations, concluding them to portray fewer signs of frustration and lack of cooperation, due to the freedom of space (Ouvry & Furtado, 2003). In contrast to this, Bilton (2002) emphasises that having this sense of freedom can promote pupils to push boundaries, without fear of having consequence for being too boisterous. In relation to the outside potentially having a negative effect on discipline, concluding to being more of a challenge for teachers to control the classroom's environment, could in turn affect overall interest and engagement within the lesson. Willms et al. (2009) further this point, expressing that students who describe their classrooms as having a disciplinary climate, are more likely to report high levels of motivation and engagement, so when it is removed or more complicated to apply, percentage of pupils' engagement could decrease.

Lieberman and Hoody (1998), associate the outdoors as an integrating context, creating advanced results in engaged learning. To support this statement an organisation called Project Dirt conducted two surveys across 45 countries with teachers who had participated in the campaign between 2016-2017. Their project was to uncover the beneficial impacts of taking learning outside. Through their results they discovered that teachers stated that when they took lessons outdoors, children are more engaged in learning (91% in the USA; 90% in the UK; 88% globally; 88% in South Africa; 87% in Canada; 84% in Australia). However, the survey also highlighted that within the UK 45% of KS2 teachers resort to blaming the pressure of the

curriculum, as a reason for not taking learning outside (ProjectDirt, 2018). A solution to this issue is commented on by Marchant, et al., (2019) highlighting that for outdoor learning to be increased in term of its use, education inspectors need to place higher value on the pedagogical approach of outdoor learning and its advances of achieving curricular aims. Opposing the beneficial factors of the outdoors, Tarr (2004) creates emphasis on the importance and advantages of being able to use classroom display walls to create an educational interactive environment. A tool in which can be used to maintain and initiate engagement in specific areas of learning, something in which being outdoors cannot compromise.

Maller and Townsend (2006) define high-quality teaching, as providing experiences to engage pupils in learning to not be restricted to only the classroom setting, as a result of its potential benefits such as allowing greater opportunity for a cross-curricular approach to achieving education aims (Learning and Teaching Scotland, 2010). Research undertaken by Selhub and Logan (2012) determined that improvements in creativity, brain function, mood and well-being were a result due to being outdoors, linking the potential of the outdoors in engaging children with learning. Supporting this a recent research investigation around improving educational outcomes in English reading, English writing and Maths for KS2 pupils was carried out. With interest around closing the attainment gap between eFSM pupils (which is high in both School A and B) and pupils not eligible. The investigation was called 'Wilderness Schooling' (WS) it was an intervention put alongside a conventional classroom-based intervention, to compare results. Results showed that pupils who were involved in the WS outdoor intervention had a higher increase of attainment in the targeted areas, in comparison to those who had convention interventions (Quibell et al., 2017).

Roorda et al., (2011) creates a strong link between pupil engagement and high attainment levels, which supports the idea of the results shown in the above research, that pupils potentially had higher levels of engagement within the outdoor intervention, to have achieved higher levels of attainment in the focus areas.

From researching how the outdoor environment could impact on pupils' engagement, it became clear that there was a lot of evidence supporting its inclusion in Foundation Phase, however it was hard to support its use and importance within KS2. This was a perfect excuse to research and bridge the gap between the advances of using the outdoor environment in learning associated with engagement, between FP and KS2.

Explanation of lesson study (LS)

The methodology used for the research project was focussed around lesson studies, which is a form of action research. A LS is a programme which is designed for professional development, which involves teachers working together in either pairs or triads to plan lessons that highlight a common learning target for pupils, with focus for this research project being previously highlighted. The lessons are then delivered while the other researchers within the group, observe and refine the upcoming lessons plans based on feedback and review (Dudley, 2014).

A beneficial factor of a LS is that it allows teachers to see pupil learning occur in a more enhanced and specific detail than is usually possible. Allowing opportunity to adapt teaching to evidentially advance learning. Wragg et al., (1996) discovered that “good” teachers who remain in teaching after three years, do so because they have discovered new ways to manage challenging teaching situations. A drawback to the use of lesson studies is when negative collaboration is present, with teachers having uncritical acceptance of ideas and the incapability to be confident to question peers’ assumptions (Cajkler et al., 2014). Murata furthers this, conveying that lesson studies might be treated as another “here today–gone tomorrow initiative” (Murata 2011, p. 9). However, Lewis (2002) comments on how using LS can advance many areas of teaching, with specific focus on enhancing professional development. Perry & Lewis (2011) connote that lesson studies allow teachers to build new adapted habits and dispositions, that support their improvement, to evidently improve students learning.

The methods of data collection used for the research project where, observations, reflections and focus group interviews. Taking a focus group approach, enabled pupils to be more open within their responses (Vaughn et al., 1996), prompting them to expand and critique peers' answers. Kitzing (1996) argues that successful focus groups are reliant on dynamic interaction to provide meaningful responses. This was combated by the selected pupils being from the same class, creating a sense of comfort, resulting in better engagement within the discussion (Rabie 2004). A common drawback to using focus groups is highlighted by Smithson (2000), as having a dominating speaker who controls fellow peers’ responses, resulting in not getting an honest evaluation from each individual. To combat this, we made sure when interviewing pupils, we would direct the questions to individuals in a randomised order.

The semi-structured interview approach allowed pre-prepared questions to be made around the relevant focus. Granting the pupils, the opportunity to elaborate and deviate from questions, additionally allowing versatility and flexibility within the interview process (Kallio et al., 2016). However, for pupils to fully express honest opinions, having a good relationship between interviewer and interviewees is considered crucial. If pupils do not have a trusting relationship with interviewer, then responses could become misleading (Hove & Anda, 2005). Using semi-structured interviews as a style of data collection, enabled us as interviewers, to add in question relating to further response and if responses were inconsistent or not relevant. Elaborated on by (Longhurst, 2003), semi-structured interviews create a conversational manner, offering students opportunity to explore issues they feel are important. This approach of allowed interviewees to gain more confidence within terms of answering questions, alongside starting within questions that were easier to answer to then progressing on to more specific questions, allowing richer data to be collected (Gill et al., 2008).

Non-participant observations were also used to collect data, allowing us to observe and analyse immediate behaviour, in the specific situation. Emphasising the validity and authenticity, of the approach and data

collected (Cohen et al., 2002). A potential limitation to observations, is the effect of the observer on the pupil's performance. For many children having the presence of people observing them learn, can negatively impact on their engagement within the lesson, resulting in the validity of the data collected to be decreased (Kim et al., 2005). Contrastingly Birmingham & Wilkinson (2003), convey that observations allow researchers to gain a deeper and truer understanding of what goes on in a specific environment, than people can ever discover simply by asking questions. With Cohen et al., (2002) furthering the advantages by claiming that being a non-participant observer allows a truer reflection of the individual, portraying how a specific situation that potentially arises is usually dealt with in the absence of the observer.

Observation schedules were designed in order to evaluate levels of engagement of selected pupils, and allowing the results comparisons and contrasts, to be easily identified. They were used by the non-participated observers alongside questioning to support judgements and recordings. The schedules were constructed based on the Leuven Scale approach (appendix 1), where pupils were categorised in terms of areas such as level of motivation, evident of expressing full capabilities, engagement in specific activity and overall enjoyment within lessons (Laevers, 2006).

Reflecting on lessons, is a vital component in teacher inquiry, and with its use within this research, has aided us as researchers to progress and develop in our professional development (Nolan & Huber, 1989), with Dana & Yendol-Hoppey (2019) adding that reflection is a powerful vehicle for learning and recall. Reflections were used within the research project, with a strong focus on Brookfields reflective practise (appendix 5). Brookfield creates emphasis on reflecting through four lenses. Therefore, the reflection of our findings and research will be reviewed in relation to self-reflection, peer reflection, advancing onto reflecting through the pupils' eyes, and finally through the lens of theoretical literature (Brookfield, 1998). However as stated by Brookfields (1998) a drawback to this approach is how our interpretation of the pupils' views can be clouded, by the desire to please the interviewer and being reluctant to be honest with answer. The inclusion of an action plan was also included within our reflection process, commenting on future adaptations of the lesson/situation if it was to occur again.

Ethical Considerations

Educational research requires ethical guidelines to follow, to protect the participants involved within the research (BERA, 2018). The research will only proceed if consent from the school is granted, as it will be taking place within the school premises. Due to the pupils being under 18, parents or guardians will also have a consent form to complete to allow their children's data to be used for the research. However, UNICEF express in Article 12, pupils should be able to express their own views, when it comes to something which can directly affect them (Unicef, 2016). Therefore, pupil assent will be implemented within the research, making pupils aware they have the right to withdraw from the ongoing research at any stage, without complications or consequences.

As highlighted by the British Educational Research Association, as researchers we take all reasonable precautions to avoid identification (BERA, 2018). Hence, the specific individuals will be referred to as Pupil1– Pupil 9, to enforce anonymity throughout the process, with the schools being referred to as School A and B. The pupils will be informed that the information collected from them will remain confidential, and that data will not be disclosed without prior consent to individuals outside of the context of the research. With all data collected being kept secure through it being stored on an encrypted USB stick, that will only be accessible to myself, and which will be locked away in a lockable unit (UWTSD, 2019).

Results and Analysis

Lesson Study 1 (LS1):

LS1 was delivered in School A. The focus was around measuring capacity and volume in maths. Teacher 1 was delivering the lesson, while Teacher 2 and Teacher 3 observed, using the Leuven Scale to highlight levels of engagement of pupils 1,2 and 3. Advancing onto interviewing the three selected pupils after the lesson had finished. We were firstly introduced to the Year 3/4 class, to allow the children to become aware of our company and to try and reduce the effect of our presence to the pupils' behaviours. This is a common drawback to observing pupils, in that it's prone to the Hawthorne effect, relating to the pupils change of behaviour due to the presence of being observed (Hagel et al., 2015).

Pupil 1 was highlighted to us by Teacher 1 as being rarely disruptive in class, however, prone to becoming disengaged. Pupil 1 expressed high levels of engagement during the introduction of the lesson (indoors), through her posture and consistent eye contact with Teacher 1 (appendix 2b), with D'Mello et al., (2007), emphasising how posture is a true reflection of active engagement. Pupil 1 was delegated the role of writing the measurements of the potions, however the interview suggests, she was only able to highlight the practical side of the task "we had to collect six potions", instead of expressing the purpose of the lesson in terms of context and skills used (appendix 2c), potentially conveying her lack of understanding. The assumption of Pupil 1 being disengaged was further evidenced by her only partaking, as a result of continuous instruction and direction by the LSO (appendix 2a). A potential barrier that affected Pupil 1's participation in the lessons is the weather "I would like to stay inside because it's a little bit rainy", with research drawing upon how wet and server cold weathers can affect pupils' learning (Monguno et al., 2017). Pupil 1's responses to the interview questions were short and inconsistent (appendix 2c). In reflection of her responses and her lack in confidence when answering, could potentially convey that she felt uncomfortable in the situation of being interviewed, therefore as a result of this the interviews were portrayed to the pupils as a chat.

Teacher 1 portrayed Pupil 2's prior engagement levels as being inconsistent, with him predominately being engaged, when interest of context is high. Pupil 2's excitement was made clear as soon as "outdoors" was mentioned (appendix 2b), instantly creating a positive outlook on the lesson, which is supported by the

research undertaken by Selhub and Logan (2012), relating the outdoor to creating positive mindset and mood towards learning. Outside, Pupil 2 displayed distracted behaviour, “not listening to instructions, distracted by putting coat on” (appendix 2a). His lack of engagement was emphasised by his questioning “what we do now sir” (appendix 2a), however, when interviewed, was able to accurately describe the purpose of the task. He highlighted through responses to the interview, that he enjoys learning within the outdoor environment, commenting on how it “reminds me of playing” (appendix 2c). His enjoyment of the environment was significantly linked to his engagement and motivation to complete the task through his observed behaviour (appendix 2a,2c). Griffin (2005), implies that teachers should embed a pedagogy of enjoyment, that learning should be considered and interlinked with the concept of fun, to enhance learning. Pupil 2 draws attention to how achieving the learning could have been made easier, with the use of the display walls in the classroom in relation to solving the maths elements of the task (appendix 2b), drawing strong links to the ideas highlighted by Tarr (2004) on the benefits of classroom displays.

Pupil 3 was associated with having high academic capability and engagement. Pupil 3 took a leading role in the activity, emphasising high levels of motivation and enjoyment throughout the lesson (appendix 2a,2b). Fägerstam and Blom (2013), suggest that when children are learning outdoors, they retain more information. This is highlighted by Pupil 3’s response to question 4 in the interview, as he was able to confidentially recall the lessons aims and objectives (appendix 2c). Pupil 3 associates the outdoors as it being a resource of reward, and its common perception of it only being an environment for sports (appendix 2c). This could potentially underpin the perception highlighted previously by Project Dirt’s results, in that teachers feel constraints by the curriculum as a factor for not taking learning outdoors (ProjectDirt, 2018). Pupil 3 expressed that he would like to have more lessons taught stating the reason, “when your home you are always inside...it’s nice to go outside” (appendix 2c). This draws upon the work by Sheldrake et al., (2019) elaborating that children’s accessibility to nature and the outdoor environment can be restricted by their home location, and therefore for many pupils their only interaction with the outdoors is through opportunities provided by their school. When asked about the would they like to have more lessons taught outside, Pupil 3 raised an advantage, closely linked with Ouvry & Furtado’s (2003) notion of the outdoors allowing pupils space to control confrontation and frustration, “better outside you have more space to calm down instead of being sent out of the classroom” (appendix 2c).

A major factor within academic achievement is lack of pupil engagement, however as emphasised by the research carried out by Kuo et al., (2018), outdoor lessons are an inexpensive, convenient way to enhance students’ engagement. The results gathered correspond with this statement, as from the observations highlighted that both Teacher 2 and Teacher 3, made identical evaluations of the three pupils’ engagement; Pupil 1 = Moderate / Pupil 2 = High / Pupil 3 = High (appendix 2a,2b). These results emphasis that Pupils 2 & 3 portrayed high level of engagement throughout most of the lesson, however during brief moments attention become more superficial. Pupil 1’s results connote that the pupil had limited motivation to partake in task unless assisted by LSO, not using her capabilities to full extent. However, all pupils expressed they

all felt concentrated throughout the lesson (appendix 2c). Regarding the reflection of LS1 (appendix 6a), for LS2, the introduction was carried out outside, to allow a true evaluation on how the outdoor environment can impact pupil engagement to the lesson being introduced.

Lesson Study 2 (LS2)

LS2 was delivered in School B. This topic lesson was focussed around using mathematical skills to scale silhouettes of world-famous mountains using a range of resources. Stressing the outdoors as being a great opportunity for incorporating a cross-curricular approach (Learning and Teaching Scotland, 2010). Teacher 2 taught the lesson, while Teacher 1 and Teacher 3 observed, and again furthering the research onto semi structured interviews.

Pupil 4 is predominantly engaged and enthusiastic during lessons, with a high standard of academic capabilities. Pupil 4 excelled in the introduction of the lesson, with consistent answering and collaborative discussions of questions (appendix 3a), underlining his understanding and engagement. Which was also highlighted by precisely recalling the lesson aims (appendix 3c). He brings to the attention, alongside with the pupils interviewed in School A, that lessons are only taught outside when it's sports (appendix 3c). A potential reason for this is explored by Kuo et al., (2018), potentially being because teachers concerns about outdoor lessons influencing students' behaviour resulting in them being too excited and incapable to concentrate. Pupil 4 made a direct comparison to if the same lesson was taught inside, claiming it to have been "boring" (appendix 3c). This emphasises that it wasn't the resources or specific outdoor features that enhanced his enjoyment and engagement; however, it was purely based on the outdoor environment as opposed to the classroom. Pupil 4 response regarding question 7 (appendix 3c), "I was listening to everything you was saying" elaborates on the literature explored above by Lieberman and Hoody (1998), associating outdoor education to advancing results in pupil engagement.

Pupil 5 can become disruptive within the classroom environment, and therefore not only results in the disengagement of himself, but to others in class. With research claiming that outdoor education can positively affect behaviour, reducing the chance of disruptive conduct (Szczytko, Carrier & Stevenson, 2018), it was interesting to investigate into Pupil 5's observation. As highlighted by the observations (appendix 3a,3b), Pupil 5's engagement within the lesson was rated low, however in relation to behaviour, Pupil 5 showed no signs of disruptive attitudes and behaviour was drastically improved in comparison to lesson taught inside, resulting in reducing the risk of disengaging others. This potentially could have been because Pupil 5 highlights that in class, more people fidget resulting in the lesson being more intermittent (appendix 3c), which evidently disengages him. Pupil 5 highlights "fresh air" being an advantage of learning outdoors (appendix 3c). Research highlights that fresh air contributes to pupils' concentration, and its influence on advancing learning when it's brought back into the classroom (Fleming, 2018).

Pupil 6 typically portrays low levels of engagement being reliant on peers to explain lesson aims. Pupil 6

was drawn upon as being engaged within the beginning of the introduction, however, became restless towards the end of it (appendix 3a,3b). Potentially portraying that the introduction was too long. Charles (2007) states, pupils should only be sat down for an introduction for a maximum of their age plus three minutes, otherwise inflicts on their engagement. Pupil 6 expresses how she enjoyed working collaboratively (appendix 3c), potentially highlighting the reason being her increase of engagement. With the beneficial factors of the outdoors allowing greater opportunity for team work to be established (Mirrahimi et al., 2011), resulting in boost of attainment levels Ozer (2007). Pupil 6 makes it apparent that she concentrates more inside, due to the cold weather and believes “people are silly outside” (appendix 3c). Appendix 3a and 3b, emphasise that the cold weather could have impacted on Pupil 6’s engagement due to her lack of input, this furthering the research mentioned previously on the effect of cold weather on pupils concentration (Monguno et al., 2017).

In summary of LS2 Pupil 4 received a high and an extremely high rating for level of engagement, expressing high levels of focus and concentration, accentuating enjoyment within the activity. Whereas Pupil 5 received low level of engagement scores, representing limited concentration levels, and consistently being distracted using the chalks. Pupil 6 received a rating of moderate, expressing limited motivation and participation in task.

Regarding the reflection of LS2 (appendix 6b), LS3 progressed in terms of using a shorter introduction, due to pupils in the previous lesson being cold during introduction, resulting in small amounts of disengagement and contribution. However, the lesson incorporated more pit stop plenaries to express next steps.

Lesson Study 3 (LS3)

LS3 was delivered in School B. The focus of the lesson was to separate solid and liquids through a practical style led task, a lesson that could have been achieved indoors, emphasising the focus being solely around the outdoor environment. Teacher 3 taught the lesson, while Teacher 1 and Teacher 2 observed.

Pupil 7 was emphasised as a high achieving student, with high levels of engagement within most taught lessons. Pupil 7 was highly engaged with the introduction of the lesson (appendix 4a, 4b), which was clearly represented by her “superb understanding of task” (appendix 4a). This potentially being achieved through the change of introduction style from LS2 to LS3. Pupil 7 draws focus upon, that more lessons should be taught outside, and comments on how she was fully engaged with the lesson (appendix 4c). She furthers this point by implying that teachers should give the freedom of being able to work outside or inside, this clearly highlighting the literature by Burriss & Burriss, (2011) focussing around how the outdoor should be viewed as an extension to the classroom. In comparison to Pupil 6, Pupil 7 conveys how she enjoyed building up teamwork and completing the task collaboratively, something which has not been so evident in the classroom, with Doppelt et al., (2008) linking collaboration to enhancing students’ engagement in practical tasks.

Pupil 8 has been highlighted as predominantly being disengaged in most classroom based lessons, and as observed within the introduction to LS3, there was no change in her engagement level, as she portrayed lack of concentration on lesson being introduced (appendix 4a), and additionally throughout the lesson “I don’t know what to do” (appendix 4a). A potential reason behind her lack of engagement may not be because the outside environment however, due to one of the major drawbacks of collaborative working, Pupil 8 has potentially become reliant on others in her group to know the task (Burke, 2011). Pupil 8 also creates emphasis on linking her engagement to the fact that she was able to work as a team (appendix 4c). Pupil 8 commented on how she felt more engaged during an outside lesson, due to its structure of having more space and being able to swap roles within groups, with her engagement being emphasised by her being able to recall the purpose of the task (appendix 4c). However, in contrast to Pupil 8 stating the advances of space, 71 respondents out of 334 in a research study, claimed the lack of space being a factor behind not being able to take learning outdoors (Waite, 2011).

Pupil 9 has been described as predominately being engaged within lessons, however has a tendency of being distracted by disruptive behaviours in the classroom. Pupil 9 expressed that he would like more lessons to be taught outside, with potential reasonings’ being “a more peaceful atmosphere” and “teacher didn’t shout as much” (appendix 4c), emphasising that behaviour in comparison to indoor lessons was improved. Relating to these points made, a study documented by Science Daily highlighted outdoor lessons to halving the amount of times a teacher had to redirect students’ attention to the task (Frontiers, 2018), therefore supporting Pupils 3’s responses. Pupil 9 was eager to get on with lesson as highlighted in appendix 4a, relating the outdoor task and enjoyment. Ainsley (2012), conveys that pupils’ engagement within education is advanced when enjoyment has been achieved.

The outdoor task was focussed around problem-solving, and through observing Pupil 9’s attitudes and feedback towards the task (appendix 4c), it’s apparent that the problem-solving style enhances engagement. Supported by Siraj-Blatchford and Sylva (2004), that the outdoors is a great facilitator to problem-solving opportunities.

In conclusion to LS3 Pupil 7’s engagement was rated extremely high and high, through expressing great levels of motivation, no interruptions and constantly addressing all her capabilities. Pupil 8 was analysed as showing moderate and low levels of engagement, portraying low levels of concentration on specific areas and presenting limited motivation. Pupil 9 was concluded to revealing high levels of engagement, expressing that he had a certain degree of motivation and was engaged within the lesson without interruptions.

Discussion

Across the nine case students, it was made clear that all pupils enjoyed the lesson. The pupils emphasised their engagement and delight of the lesson, portraying that they hardly go beyond the classroom walls to have a lesson other than sports. Relating to their engagement Marsh, (2012) emphasises that teaching style is crucial to student engagement, therefore could the change of teaching style in terms of taking the pupils outdoors, giving them the freedom of space, instead of confined “sat at desk and do paper work” Pupil 3 (appendix 2c), be the reason behind the increase of engagement. If more lessons were taught outside would we start to see a decline in relation to pupils engagement within the lesson, and seeing it to be more on par to that of lessons taught inside?

In conclusion to their positive responses, they could have been inflicted due to them wanting to please the interviewer, as they were aware of the reward of being interviewed. This is portrayed by Birmingham and Wilkinson (2003), as a drawback of focus groups, due to them being more conscious to please the moderator in order to be rewarded.

Mims (2003), creates emphasis on that how learning outdoors is a great opportunity for authentic learning to be explored. Authentic learning is now a major drive for its inclusion within the delivery of the Welsh curriculum (Welsh Government, 2020), with Eick (2012) conveying that student learning is significantly enhanced when it is delivered through meaningful and authentic contexts. The use of authenticity was made apparent in all the lesson study's, with most of the pupils highlighting their enjoyment of the practicality of the tasks, and the skills incorporated within them. Evidently impacting on their overall engagement.

Schools' A and B have difficulties regarding disruptive behaviour within the learning environments. This is brought to the attention due to the relevant link between pupils' behaviour and engagement, with literature supporting the negative impact of individuals disruptive behaviour hindering the engagement and learning of other students. Furthering this, current studies indicate the support that is most needed for behaviour management, is the behaviour that disrupts others (Arbuckle & Little, 2004). As a result of this research study pupil's engagement was not affected due to disruptive behaviours, as such behaviours were not only not made apparent, however were justified due to the freedom of “space to calm down” Pupil 3, and opportunity to remove themselves from confrontational situations (Ouvry & Furtado, 2003).

A limitation to the methods of collecting the data is the time spent observing the lessons, the results were based on three lessons, which were located in different classes. Simmons (2018), expresses that this is a common limitation to observational research, that having a small sample size decreasingly represents the validity of the results in the representation of the whole of the class. Therefore, to further my research and to improve the detailed explored in the observations, more would be carried out.

Conclusion

In conclusion to the data collected from this research, 11.1% of pupils were rated below “moderate” in terms of engagement, with 88.9% of students achieving “moderate” or above. This connotes that most participants observed, were engaged throughout activities, with no interruptions, high levels of motivation and portraying overall enjoyment. Therefore, supporting the evidence of Project Dirt’s (2018) research study and the report from Estyn on how Crwys Primary Schools’ students have increased engagement, as a result of lessons being taught outside. Furthered by Marchant et al., (2019), perceptions on outdoor learning, being a pedagogical approach to enrich learning and enhancing school engagement from pupils.

The findings of the lesson studies support the statement made by Bottrill, (2018). In that taking the learning outdoors has provided greater opportunities for pupils’ development, in terms of freedom of space, providing fresh air, enhancing collaboration and enforcing problem solving, areas in which classrooms struggle to provide. Majority of respondents commented on how they enjoyed the “fresh air”, with it clearly being a factor to progressing engagement of pupils. Supporting the research by Selhub and Logan (2012) and as conveyed by Gustafsson et al., (2012), with its beneficial results on well-being and mental health, allowing students to engage with activities for prolonged periods of time.

In conclusion to the observations in comparison to the interviews, students that were displaying disengaged traits, such as being distracted and not concentrating on introductions, highlighted in the interviews that they felt engaged. This emphasises that more relevant questions should have been asked when behaviours were displayed, allowing pupils to respond immediately to if they feel engaged with the lesson in terms of aims and purpose. Pupils’ who did attain low engagement levels, however expressed that they were engaged in the interviews could have been resulted by the effect of the “dominant speaker”, and therefore just answering the same as the individual who is taking control of the questions (Smithson 2000).

Liebermann et al., (1998) concludes outdoor education to be a tool for enhancing test results, concentration, motivation and for reducing disruptive behaviour. This is supported by the results of this research stressing that there were no individuals that behaved inappropriately, an issue that is predominately present when the classes are taught inside.

In conclusion to this research, taking learning outdoors has great beneficial impacts on not only engagement, but enjoyment and behaviour. It is a pedagogical view within the foundation, that outdoor education is viewed as equally important as that of lessons taught indoors, in terms of pupil development. Therefore, with these results clearly portraying that it does positively impact pupils’ engagement in KS2, I will be using outdoor lessons to not only advance my professional development, but to advance the learning of the pupils’ I teach.

Recommendations

If I done this lesson study research again, I would deliver a lesson which is similar in terms of context resources and aims indoors. This would advance my research by creating a relevant comparison to comparing levels of engagement outside to the lesson being taught inside, focussed around the same sample of pupils. Structured questions would also be enforced into the observations, allowing the observers to get a truer reflection of the reasoning's behind the attitudes the children are displaying.

To further explore the beneficial impact on the outdoor environment for being the facilitator for learning, I would further this research into how it can impact on boy's behaviour. The focus will be situated around boys due to the results of this study which expressed the participants who usually display disruptive behaviour, did not when situated the outdoors, and with stats form 2012-2013 portraying there is a higher percentage of boys exclusions in Wales (1,720) in primary schools to that of girls (187) (StatsWales, 2013). Can outdoor education be a possible solution to minimising these numbers?

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