

ECAD7004/C

Assignment Title: How can engagement be assessed through
Assessment for Learning in Key Stage Two?

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	Target	Wat I have done in this assignment
Target 1	To ensure I synthesise and reflect	I have used my reading to balance arguments and identify opposing/supporting viewpoints
Target 2	To ensure I use my reading wisely to help my arguments	I have read widely to support arguments, using balanced arguments and multi-referencing
Target 3	To proof read my work to ensure it is not confusing to read and revise my use of apostrophes and capital letters	I have proof read each section of my work in the hope it comes across with clarity and a clear structure. I have also checked my use of punctuation throughout my writing to ensure it is clear and concise.

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Aims and Focus of Research

The focal point of the research is to identify the increase of children's engagement when Assessment for Learning is utilised. The aim and purpose of the project is to evidence how strategies allow children to develop their knowledge and progress within learning, throughout the use of questioning, assessment methods (Welsh Government, 2010) and support within their Zone of Proximal Development (Vygotsky, 1980). Within the research schools, Assessment for Learning is a priority, conforming that the research would depict how children were engaged during learning activities, and how steps for development could be identified.

Research Context

The research was undertaken in two large, two to three form entry schools, situated within the affluent Cardiff suburbs (Estyn, 2015; Welsh Government, 2018). The research was conducted in three classrooms: two Year Three classrooms: one with 31 pupils, with 32% of children with Additional Learning Needs; School Two with 30 pupils with 6.6% of Additional Learning Needs and one Year Six classroom, with 30 pupils with 6.6% of pupils recognised to have an Additional Learning Need. Throughout identification of class and case study pupils, the focus of the research was to identify the notion of how Assessment for Learning, thus, delving into the importance of keeping them engaged using Assessment for Learning strategies.

Overview of Literature

Assessment for Learning to Raise Standards

Assessment for Learning is acknowledged as a major component of monitoring and improving children's progress within education (Black and William, 2005), supported by Donaldson's Four Key Purposes of the new curriculum indicating children as 'ambitious, capable learners' (WG, 2019). Research supports that Assessment for Learning identifies improvements in learner's performance, leading to higher quality outcomes (Welsh Government, 2010). Assessment for Learning, also identified as formative assessment, is achieved predominantly through ongoing assessment, being an integral part of learning and a development process (DFE, 2012). Practitioners establish systems to ensure that children are observed regularly, throughout strategies within the classroom, to assess their

understanding in order to support planning and provision (Neuam, 2013). The Welsh Government identify assessment as a mechanism of informing the child of their achievements, whilst identifying an accurate and informative light for their next steps of development (Thomas and Lewis, 2016). Assessment for Learning is continuous formative assessment, utilised to boost achievement, whilst empowering the learner (Weeden, et.al., 2002; Cauley and McMillan, 2009).

Empirical evidence suggests that 'Assessment for Learning is probably the most neglected topic in the whole of the educational world' (Weeden, et.al., 2002, p.150). Correlated with literature, whether it is due to educational policy asking, educational research or education practice, formative assessment is currently one of the weaker elements of educational practice (Weeden, et.al., 2002; Black et.al, 2003). Through research prior to the lesson study, the research question became apparent, providing a heavy focus on Assessment for Learning in the classroom. The question was refined, due to reading supporting the research question, in order to identify Assessment for Learning as a tool to raise standards (Black and William, 1998). Black et.al., (2003) also claim that the most important debate of Assessment for Learning is about improving the learning of pupils and developing lifelong learners, evidencing aspects of Donaldson's Four Purposes (2019). Supporting this, the Assessment Reform Group stated that the awareness of learning and directing learning themselves is of 'increasing importance in the context of encouraging lifelong learning' (1999, p.7).

Assessment for Learning is recognised through literature as a 'key factor' in helping to raise children's standards of achievement (Briggs et.al., 2008), linking engagement and learning in practice (Hall, 2007). Arguments have arisen where it is suggested that using assessment to help pupils is one of the weakest aspects of effective practice across the nation (Assessment Reform Group, 1995). After a review of literature, it became apparent that for learners to get the most out of the assessment process, pupils need to become involved in it (Harris and Bell, 1986), emphasising engagement.

Engagement in the classroom

Student engagement can be initially defined as the 'amount of physical and psychological energy that the student devotes' to the learning experience (Astin, 1999, p.518). However, there has been much debate on the more recent definition (Trowler, 2010; Dunne and Owen, 2013), incorporating the role of 'time, energy and resources spent on activities designed to enhance learning' (Exeter et.al. 2010, p.762). With Assessment for Learning and engagement being an important topic in educational practices, it is known to correlate

with student satisfaction (Kuh et.al. 2007) and with positive engagement, identifying an important indicator of quality (Coates, 2005). Assessment for Learning plays a vital role within education, thought to be the 'single biggest influence on how students approach their learning' (Rust et.al., 2005, 231).

Effective practice within the classroom should aim to contain a balance of adult-led and child-led activities, which allow flexibility whilst assessing the learning taking place (Thomas and Lewis, 2016). Throughout research, proponents have agreed that when children are aware of the Assessment for Learning methods utilised within the classroom, such as talk partners, peer/self-assessment and Lollipop sticks for questioning, they become more engaged and focused (Thomas and Lewis, 2016).

Assessment for Learning strategies, which have been suggested to activate engagement with children, can be recognised through theoretical principles. Using talk partners or peer assessment within the classroom, reflects Vygotsky's theory of social interaction, aiding the learning process (Vygotsky, 1980). Piaget also emphasised the role of peer interaction in cognitive development, with children valuing activities when peers are involved, verbalizing the problem through a shared learning experience (Gray and MacBlain, 2012). Furthermore, research has suggested that Assessment for Learning should consist of strategies, empowering students to take control over their learning, evidencing engagement in the classroom (Black et.al, 2003). Harlen (2006) suggested that an educators sole aim should be to improve self-efficacy through assessment, with Brown and Knight (1994) arguing that assessment should be a shared, collaborative process of teaching and learning.

Throughout the research of Assessment for Learning and engagement within the classroom, it was strongly supported that there was not much priority on the strategies within educational practices. Conducting the research question, emphasised the importance of using strategies to further engage and actively stretch all learners to reach their full potential (Jones, 2005). The review of literature evidenced the advantages and drawbacks of using Assessment for Learning within the classroom, and the influence it has on engagement within the learning environment.

Lesson Study Design

The ontology surrounding the research project evidences how children's engagement can be monitored through using different Assessment for Learning strategies, such as thumb indicators, feedback and the use of questioning in the classroom. The epistemology surrounding the research project will consist of empirical and secondary data, exploring current and theoretical literature, supported by observations; interviews and reflective models. Research will be carried out through an interpretative view, exploring the complexity of children's academic engagement, through qualitative research data (Cohen, et.al., 2007; Roberts-Holmes, 2014).

The notion of methodology outlines the principles, values and philosophies which underpin research (Clough and Nutbrown, 2012) in education. It is linked with theoretical constructs and concepts, which are deployed as a 'conceptual framework for solving the research problem' (Ma, 2016, p.19). The methodology evidences the structure in which the research is perceived, using the knowledge which is constructed (Robert-Holmes, 2014).

The methodology used identifies lesson study research, as a mechanism of action research, encouraging collaborative classroom learning, identifying an area of development in pupil's progress (TD Trust, 2015). The lesson study aims to delve into pupil's perspectives of Assessment for Learning, whilst developing and monitoring progress. Conducted through non-participant observations, interviews and reflective cycles within the lesson studies conformed a triangulation approach. As suggested by Dudley (2014), three pupils from the Year Six and the Year Three classrooms, varying in attainment, were selected in line with the data collection methods, to demonstrate how engagement is monitored through Assessment for Learning strategies.

The notion of the lesson study allowed joint observation to compare learning observed (Dudley, 2014). The case study children indicate the result of the reflexive, recursive and collaborative experience of lesson study (Dudley, 2013), supporting the significant impact on pupil learning as a result of teaching (Dudley, 2013). From lesson studies, teachers are encouraged to collect a record of collaboration and reflective learning, on what they is learnt and share practice knowledge (Stigler and Hiebert, 2009). Lesson study is identified as a mechanism which encourages collaborative classroom learning (Dudley, 2013), through a triad of teachers working together (TD Trust, 2015), to solve teaching or learning problems,

whilst encouraging professionals to engage with developing pedagogies, designed solely for pupil's progress (Takahashi and McDougal, 2016).

Observations during lesson study identify direct data collection, supporting high ecological validity, eliminating bias notions for researchers (Denscombe, 2008). The Laevers Scale (1997) was utilised to monitor the children's engagement (See Appendix Four to Nine, pages 12-20) when Assessment for Learning strategies were used (Laevers, 1997), through non-participant observations (Dyer, 1995), identifying quantitative data throughout the study. Research suggest that observations only provide a 'snap-shot' of the context of the research, and is to be further support by interviews to dispel the bias and imprecision of direct observations (Malina, 2010). Observational data collected comments on the classroom environment (Cohen et.al., 2007), further supported by interview material and reflective models.

Semi-structured interviews (Appendix Ten to Twelve, pages 21-23) were utilised throughout the lesson study, as an essential insight to the research (Bell, 2010), revealing perspectives of the lesson study and Assessment for Learning (Nisbett and Watt, 1980). Dudley supported the use of the flow of analysis starting with observations, to be addressed by teachers to identify a focus on pupil learning through a post-research lesson discussion interview (Dudley, 2013). Interviews provided significantly good response rate, with high ecological validity (Cohen et.al., 2007). However, research has argued that the inherent power imbalance between the researcher and the 'researched' simultaneously emphasises the qualitative methodology to have a 'common epistemological ground' (Karnieli-Miller, Strier and Pessach, 2009, p.279). Throughout the use of semi-structured interview, literature supports that participants are free to bring their own agenda into the research situation (Karnieli-Miller, Strier and Pessach, 2009). The children selected throughout the lesson study, were presented with a series of interview questions, in order for the researchers to support the information gathered from the observations.

Triangulation can be identified to obtain complementary data collection methods, including observations, interviews and reflective cycles (Punch and Oancea, 2014). The triangulation approach allows research to be carried out through different methods, finding perspectives to conform or challenge the findings (Scott and Morrison, 2007). Triangulation will be supported through the ecological validity of reflective cycles. Brookfield (1995) will be utilised through the four 'lenses' (Appendix Thirteen to Fifteen, pages. 24-32), considering different perspectives from student, colleagues and autobiographic views, strengthened by theoretical links (Brookfield, 1995). Using Brookfield's Lenses (1995) supports the recommendations of

Ho and Kane (2013), where more than two researchers strengthen reliability, checking and corroborating each other's data, providing a clear picture. Gibbs' reflective cycle (1988) examines the questions, identified through the perspective lenses of Brookfield, advocating the stages and principles for the research (Gibbs, 1988). The reflective cycle discusses the case study views and the personal views of the researchers (Robson, 2002), to create a representative case, with academic links to theoretical literature.

Ethical Considerations

Ethical considerations are implemented into research following the outcomes of the Nuremberg Trials 1946 (Dhai, 2014), where the importance of Ethics in research became paramount. Ethical considerations work with adequate permission from participants, informing their right to withdraw (UNCRC, 1996). Ethical guidelines set by BERA (2018) documentation, are further supported through UWTSD Research Ethics and Integrity Code of Practice (2019).

Prior to research, participants were required to understand the purpose of the research (Tidsall et al, 2009). Parental consent was adhered to through permission letters (Appendix Sixteen, page 33) and concerns regarding the research from parents or participants were addressed. Prior to research, children endured a brief outline of the research, ensuring understanding, in order to hold assent from the research group, obtained through adequate provision. Using child-friendly strategies, on-going assent and rights to withdraw were confirmed (UCLA, 2016). The ethics and permission form from parents, ensured that the researcher and the 'researched' were protected from physical and psychological harm (Alderson and Morrow, 2011).

In regard to complete disclosure of information, confidentiality and anonymity was prioritised. When displayed through data analysis, all participants appear anonymised. Data collected was stored on an encrypted memory drive, ensuring no access.

Lesson Study Analysis

Lesson Study One

Throughout the context based lesson (Appendix One, pages 2 to 5), findings were gathered throughout using a Leuven Scale (Appendix Four, pages 12 to 13) method (Lavers, 1998), evidencing children's engagement throughout the lesson on different focuses. The lesson study evidenced how the children focused on the teacher, understanding the movements; communicating with others; answering questions and developing their knowledge and understanding. During the lesson study, all children provided a consistent level of engagement. This was further evidenced throughout the introduction of Assessment for Learning methods, such as Lollipop sticks and questioning from the class teacher and between peers. As stated in the review of literature, Assessment for Learning is the 'single biggest influence on how students approach their learning' (Rust et.al., 2005, 231).

Child One evidenced an inconsistent level of engagement (Appendix Five, page 14), peaking during the middle of the session. Child One was recognised during the lesson study as a child of lower attaining academia, however, results show that the child was engaged and involved throughout. Researchers evidenced the child answering questions about the context of the lesson, whilst discussing answers and queries with their peers. Child Two evidenced a consistent level of engagement (Appendix Five, page 14) throughout the lesson study. Varying from a level three to a four of engagement, child two was able to complete the session using Assessment for Learning strategies, supporting peers on their table with answering and writing within their work. Child three, evidenced as the MAT pupil, was vocal throughout the session (Appendix Five, page 14), raising a hand even when the lollipop sticks were in use. Child three was encouraged and motivated throughout the session, evidencing high levels of engagement throughout questioning and their peer assessing of answers. Along with this, the recapping session during the introduction evidenced the child encouraging a discussion with the table about the information they had previously learnt.

Throughout the interviews (Appendix Ten, page 21), Child one expressed little enthusiasm when answering questions about Assessment for Learning within the lesson. The child was able to articulate learning, often providing an opinion from another child's point. The child stated that they felt worried when the lollipop sticks were used for random sampling within the classroom, and would much prefer to use regular questioning. Throughout the session, the child evidenced no significant discomfort within the Assessment for Learning strategies

during the lesson, evidenced in the observation schedules. The child evidenced during the interviews that they were most comfortable when working alongside a peer, sharing knowledge in talking partners and marking their work.

Child two expressed enthusiasm during the interview (Appendix Ten, page 21), discussing their perspectives of Assessment for Learning and opinions on the lesson. A positive understanding of knowledge during the lesson was expressed, demonstrating a good recall during the interview, stating that 'using the lollipop sticks in lessons allow me to think back to what I learnt yesterday just in case I am picked'. Where child one stated that they preferred working with peers, child two expressed their perspectives on preferring to work individually, as it allows them to think and activate their prior knowledge.

Child three, recognised as the MAT pupil, demonstrated the most enthusiasm and encouragement throughout both the lesson study and interview process (Appendix Ten, page 21). Child three demonstrated high to extremely high levels of engagement throughout, stating during the interview process their 'love' of answering questions. The child suggested that within the classroom, self-assessment allows children to recognise their own mistakes, adopting the role of the teacher to pinpoint their future development. Child three stated that they disliked the lollipop sticks, and would feel more inclined to volunteer as the lollipops sticks expressed increased pressure. The child evidenced the use of Assessment for Learning encourages the class to stay engaged, in the result of being picked during random strategies.

Evidence of the case study children, from the lesson study and the interview process, suggest that Assessment for Learning identifies an effective way of monitoring progress and understanding. However, the children feel uncomfortable and it increases pressure within the classroom. Where the students evidenced more engagement as the lesson study persisted, the interview process reflected that this was only due to gaining more knowledge in preparation to answer questions further on in their learning.

Following the lesson study and the interview process, the researchers proceeded with a discussion of the data and agreed on overall findings (Dudley, 2015). During the reflection of data collection, the researchers used a bespoke reflection model (Appendix Thirteen, page 24 to 26), in order to ensure continuity. Reflections on the lesson study were completed through Brookfield's Lenses (Brookfield, 1998), encouraging the practitioner to reflect on differing perspectives, thus removing potential unrecognised bias. Brookfield's Lenses (1998), were further supported by the questions of Gibbs' reflective cycle (1988). The

reflective cycles evidenced significant points during the session that the researchers evidenced, supporting findings from the lesson study. The reflection on the lesson study evidenced good practice and effective learning from the case study pupils, demonstrating 'no feeling of failure' amongst their peers. Along with this, the reflective cycles expressed that views were reciprocated when Researcher One believed the children worked well with the Assessment for Learning strategies during the lesson, however in the interview evidenced a sense of pressure.

If the lesson was carried out again, the quiz suggested by the students would be used in line with pupil voice, to assess children's learning as a plenary. This would allow the children to avoid the pressure evidenced with direct questioning. Along with this, Assessment for Learning strategies that encourage confidence in all learners would be utilised.

Lesson Study Two

The second lesson study consisted of three case study pupils, in a year 3 classroom. The lesson study was situated within a context based lesson (Appendix Two, pages 6 to 9), learning names of organs in the body and labelling them. The case study pupils were chosen to represent middle, higher and the More Able and Talented skills across the curriculum (Welsh Government, 2015).

Using the Leuven Scale of engagement (Appendix Six, page 15 to 16), three case study pupils were identified during the study at every ten-minute interval for an hour. The children were then given a score of 1 to 5 based on their level of engagement (Appendix Seven, page 17) at that particular point in the lesson (SCILT, 2019). Throughout research, observations at the beginning of a session have been suggested to cause the most disruption to the learning environment, thus emphasising the importance of observations being conducted for a significant proportion of the lesson study (The National Union of Teachers, 2010).

The higher ability child evidenced a fairly consistent level of engagement (Appendix Seven, page 18), demonstrating a low level of positive body language during the beginning of the lesson study. However, engagement rose throughout, expressing moderate to high levels of engagement during the main body. The child answered questions directed at the whole class, demonstrating confidence in answers and supporting peers within the classroom. The child was also identified to volunteer during the quiz at the end, displaying knowledge and

understanding to the class.

The More Able and Talented child, recognised as Child Two throughout the lesson study, expressed a moderate level of engagement during the introduction (Appendix Six, pages 15 to 16). Child two was first evidenced to be withdrawn, often only speaking when questions were asked. Throughout the main body of the session, the child's levels of engagement rose from moderate to high, expressing an extremely high level of engagement when 'answering questions directed', further supporting their peers. The child's level of engagement rose increasingly by the end of the session (Appendix Seven, page 17), evidencing a clear understanding of the session focus.

Child three, the higher attaining child, also evidenced a moderate level of engagement throughout the introduction of the session (Appendix Six, pages 15 to 16). During this time, there were no questions asked, however, engagement was recorded through their resources and body language. Focusing on the main body of the session, the child evidenced an increasing level of engagement, raising from moderate to high (Appendix Seven, page 17). The child answered the questions directed to the whole class, and volunteered often following the use of lollipop sticks when a child was struggling with their answer, evidencing Vygotsky's More Knowledgeable Other (1980). However, towards the end of the lesson, using the plenary quiz, the child did not evidence an increasing level of engagement when identifying a development in their progress, knowledge and understanding.

Following the lesson study, interviews were conducted as soon as possible, preserving fidelity of pupil's perspectives (Cohen, Manion and Marrison, 2018) of the lesson and the Assessment for Learning strategies used. In order to alleviate anxiety (Bell, 2011), interviews were conducted in a quiet, neutral area within the school, which the children were familiar to.

During the interview process (Appendix Eleven, page 22), child three, recognised as the higher attaining child, discussed the importance of often not being challenged enough during the session, stating the activity had been done before, resulting in low development of knowledge and understanding. The child evidenced that if more challenge was provided throughout the use of questioning, such as higher-order questions, then knowledge, understanding and progress would increase. The interview process evidenced the case study children to enjoy the use of lollipop sticks as they did not feel nervous when using them, due to no fear of getting an answer wrong. Similar to the case study children from Lesson Study One (Appendix Ten, page 21), the children stated that they preferred the use

of lollipop sticks due to no bias choosing of children to answer questions. Child Two, the MAT child, stated that the use of lollipop sticks often leads to them being asked specifically, in order to support other children.

The children interviewed (Appendix Eleven, page 22), stated that the One Star and a Wish form of feedback wasn't as useful as the teacher feedback, as they felt more trusting of that provided by the teacher. Child One expressed their perspective of the feedback being not as informative, when not provided by the teacher, and praise never being as useful. The case study children stated that they enjoyed being praised by the teacher, reinforcing Skinner's Behaviourist Theory (1953) of Positive Reinforcement. Following positive reinforcement, the children expressed that they 'like to please the teacher' and it makes them want to work harder and 'produce extra work'.

Following the completion of the lesson study and the interview process, Brookfield's Four Lenses (1998) were utilised (Appendix Fourteen, pages 27 to 29) in line with Gibbs' reflective cycle (1988), to provide more structure. The reflective cycles evidenced the children engaging in the session about the human body organs, using a different range of Assessment for Learning Strategies, such as talk partners, discussing prior knowledge and questioning (Welsh Government, 2010). The feelings of the session were supported by both self and peer, evidencing the children could have been further challenged to develop their knowledge and understanding. Effective practice was evidenced during the use of Assessment for Learning strategies, encouraging a positive response. Analysis of the situation evidenced that using a different range of Assessment for Learning strategies would allow children to challenge themselves further. This was expressed more in-depth during the conclusion and action plan of the reflective cycle, stating a use of higher order questioning would allow children to be challenged further, along with a use of peer and self-assessment to identify strengths and weaknesses in others work.

Lesson Study Three

The third lesson study was situated in a different school, within the inner city of Cardiff. The research participants within the third lesson study were recognised as two Middle Ability children and one representing the lower attaining pupils of the curriculum. The focus of the third lesson study was literacy, using a context specific comprehension (Appendix Three, pages 10 to 11). The children were required to read the abstract, locating information to

answer the questions. The Assessment for Learning strategies used were questioning and peer/self-assessment.

Child One, identified as a middle attaining pupil, displayed a high level of engagement during the beginning of the session (Appendix Eight, pages 18 to 19). During the main body of the lesson, the child displayed a range of engagement levels, from moderate to extremely high (Appendix Nine, page 20). Child One was confident when answering questions directed to the whole class (Appendix Eight, pages 18 to 19), evidencing an extremely high level of engagement. Child two, also recognised as a middle attaining pupil, displayed a consistent level of engagement throughout the session (Appendix Eight, pages 18 to 19), dropping from a high to moderate level of engagement (Appendix Nine, page 20) during the main body of the study. Child two answered questions with confidence, focusing on their activity, and further supporting children within their groups. Child three, recognised as the lower attaining child, evidencing a range of engagement levels during the lesson study. The child ranged from low to extremely high during the session (Appendix Eight, pages 18 to 19), evidencing significant confidence when answering questions directed to themselves and others within the classroom, along with communicating to peers in their group.

Throughout the interview process (Appendix Twelve, page 23), data analysis has demonstrated that the children in the second class of the Year 3 cohort preferred self-assessment as their favourite Assessment for Learning strategy, evidencing a contrast in opinion from other case study pupils. The children stated (Appendix Twelve, page 23) that self-assessment allows them to evidence the specific mistake within their work, supporting their future development, making targets for improvement. Along with this, the children during the interview process stated that they enjoy using talk partners to share their ideologies and perspectives to others. Feedback within the classroom assessed that children are encouraged to feel happy and proud, using the 'What Went Well' and 'Even Better If' structure.

The use of a reflective cycle (Appendix Fifteen, pages 30 to 32), supported by Brookfield (1988) and Gibbs (1998), strengthens the perspectives of both the researcher and the research partners. The reflective cycle for Lesson Study Three evidenced that through Assessment for Learning, the children were engaged throughout, supported by all researchers. The reflective cycle identifies that the children were confident when using the Assessment for Learning strategies, analysing the use of collaborative working throughout. Areas for future development were evidenced using the cycle, identifying steps for further engagement and challenge to set high expectations.

The lollipop stick strategy evidences clear thematic links, with all research participants expressing that it is not bias and is the fairest way of selecting children within the classroom. All children during the study also portrayed that it keeps them highly engaged throughout the session, stating they could be picked at any time. Along with the lollipop sticks evidencing thematic links throughout all participants, they too stated that they do not like the use of peer assessment as an Assessment for Learning strategy. All children during the lesson studies connoted that the comments made during the use of peer-assessment are unhelpful, and prefer the use of a teacher's comment.

Discussion of Research Findings

Following close analysis of the research findings, it has been identified that the case study pupils performed with growing engagement throughout the session (Thomas and Lewis, 2016). All pupils were evidenced to become more engaged as the session continued, providing a positive learning experience for both the pupil and the class teacher. Throughout the recognition of Assessment for Learning being one of the most 'neglected' practices within education (Weeden, et.al., 2002; Black et.al., 2003), the focus was to encourage children to participate within the lesson's in line with different strategies used to monitor their progress and understanding. Through the use of strategies such as questioning, peer and self-assessment, lollipop sticks and talk partners (Welsh Government, 2010), the children demonstrated an increasing level of engagement. The use of Assessment for Learning within the lesson studies evidenced that strategies of questioning which involved whole class response resulted in fewer disruptions in the learning (Hunter and Haydon, 2011).

The use of Assessment for Learning during the research evidenced children's understanding and achievement to be identified through assessment processes when children were involved in it, further supported by their peers (Vygotsky, 1980). The review of literature evidenced this particular focus point, and the lesson study further supported this. However, in contrast to the review of literature, the research project evidenced that Assessment for Learning within the classroom was delivered with a high priority, used as the key method of assessing children's knowledge and understanding. In focus of this point, research stated of Thomas and Lewis (2016), demonstrated the increasing engagement and focus of learners throughout the research session.

The educational practice is believed to be understood through a shared cultural understanding evidenced through qualitative approaches, such as observations (Appendix Four to Nine, pages 12 to 20) and interviews (Punch, 2009). The interviews (Appendix Ten to Twelve, pages 21 to 23) and observations conducted by the researchers support the complexity and diversity of human interactions (Robert-Holmes, 2014). The Laevers' scale (1997) was used in order to gauge engagement (Palaiologou, 2016). The limitation with the observational method was that it only provided a small section of the lesson study, taking into account case study children, rather than the whole context of the classroom. The strengths of the observational data were ecological on validity, providing the real actions of the case study pupils. The strengths of the interviews enabled an essential insight, evidencing a revelation of characteristics from the case study groups (Bell, 2010). The

ecological view of interviews is also recognised to be high, providing purposive sampling (Bell, 2010; Roberts-Holmes, 2014). The reflective cycles utilised within the research provided a clear understanding of the lenses and perspectives of the case study pupils, in line with the research question and the strategies used within the classroom.

The lesson study enabled the research question to be concluded, in reflection on the data analysis and the review of literature. Links of a thematic nature were evidenced, in line with children demonstrating an increasing level of engagement to the session when Assessment for Learning was introduced (Jones, 2005). The data analysis displayed these thematic links with increasing engagement throughout the session, demonstrating a rise in engagement as the lesson continued, and Assessment for Learning strategies were utilised.

Conclusion

Analysing the data collected throughout the lesson study and the interview process, evidenced the conclusion of the case study children enjoying Assessment for Learning. The children observed, were confident and familiar with the use of Assessment for Learning strategies utilised, and thrived off using them to enhance their learning and recapping during focus sessions.

However, following the interview process, it was illuminated that each individual child who was recognised as a case study pupil thrives off varying strategies. Within the lesson studies, a high focus was provided on the use of lollipop sticks, evidencing in the interviews that the children felt an increasing sense of pressure when these were used. The children strongly supported their perspectives of the Assessment for Learning strategies utilised, concluding each individual thrives off a different strategy.

Analysis of the data demonstrated by the research participant, strongly supports the assertion stated by Weeden et.al. (2002) that Assessment for Learning is a highly neglected topic. The lesson study evidenced the importance and the level of effectiveness it has on children's academic progress, suggesting more focus needs to be prioritised within the classroom.

Limitations can be evidenced as the sampling size, being of vast disadvantage to the lesson study. The three research participants from each year group represented a small proportion of children within the classroom. Sample size limitation, further supported by Dudley (2015),

recommends that further lessons would allow greater detailed observational notes to be taken. This suggests that the research findings provided may not be valid, however, the research methods used strongly support the validity in research.

The non-participant observations allow direct data collection, to support high ecological validity, eliminating bias notions (Denscombe, 2008). Evidenced during the review, the observations are used to provide high validity. Further supported with the use of semi-structured interviews (Bell, 2010), to reveal perspectives. The strengths of the data collection methods and interviews present a high significant response rate, alleviating the power imbalance, through the use of other research partners. The use of reflective cycles evidenced the importance of identifying the case study children perspectives, supporting ecological validity, from views of research participants and the researchers themselves (Robson, 2002).

From the data collection and analysis, in further professional practice, the researcher will ensure a priority on varying Assessment for Learning strategies, in order to support children's academic development. Dudley (2013) asserted that the act of teaching alone, limits the practitioner's ability to observe the class completely. Reflecting on the lesson study and interview process allowed the researcher to evidence areas for development, which will be further emphasised in professional practice. This allows the researcher to support children, following the observation, where support was implemented into an action plan for the remainder of the teaching practice.

If the lesson study was conducted again, a range of Assessment for Learning strategies would be utilised in order to suit the varying learning needs of the Year 6 classroom. This would allow all children within the classroom to feel comfortable with the use of strategies, emphasising the importance of differentiation and equality within the learning environment. Varying the strategies of Assessment for Learning in the classroom, supported by Jones (2005), emphasises the importance of further engaging and actively stretching learners to their full potential.

The research project has concluded an illumination of the importance, differentiating the use of Assessment for Learning strategies within planning, along with the lesson objective and the level of difficulty within the work. Ensuring that all children feel comfortable with the use of Assessment for Learning, allows both the teacher and the child to learn and develop in a positive, comfortable learning environment. Activating engagement within the classroom is essential in order to develop children's academic development, supported by Piaget's

emphasis on cognitive development (Piaget, 1936), encouraging peer interaction (Vygotsky, 1980), through a shared learning experience (Gray and MacBlain, 2012). Taking these considerations into account when planning demonstrates the implementation of Donaldson's Four Key Purposes of the New Curriculum (Welsh Government, 2019), encouraging children to become 'healthy, confident individuals', taking control over their own learning.

Recommendations

Through evidencing the limitations of the study, recommendations have been identified, ensuring that children and the researcher would benefit, if conducted again. In a different educational context, using a different strategy of sampling, such as random sampling of case study pupils would have been conducted. The effect of this would be to ensure that the results were valid and provided reliability to the research. Along with this, a brief discussion with other researchers would have been beneficial to ensure that all took the same sampling of pupils, to provide more accurate results.

The findings identified may be taken forward to inform further research within the researcher's professional development, in line with ensuring children's progress and understanding. Grigg (2015) demonstrated the importance of teachers becoming researchers to benefit their professional development and that academic development of their students. Hancock (2001) summarises the cultural view and the workload of the teacher, acting as impediments to teacher-led research, ensuring that resources, time and motivation is clear, to complete research. This will inform the researchers professional development, where findings can be taken into further practice, supported through Cremin and Arthur (2014) illuminating the research of teachers performing instinctively without the inclination to analyse.

The report will be shared with the one research school upon request from the class teacher. Through this, the report will enable the effective practice to be shared with the placement school, in order to evidence the importance of Assessment for Learning, ensuring all children are engaged in the lesson. Higher order questioning can be used for the More Able and Talented pupils in line with Assessment for Learning, illuminating Kracl and Harshbarger (2017) research extolling, the virtue of higher order questioning for challenge.

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