

To find out if verbal reminders influence children's choice of familiar activities or choice of challenge during independent learning.

Gallwch ychwanegu'ch targedau o'ch aseiniad diwethaf gan ddefnyddio'r tabl isod. /

Please add your targets from the previous assignment using the table below.

	Targed/Target	Yr hyn yr wyf wedi'i wneud yn yr aseiniad hwn. What I have done in this assignment.
Targed/Target 1	Read even more widely, ensuring all sources are credible and academic.	I have used credible sources. One source is not academic, however, I have addressed my choice to use it in the essay.
Targed/Target 2	Be a little more specific to demonstrate your full knowledge and understanding (e.g. say how you will achieve something/what specifically you will do/how things relate).	I have demonstrated my knowledge and understanding.
Targed/Target 3	Revise your use of the possessive apostrophe.	I have revised my use of the possessive apostrophe.

Aims, focus and purpose of the research

The focus of the research is to take a closer look at children's Independent Learning (IL) time, and whether verbal reminders from teachers can influence children's choice of familiar or challenging activities. This issue was of particular interest to researchers due to observations made in the placement school. Children weren't using IL lessons properly, some children using it as a time to socialise and have a break. The focus of this research is therefore to take a deeper look into what children are doing during these IL lessons and choices being made. The aim is to and analyse the data to come to a conclusion, are verbal reminders effective as a tool to influence children's choices in IL lessons, or does this issue need another solution?

Research context

Within the school, children across Foundation Phase (FP) and Key Stage 2 (KS2) are given the opportunity to access IL time on a daily basis. Through discussion with peers and mentors researchers identified a common issue with IL. Children are not taking advantage of activities and challenges to extend their learning. Although resources and activities are provided, often children are choosing to remain on the same activity for an excessive amount of time, not using their time to advance their learning. Children are familiar with the purpose of IL and what is expected during this time. Due to this, researchers believe verbal reminders to choose a new activity should refocus their choices. As a result, the research question is, 'To find out if verbal reminders influence children's choice of familiar activities or choice of challenge during independent learning.'

Short overview of relevant literature

When discussing this topic there are two key areas that need to be discussed. Firstly, to identify what IL is, and why it is a valuable teaching technique. Secondly, to narrow my focus onto how verbal reminders can be used for classroom management.

There are many benefits to promoting IL within schools. IL allows children to take responsibility for their learning and make informed choices (University of Hull, n.d.). Further benefits include; setting goals, planning learning, finding resources, promote self-control, work collaboratively, self-assessment, and monitoring one's own learning (Belton & Scott, 1998; Hockings *et al.*, 2018; Estyn, 2019). These are all skills that are necessary to help children become successful in their future. According to Estyn, IL opportunities have significantly impacted standards and levels of wellbeing (Estyn, 2018). Furthermore, it has been suggested that in schools where More Able and Talented (MAT) children perform well, learners have the opportunity to direct their own learning (Estyn, 2018). Lankin (2013) highlights that differentiation is important to ensure learners are able to access these opportunities and facilitate learning. During the IL lesson that will take place for this research, learners will be given a range of resources and challenges requiring different levels of skill to achieve (Appendix 1). IL can be linked to the theorists Montessori. Montessori encouraged a holistic learning style (O'Donnell, 2013). She encouraged child-led learning. The teacher's role is to provide resources to encourage learning, however the learning itself must be child-led. This can be linked to IL as it gives the learner choices to develop their learning, working independently without the over-reliance on teacher-led learning. Furthermore, the Constructivist and Humanistic approach to learning both stress the importance of child-led learning and children pursuing their own interests (Harasim, 2017; Veugelers, 2011). This is an example of how deep rooted the benefits of independent, child-led learning is in learning theories.

It is important to note drawbacks associated with IL. Arguments against IL include; more resources for teachers to find and provide, teacher-directed learning is more efficient, students prefer to be taught, some students are not capable of working independently, and standards may drop (Belton & Scott, 1998). Lankin (2013) suggests that learning only happens when learners take ownership of their own ideas, the learner must want to learn. This is important when considering the style of IL found in this research. The IL lessons in this study follow the well-established style of IL within the placement school. Therefore, the IL lesson in this study will provide children with a list of activities to choose from. This does not allow children to pick any activity they like, however, they are able to engage with the activity in any way they choose. For example, iPads, Minecraft, GarageBand, drawing, writing etc.

In order to refine the research question, researchers identified a problem that is occurring during the IL activities in the placement school. It is apparent that children have not been taking advantage of IL time, and are not engaging with the activities provided. Therefore, researchers have chosen to research how verbal reminders can influence the choices made by learners, and to see if it can lead to children making better use of their IL lesson. As stated by Scott (2017), verbal prompts can be used to increase the probability that children will behave in the desired way. In this case, encourage learners to move onto other activities to prevent repetition. This point is taken further by Hodges (2001), who suggests that prompts should be used until the desired behaviour occurs, and then can be gradually taken away. Verbal prompts are used frequently to manage the learning environment to remind learners of a pre-arranged rule, in this case, to choose a new challenge to complete, and then move on to another challenge (WG, 2006; Terada, 2019). Terada is not the most reliable source, coming from a blog, however the source exemplifies how widely accepted verbal reminders are as a teaching tool.

On the other hand, it has been suggested by Scott (2017) that verbal reminders are not always effective. For example, one could give a child a direct verbal instruction, and they could accept, however, the child may not have heard or understood what was said. A solution to this, as suggested by Scott (2017), is to use a pre-correction technique (i.e. verbal prompt followed by a question). This can help the teacher know that the child has understood the expectation and to engage the child. Direct verbal reminders can only go so far in influencing a child's decisions. Children may not hear, children may hear and choose to ignore or children can mishear.

Children take part in IL throughout the school on a daily basis. IL is a well-established technique within the school. Learners know what to expect and how teachers intend for IL to be used. It is for this reason that we have chosen to focus on verbal reminders, as the routine is being misused. Had there not been a well-embedded routine of IL, creating that familiarity and ethos would have been the first area to address. However, this was not the case in the placement school, and therefore we aim to discover whether verbal reminders could be sufficient to prompt learners engagement. This reading has supported our research question as it supports the effectiveness of verbal reminders as a classroom management tool.

Explanation of your lesson study design

This research will use a Lesson Study (LS) approach to collect data. This is a popular method of developing pedagogy and professional development that is commonplace in Japan (EEF, 2017; Godfrey et al., 2019). LS require a group of teachers planning and carrying out lessons with a specific focus in mind. The teachers then take turns to observe these lessons, giving feedback to one another and develop the lesson each time (EEF, 2017). Godfrey et al (2019) summarises the key components of a LS into four elements; identification of research focus, collaborative planning of lesson, live research lessons in which other teachers observe, and a post-lesson discussion. LS research is shown to benefit professional development, resulting in improved teaching and learning (Olson, 2005; Cheung & Wong, 2014; Dudley, 2014; DCSF, 2009).

Literature supports this practice, however, there are various limitations. Godfrey et al (2019) highlights the impact of having few control groups. Few control groups can lead to less reliable and accurate results. Furthermore, the Education Endowment Foundation (EEF, 2017) discuss the limitations of the LS in their research, one particularly noteworthy limitation being that long term results were not always evident.

During the LS research, researchers will collect data through observing 3 previously identified children from each class, totalling at 9 children all together, these will be the focus groups. Focus groups will be identified through professional dialogue with the class teacher to select children with a range of typical engagement levels. Observations will be carried out with a non-participant approach so as to have as little impact on the research findings as possible (Angrosino, 2012). A limitation of observation based research is the Hawthorne effect. Being present in a classroom can influence the way children in that classroom act, thus creating an inauthentic context for observations to be made (Kumar, 2014). Similarly, observer bias can influence the results of an observation based research, for example the observers expectations and emotions. Dissonance Theory, looking for things that confirm what we already believe, is another potential cause of observer bias (Festinger, 1957). There are ways in which to ensure that our observations are more reliable. Observations will not be made by the researcher who teaches the children being observed. The aim of this is to limit the bias and preconceptions the researchers have about the children they are observing. Further limitations of observations can be that the observer is only able to see behaviour, not motives, attitudes, feelings or intentions. In order to combat these limitations, the observations will be followed by interviews with the observed children.

The observations are recorded using a bespoke semi-structured observation sheet as seen in Appendix 2, 3 and 4. Researchers will observe what is naturally occurring within the

independent learning session, researchers will then note down any observations that relate to the children's engagement. Researchers will be looking to identify some specific behaviours:

1. Are children on task?
2. Are children choosing different challenges?
3. Note the behaviour.
4. Are children working individually or with peers?

Observations will be made during 3, 20 minute IL lessons. These IL sessions will occur within a 20:20:20 carousel lesson, referred to as 'Amser Dysgu' in FP, and 'VIP' in KS2 (Appendix 15, 16 and 17). The other two rotations within this lesson will not be independent and therefore will not be observed. Each researcher will teach a lesson while the two other researchers make observations, there will be a total of 3 Lesson Studies. 20 minutes is a short observation period, this will limit the accuracy of our research. However, due to university placement dates this is unavoidable. The research focus is evaluating the impact of verbal reminders on children's choice of activity during IL. Although this is specific, the researcher will consider engagement and attitude as simply choosing a new challenge does not indicate the level of engagement with the challenge. The data being recorded is qualitative data (Angrosino, 2012).

Focus groups will then be interviewed, the interview will be semi-structured. Questions are open ended and will encourage open dialogue (Appendix 5, 6 and 7). There are 8 questions that the researchers will ask the focus group. However, if a child makes an interesting point, there is room for the discussion to go further into what they are saying. There are limitations to collecting data through interviews. Limitations include the potential for researchers unconscious signals, validity, and the depth of information may be difficult to analyse (Kawulich, 2005). Children may choose to lie or be misleading if they are concerned with being told off. To avoid this children will be aware that their opinions are valuable and cannot be wrong. The interviews will be informal and take place in the corridor outside of the classroom where the children have their IL lessons. Furthermore, the researcher who teaches the children will be present for the interview, this will make the children more comfortable as they will know the researcher well.

Following the collection of data, researchers will reflect using Gibbs' reflective model (Gibbs, 1988). This model was chosen as it encourages a systematic approach to reflecting on an experience. Gibbs' cycle encourages one to analyse an experience and develop a plan of action for improvements. The cyclic nature makes it particularly appropriate for a LS based

research as researchers will naturally be observing, reflecting, creating an action plan and observing again. Gibbs' reflective cycle promotes a deeper understanding of the results gathered, useful for analysis and recommendations.

Ethical considerations

There are ethical considerations that must be considered when researching children in a school environment. These considerations have been discussed more explicitly in the ethics form (Appendix 13). The research will work within the university and BERA guidelines. Ethical considerations include, selecting children to observe, the observations themselves, interviews and recording information about children. Parents and children must give consent and assent and be aware that they are able to withdraw from the research at any point (Appendix 11). There are implications of the power dynamic between the researchers and the children, children should not feel pressured into answering questions in a particular way. The anonymity and confidentiality of those involved will be maintained throughout the research.

Lesson Study 1

During LS1 children were not given a verbal reminder during the lesson introduction. Children were expected to choose a challenge from the VIP challenge sheet and work independently to create a piece of work. During the observation all three children were able to work independently on a task to varying degrees of success (Appendix 2). Child A had chosen a challenge and was working independently with a positive attitude toward their work, putting in a great deal of care. However, Child A had worked on this same piece of work for several lessons an excessive period of time, as identified through professional dialogue. Child A chose to challenge themselves to advance their learning, but continued with a familiar piece of work. Child B was on task, working hard with a positive attitude throughout the session. Child B chose to create a mascot for the Lions, a challenge set out on the VIP activity sheet. The child had previously done this challenge, however, they chose to use new resources, Minecraft, to create the mascot. Child C chose a new challenge, however, they were flustered and distracted, walking around throughout the lesson. Child C was determined to engage well with the challenge, however, they struggled with the challenge. This is evident as the observer noted the child saying, "I need a mouse, I'm doing terribly at this" (Appendix 2).

The children observed were all working independently, without relying on the input of teachers to solve problems they faced during the completion of their task. Children relied on

their own research and experimentation, or support from their peers, to engage with these challenges. The resources available to the children were appropriate and encouraged experimentation with technology. The goals of the IL activity were reached somewhat as children were mostly able to engage with the activity independently to create an well thought out piece of work. However, the results of the interviews with the children offer a different perspective to what was observed.

When looking at the interview discussion (Appendix 5), it is clear that the children had mixed feelings of the IL experience. When asked the goal of IL sessions only Child B and C showed some understanding the goal of IL. Child A had a pessimistic outlook on IL, not understanding the benefits it can have for an individual. Child A believed that IL is not checked by teachers so there is no point due to the lack of feedback. To improve this, I would suggest that children should be given feedback more often. Child B and C agreed that IL does challenge them as they can choose challenges of different difficulty, however, Child A argued that they cannot challenge themselves without having teachers support available. To improve this, children should be taught different scaffolding and supporting techniques. All three children preferred working with a teacher for support. To improve IL, Child A would like an LSA to check on the children's work and provide support, Child B and C would prefer more challenge options. When asked if verbal reminders impacted their choice to choose to challenge themselves and try a new challenge, or to continue to do the same challenge they are comfortable with, there was a mixed response. Child B claimed that verbal reminders definitely encourages them. Child C took a middle stance saying that verbal reminders "sort of" encourage them. Child A claimed that most of the time verbal reminders did not encourage them to challenge themselves, they would choose the easier activities regardless. These interviews provide a useful insight into the children's feelings and thoughts regarding IL. Through interviewing the children it is clear that verbal reminders are not enough to influence their choice and actions in IL on their own.

LS1 demonstrated to researchers that without giving a verbal reminder, not all children choose to challenge themselves. The observations and interviews suggest that without giving verbal reminders, children can forget the purpose if IL. For the next LS, researchers will introduce a verbal reminder at the beginning of the lesson to see if verbal reminders can influence children's decisions or feelings. In terms of our research, I believe that our observations and interviews were well focused and helped deepen our understanding of our research question. However, to improve, our reflection time needs to be better organised to allow time to discuss our findings more deeply (Appendix 8). After this observation we did not designate enough time for discussion and development of our next lesson study.

Furthermore, in interviews we will need to ask children to expand on their points more deeply, for example, Child C replying "Sort of" should have been question further to have a deeper understanding of what that child meant.

Lesson Study 2

At the beginning of LS2, before sending the IL group off to work, my research partner gave a verbal reminder to the children. Researchers verbally reminded the children to try and challenge themselves and not to prolong an activity they find easy for longer than necessary. I will now summarise my observation, highlighting where children achieved lesson goals and where they did not (Appendix 3). Child D, E and F are referenced from Appendix 3. Child D chose to attempt a new challenge and worked independently on this task. Child D remained on task researching the activity throughout the lesson. Child E chose a new challenge and engaged well with the activity demonstrating good independent learning techniques only deviating from the activity once or twice. The child planned before beginning the challenge and organised their own resources. Child F was not on task throughout the lesson. Child F chose to continue an activity from the previous week. Continuing a challenge is not wrong if the challenge requires more time to research and complete, however, this was not the case with this challenge. Child F was not spending time to create an excellent well researched piece of work that would warrant so much time. Instead they chose to talk with their peer throughout the lesson on an unrelated topic. Child D and E did achieve the lesson goals and were well engaged, Child F was not.

Within the interview children expressed the need for verbal reminders, to maintain their concentration (Appendix 6). Children highlighted issues they had with IL altogether, stating that IL can be too hard and resources they would like are not always available. Children stated that they were concerned about not having the prior knowledge to attempt a new challenge well. This is a clear focus area for developing IL in the future. Children need to be taught the skills so that they are equipped to deal with new challenging concepts allowing them to assess and perform these challenges independently. Allowing time for IL is not enough, children need to have the skills to engage well with IL and have the necessary attitude to thrive independently.

The lesson could be improved by providing more resources for children to access and engage with. Children could be given more feedback and support for their work. Discussion with the children about the goals of IL would be beneficial, so they too can understand why it

is important to be able to work independently. Collaboration with children to create challenges would also be beneficial.

Lesson Study 3

LS3 differed to LS1 and 2 because it took place in a Year 2 classroom. IL opportunities are frequent throughout the school. However, one must consider that the expectations for Year 2 children are different from Year 5 children. Due to their age, activities are different and are more play based. Child G, H and I are referenced from Appendix 4. Another difference that had great impact on our results is that the children were not given the option to choose their own activity. The Year 2 teaching staff noticed issues occurring with IL in Year 2 and decided to modify their 'Amser Dysgu' sessions. As a result, researchers had to provide resources for one activity only for this lesson. This impacts our research when considering children choosing their own activity to challenge themselves. However, it does raise an interesting question, why did the Year 2 staff think this was necessary? Although this was a drawback in the research, researchers are still able to analyse the children's choice to challenge themselves through participation or not.

During the observation, Child G was keen to start the task and well engaged throughout. Child A worked with their peers and built an Arabian city with blocks which linked to their theme, Aladdin (Appendix 4). On the other hand, Child G and H were sat talking, not engaged with the task for the first 5-10 minutes of the lesson. Child G mainly sat and watched the other children without engaging with the task except for a few minutes. Child H was more engaged than Child G, working with Child I to create the Arabian city.

During the interviews with the children questions needed to be adapted in order for the children to understand them (Appendix 7). This was done by using different language during the interview, to improve we could have written simplified questions before conducting the interview. Two of the three children did not think that verbal reminders encouraged them to try new challenges, however one child said that she did want to challenge herself after having a verbal reminder. Again two out of the three children like working independently, however, one child said she prefers to have help from the teacher. In Year 2 the children so not have a clear understanding of IL however one child said "it's important to work things out for yourself". I would argue that this lesson did not engage the children well as they were disengaged because the challenge did not appeal to them. In future, I would like to see more choice for independent learners, or more collaboration with the learners about the activities available to them. When considering the behaviour of the children in this lesson, It must be

considered that they are only 6 or 7 years old. One should not hold their expectations too high and expect all learners to be fully engaged throughout this time without any teacher or adult support. Children were given resources to challenge themselves to independently complete a challenge. This falls in line with the Montessori theory of teaching as previously mentioned. We must then allow the children to lead this learning without having too great expectations of them.

This was the final LS, changes will not be required for a following lesson. However, there are key areas that need to be changed for children to better engage with the goals of IL. For example, What A Good One Looks Like (WAGOLLS) could help guide children, give them an example to work towards without a teacher being necessary. Furthermore, a circle time to discuss the goals of IL could be used to help children better understand the reasons for why they need to learn to work independently.

Discussion of research findings in relation to related literature and research

Across all 3 Lesson Studies it was evident that verbal reminders did not have a large enough influence over children's choice of familiar activities or choice of challenge during IL. Five out of the 9 children observed made the choice to challenge themselves and engage with IL positively. The results of introducing a verbal reminder at the beginning of the lesson cannot be seen to significantly impact children's choices. Although Scott (2017) and Hodges (2001) highlight the influence verbal reminders can have on children's choices and behaviour, this LS demonstrates the limitations of its use.

There is evidence to suggest that verbal reminders had some influence. During the interviews, Child A, D, E and H claimed that verbal reminders influenced their decisions and reminded them to try new activities and challenge themselves, this supports Scott (2017) and Hodges (2001). Child C took a middle ground, whereas 3 children claimed that verbal reminders did not influence their decisions. This can be linked to Scott's belief that verbal reminders are not always effective independently as previously discussed. It is evident that verbal reminders did not impact decisions significantly. During LS1 children were engaging with IL fairly well without the use of verbal reminders and during LS3 children engaged poorly with IL with having had a verbal reminder. There are many factors that may have contributed to this including, age, children observed, small focus group, the activity and many more. This can be linked to Lankin (2013) who suggests that IL works best when children can take ownership of their ideas and when learners want to learn about something.

In LS3 the choice of activities was taken away from the children, this could negatively affect their engagement with the activities. Giving a verbal reminder to children to challenge themselves will not engage a child who has no interest in the activity set out for them. This can be linked to the Humanist approach, children should lead their own learning, exploring their own interests. Children may not choose new challenges because they do not understand the goals of independent learning, and do not have enough input into the challenges available to them. Furthermore, IL should not mean unsupported and unsupervised, this was the case during the LS and during regular practice within the school.

There are many factors that can influence children's choices and engagement, therefore one answer cannot be found. The LS provided insight into where IL can be strengthened and adapted, therefore it was useful moving forward. The LS was unable to provide a clear answer for what the best course of action may be moving forward. However, it raised many interesting point and further questions that should be explored.

Conclusion

Overall, LS can be useful to analyse a lesson (Dudley, 2014). The LS method used allowed researchers to focus their attention on the impact of one pedagogic technique. This method allowed researchers to engage in professional dialogue, focusing their attention on the use of verbal reminders and the impact on learners, while allowing researchers to consider reasons for the results recorded. Another strength was the IL activity planned for the children. Researchers used the VIP and Amser Dysgu activities used daily by the placement school, this meant that children were familiar with the style of IL. This gave a true representation of their usual behaviour during IL. Had researchers created an entirely new concept of IL for the children, the new experience could have provided misleading results. For instance had children been given a completely new activity with free reign over their activities, resources would have been difficult to find, and their excitement for this new freedom could have an impact on their choices and behaviour. The method for collecting data was somewhat reliable as two researchers observed each lesson. However, researchers could have missed something or not written it down. Due to the type of data we were collecting, this is not of great concern as researchers were able to record children's general attitudes and choice of activity. The data collected from the interviews with children is useful, but not entirely reliable. Children were comfortable to answer questions, however they may have felt pressured to say what they thought the adult would like to hear. The method of observation was successful as it allowed the observer to take a running record of

children's behaviour during the session. It gave the observer freedom to note unanticipated behaviour and to explain children's activities further. The interviews were a strength as we were able to adapt questions through the semi-structured approach and were conducted straight after the lesson (Dudley, 2014).

There are a number of limitations with this research. The small sample size and the short amount of time available for the study to take place was a major limitation. Due to the nature of a LS, we were unable to observe previous lessons and relied on professional dialogue to identify children to observe. Furthermore, the research was limited due to the last minute change in practice that meant a key variable of the lesson was changed in the Year 2 classroom. Our research looked at the impact of verbal reminders on the child's choice of activity, in LS3 this choice was removed from the children, therefore limiting the value of that lesson to our research. On reflection, it could be argued that LS isn't the most appropriate research technique to answer the research question. Researchers were unable to see the choices made by children before and after introducing a verbal reminder. Different classrooms have a different attitude and a different understanding of certain concepts, it would have been more beneficial to test this theory within one classroom over a number of lessons.

This research has taught the researchers not to rely on verbal reminders to ensure that children engage with IL correctly. Children need to understand why they are learning independently and have an interest in the activities. Children need to have a deeper, richer understanding of the value of IL, children need more freedom to learn about their interests and passions if we continue to expect a high level of engagement and quality of work produced during IL. If I were to promote IL within the classroom in future lessons, I will ensure that the atmosphere and attitude towards IL is positive and engaging. This can be done through circle time discussion or teacher led research into the benefits of IL, so children know the reasons and benefits of IL. This will prevent attitudes such as Child A's belief that IL is a time to "give teachers a break" as stated in Appendix 5. This attitude highlights where communication with learners fails and how verbal reminders will not affect the overall attitudes of our learners. Moving forward, IL should be supervised more closely.

Recommendations

There are several recommendations I would make in light of my research. Through my research I have found that verbal reminders are not enough to encourage true engagement with IL. Firstly, I would recommend addressing the misconceptions children have with IL to

ensure that the children have an understanding of the goals of IL. Secondly, I would ensure that children have more input into the challenges and activities available to them, to encourage engagement and promote an interest in what they are learning. I would recommend having more feedback for children and guidance from teachers so the children can learn the skills necessary to work independently, successfully.

If I did LS research again, I would ensure that my research question is more appropriate for this method of research. Furthermore, I would conduct the research with more practitioners. I would manage time better to ensure that worthwhile changes could be made between each lesson. I believe that in order to collect more useful research, researchers should have been more flexible to making changes during the LS process. Observations needed to be conducted over a longer period of time and across different environments. Comparing children's work during IL to teacher directed tasks would have been a useful comparison to see the difference between attitudes. The time constraints did not allow us to modify the attitude of children and their understanding of IL to see if these changes could promote better engagement.

References

Angrosino, M.V. (2012) 'Observation-based research', in Arthur, J. *et al.* (eds.) *Research methods and methodologies in education*. Los Angeles: SAGE.

Belton, V. & Scott, J.L (1998) 'Independent Learning and Operational Research in the Classroom' in *The Journal of the Operational Research Society*. Vol. 49: No. 9. Palgrave Macmillan Journals: Basingstoke.

British Educational Research Association [BERA] (2018) *Ethical Guidelines for Educational Research*, fourth edition, London. <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018> [Accessed: 15th February 2020].

Cheung, W.M. and Wong, W.Y. (2014) Does Lesson Study work? A systematic review on the effects of Lesson Study and Learning Study on teachers and students. *International Journal of Lesson and Learning Studies*. 3(2).

Department for Children, Schools and Families (DCSF) (2009) *Improving subject pedagogy through lesson study: handbook for leading teachers in mathematics and English (National Strategies: secondary)*. [online] Available at: https://moodle.uwtsd.ac.uk/pluginfile.php/289257/mod_resource/content/1/Improving%20subject%20pedagogy%20through%20Lesson%20Study.pdf [Accessed 20 February 2020].

Dudley, P. (2014) *Lesson Study: a handbook for teachers and school leaders*. Lesson Study UK www.lessonstudy.co.uk [online] Available at: https://moodle.uwtsd.ac.uk/pluginfile.php/289255/mod_resource/content/1/Dudley%20Lesson%20Study%20Handbook.pdf [Accessed: 23rd February 2020].

EEF (2017) *Lesson Study: Evaluation report and executive summary*. [online] Available at: https://moodle.uwtsd.ac.uk/pluginfile.php/289271/mod_resource/content/1/Lesson%20Study%20EEF.pdf [Accessed: 23 February 2020].

Estyn (2018) *Striving for independent learning for all pupils*. [online] Available at: <https://www.estyn.gov.wales/effective-practice/striving-independent-learning-all-pupils> [Accessed 21 February 2020].

Estyn (2018) Supporting more able and talented pupils. [online] Available at: <https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/Supporting%20MAT%20pupils%20En.pdf> [Accessed 18 February 2020].

Estyn (2019) Enabling pupils to become independent learners. [Online] Available at: <https://www.estyn.gov.wales/effective-practice/enabling-pupils-become-independent-learners> [Accessed 20 February 2020].

Festinger (1957) A theory of cognitive dissonance. Evanston, IL: Row, Peterson.

Gibbs, G. (1988) Learning by doing: A guide to teaching and learning methods. London: FEU.

Godfrey, D. *et al.* (2019) A developmental evaluation approach to lesson study: exploring the impact of lesson study in London schools. *Professional Development in Education*. 45(2).

Harasim, L. (2017) Learning Theory and Online Technologies. (Routledge, New York).

Hockings, c. *et al.* (2018) Independent Learning – What We Do When You're Not There. *Teaching in Higher Education*. 23(2).

Hodges, R. and White, W.G. Jr. (2001) 'Encouraging high-risk student participation in tutoring and supplemental instruction' in *Journal of Developmental Education*; 24(3), pp. 2.

Kawulich, B.B. (2005) Participant Observation as a Data Collection Method. *Forum Sozialforschung / Forum: Qualitative Social Research* 6(2). [online] Available at: <http://www.qualitative-research.net/index.php/fqs/article/view/466/996> [Accessed: 23 February 2020].

Kumar, R. (2014). *Research methodology*. (4th ed). London: SAGE.

Lankin, L. (2013) *Developing Independent Learning in Science: Practical Ideas and Activities for 7-12 Year Olds*. (Open University Press: Maidenhead).

O'Donnell, M. (2013) *Maria Montessori: A Critical Introduction to Key Themes and Debates*. (Bloomsbury, London).

Olson, J.C (2005) Do teachers change their practice while participating in a lesson study? *Building connections: Research theory and practice*. (Sydney: Mathematics Education Research Group of Australasia).

Scott, T.M. (2017) *Teaching Behaviour: Managing Classrooms Through Effective Instruction*. Corwin, California.

Terada, 2019) - <https://www.edutopia.org/article/8-proactive-classroom-management-tips>
University of Hull. (n.d.). *What is meant by independent learning?: Essential Study Toolkit*.
[online] Available at: <https://canvas.hull.ac.uk/courses/30746/pages/what-is-meant-by-independent-learning> [Accessed 18 Feb. 2020].

Veugelers, W. (ed.) (2011) *Education and Humanism: Linking Autonomy and Humanity*. (Sense Publishers, Rotterdam).

Welsh Assembly Government (2006) *Practical Approaches to Behaviour Management in the Classroom*. Cardiff.