

## ASSIGNMENT DETAILS AND FEEDBACK

### SOUTH WEST WALES CENTRE FOR TEACHER EDUCATION

*Sections marked with \* should be completed by module lead*

|                                                       |                                                                                                                               |                                                     |          |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------|
| Student name:                                         |                                                                                                                               | Student P number:                                   | 1708143  |
| Programme: *                                          | PGCE Primary                                                                                                                  |                                                     |          |
| Module: *                                             | The Enquiring Teacher                                                                                                         | Module Level (6 or 7):*                             | 7        |
| Module code: *                                        | M7X2152                                                                                                                       | Contribution to Overall Module Assessment (%):<br>* | 100%     |
| Module Lead:*                                         | Catherine Morgan                                                                                                              |                                                     |          |
| Assignment Title:*                                    | Write a critical and analytical essay that discusses your practitioner research 'lesson study' in relation to a chosen field. | Assignment No (x of x):*                            | 1/1      |
| Start date:*                                          | 09/01/18                                                                                                                      | Submission deadline:*                               | 16/04/18 |
| Return date of provisional marks & written feedback:* |                                                                                                                               |                                                     |          |

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|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------|-----|--|----|---|
| Referencing:                                                                                 | In the main body of your submission you must give credit to authors on whose research your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have read or quoted in order to complete this assignment (e.g. for books: surname of author and initials, year of publication, <u>title of book</u> , edition, publisher: place of publication).                                                                               |       |                                                                                                 |     |  |    |   |
| Submission:                                                                                  | <p><b>All assignments must be submitted to Turnitin unless otherwise instructed by the Lecturer.</b></p> <p><b>Note:</b> the Turnitin version is the primary submission and acts as a receipt for the student. <b>Late submission of the electronic version of the assignment will result in a late penalty.</b> Penalties for late submission: Up to one week late, maximum grade D. Over one week late, Refer. Only the Extenuating Circumstances Panel may grant an extension.</p> | Date: | 16/04/18                                                                                        |     |  |    |   |
| Module lead to tick to indicate if a hard copy version of the assignment must be submitted.* |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       | <table border="1"> <tr> <td>YES</td> <td></td> </tr> <tr> <td>NO</td> <td>✓</td> </tr> </table> | YES |  | NO | ✓ |
| YES                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                 |     |  |    |   |
| NO                                                                                           | ✓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |                                                                                                 |     |  |    |   |

How can we improve pupils understanding of  
the learning outcomes through self-assessment  
through the foundation phase?

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### Purpose of Research

Black and William's (1998) influential research on Assessment for Learning (AFL) has suggested the importance of formative assessment, the research as a result has been a key component of a teacher's toolkit. Throughout teacher practice, it has become evident that although AFL was being used in the classroom, not all the strategies implemented were aimed to improve the children learning and understanding of the outcome. It was clear that self-assessment (SA) was an element of AFL that the children were not familiar with and from observations in the classroom it became apparent that the SA strategies that were being used did little to assess the children true understanding and as a result the outcomes were not being improved. Therefore, the aim of this research is to question how the use of self-assessment as a tool for assessment for learning can have an impact on the pupils learning and understanding in the foundation phase. Using specific self-assessment strategies this research aims to observe how the use of specific technique can impact the pupils shared understanding of the learning outcome.

### Research Context

The research was conducted in two Foundation Phase (FP) classes across two different schools. The first research lesson took place in a year 2 class with 27 pupils in a rural village school in the Swansea valley (school 1). 11% of the children in the school were known to be eligible for free school meals (FSM), which is lower than the 19% national average (Welsh Government (WG), 2017). The Second lesson took place in a reception class with 27 pupils in a small inner-city school (school 2). The school has 18% of the children who were known to be eligible for free school meals.

Through discussion with my research partner it was decided that in both classes SA could be refined and developed as its use in both schools was not an effective way of improving the children's learning outcomes. However, although in school 1 the SA seemed to be ineffective as it was ignored by the children unless it was a task that was adult led, this proved to be an improvement on school 2 because SA was rarely used in this school. Consequently, it is understood that the children in school 1 had received more training on SA than the children in school 2.

The literature surrounding SA suggested how successful the AFL strategy could be when used correctly and so with this in mind it was decided to investigate the SA strategy and refine it to improve the children's understanding of the learning outcomes.

### Literature Review

It is to be believed that the use of assessment in schools have an impact on the children's learning outcomes. Nevertheless, the Assessment Reform Group (ARG,1999) states that children make a significant improvement in their learning if they have a sense of ownership of their education. The ARG (1999) suggests the importance of AFL which supports the children learning and understanding and highlights the need for schools to reject the assessment of learning methods. Black and William (1986), stated that the use of AFL can raise attainment which supports research by The Sutton Trust (2014) that encourages the use of AFL in the classroom due to the strategy being effective and cost efficient. The WG (2013) promotes AFL as a policy because it encourages teachers and the children to work together to identify a benchmark of their learning and to identify the next step. This supports the ARG (1999) suggestions that the children benefit from AFL due to the ownership it allows them to have over their learning. Allowing the children to play an active role in their learning through assessment is supported by Donaldson (2015). In his new curriculum Donaldson (2015) suggests that AFL allows children to be fully engaged throughout their assessment and education, enabling the children to develop into ambitious and capable learners

The ARG (2002) highlights that for AFL to be implemented successfully in the classroom there must be a positive ethos that is mirrored throughout the school. This is mentioned as one of the ten principles for AFL to be practiced successfully. Consequently, as part of the ARG (2002) ten principles the need for learner motivation is highlighted as being a key component in the execution of AFL in the classroom. Supporting this, in the *Directions for Assessment in New Zealand* (DANZ) (Absolum, Flockton, Hattie, Hipkins, & Reid., 2009) suggests that through the use of SA children will be motivated to interpret the information therefore consolidating their learning of the outcome.

As part of the ten principles the ARG (2002) states that the benefits of implementing AFL in the classroom is that it allows the development of SA. The ARG (2002) suggests that SA encourages children to self-monitor and reflective. This consequently supports Donaldson (2015) new curriculum creating independent and ambitious learners. The ARG (2002) recognises that the use of SA allows children to be independent learners, allowing the children to develop new skills and knowledge. This in turn encourages the children to be self-reflective and recognise the next suitable step for improvement.

However, the ARG (2002) states that for the children to develop their SA skills the teacher must equip and provide the children with suitable training allowing them to benefit from this strategy of AFL. The WG (2013) highlights the importance of preparing the children for SA promoting the importance of listening skills, questioning skills, empathy, self-awareness and the development of metacognition (Harries & Brown 2018). NFER (2012) supports the ARG (2002) suggestion of creating a positive ethos

within the school is vital for the successful use of SA. NFER (2012) promotes the importance of a positive ethos and in turn creating a classroom culture that is encouraging for children to make errors and to recognise that asking questions and that not understanding is a positive action. The DANZ (2009) supports this by stating that it is the process of learning and improving that should be celebrated not the right or wrong answers. It is highlighted in the DANZ (2009) that for the children to use SA efficiently they must first be aware of a good example of the work and have access to the success criteria. DANZ (2009) recommends that teachers are cautious when creating the success criteria for the children, stating that strong success criteria should be used by the children as a marking ladder and a check list. NFER (2012) seconds this by stating that providing the children with a clear set of instructions will result in a positive participation during SA.

However, despite SA being a very popular element of formative assessment, Harris & Brown (2013) questioned the limited research found in primary schools that are mentioned within Black and William's (1998) *Inside the Black Box*. Although, Andrea (2010) promotes the use of SA for metacognition development and self-regulation, Harris & Brown (2013) state that the actual effects of SA are difficult to measure. Bennet (2011) states that SA develops children's cognitive skills supporting Andrea (2010) statement that SA has the ability confidence in understanding through the use of success criteria. However, Harris & Brown (2013) questions the impact SA has on peer relationships and self-confidence. Harris & Brown (2013) states that research from New Zealand suggests that there was a concern for the accuracy of SA when children are evaluating their own work. Van Gennip et al (2010) (Gerristem, 1999) supports this argument suggesting that although children enjoyed the process of SA there was a concern of cheating and inaccuracy.

However, regardless of these limitations it is clear from research that SA can improve the children understanding. This study will therefore use the literature reviewed to understand how SA currently being delivered can be improved and if the child's understanding of the success criteria can impact this and improve the outcome. This will include adapting an environment with a positive ethos, providing the children with success criteria which encourages specific feedback and allowing the children to have thinking time.

### Methodology

The method of this research project was based on Peter Dudley's (2011) lesson study method. Peter Dudley lesson study aims to improve and develop teaching, teacher's knowledge and learning for the children. Throughout the research project my research partner and I adhered to the Lesson Study process, jointly planned and observed the research lessons, then using a sample of interview questions we discuss the lesson with a focus group to gain knowledge of their insight into the lesson. After the research lesson and focus group interview my research partner and I decided to evaluate and reflect on the selected self-assessment technique (considering any difficulties, evidence of learning, overall response). We together reflected on the lesson and used our reflection to plan and adapt for the next research lesson. We choose three case pupils who were observed and questioned on their activity.

Through engaging with the Lesson Study, my research partner and I collaborated to devise observation methods which best reflect the research aims and purposes. We shared the classroom context prior to the observations. We observed in both a participative and non-participative context (depending on our role as teacher or 'observer'). We decided to use the Leuven scale of involvement as a basis for our observations, considering the children's activity according to predefined criteria (e.g. Low activity; frequently interrupted activity etc). Our observation form allowed additional space to record more general comments regarding the pupils behaviour, oracy and cognitive thinking skills. Observations will focus on three case pupils' learning. For the purpose of this research we focused our observations on three case pupils, all of different attainment.

Due to the age of the children we discussed with the school and decided that a more informal interview would be best suitable. We then asked the children to share with us the work that they have completed for the lesson, and then discussed with them their choice of self-assessment during the lesson (the children would have assessed their own work during the research lesson as a plenary). We will then ask the children to explain what the learning outcome for the lesson was and what they needed to do to achieve this (success criteria).

One of the chosen children could be absent on the research lesson day so we will account for this possibility by selecting children to act as reserves for the originally selected case pupils. It will be important to ensure that assent is obtained in any change of participants. Due to the age of the children we will obtain assent throughout the lesson by using a method of showing thumbs up or down.

### Ethical Consideration

Throughout the research it was vital to adhere to the British Educational Research Association Guidelines (BERA, 2011), ensuring that all ethical consideration has been met. Approval was sought from the university ethics committee prior to the start of the research. Throughout the process of gaining ethical approval various elements were needed to be considered especially as the research would be taking place in a classroom and involved the participation of children.

The BERA (2011) states that Article Twelve of the United Nations on the Rights of the Child (Unicef, 1989), 'children should have a say in matters that affect them' should be maintained throughout the research. This is supported by David, M., et al., (2001) *Children and school based research: 'informed consent' and 'educational consent'*. Consequently, the children in the class were informed prior to the research activity what would happen, and what the children could expect. This then provided an opportunity for the children to reject the chance to participate if they wish. It was vital that the children's best interests were considered throughout the study and that the children's voices were heard. Thus, after discussions with my research partner and the schools, due to the age of the children that would be participating it was agreed that we would gain verbal assent after explaining the activity.

Also, the schools were given details of the research project in advance so that they were therefore able to identify any pupils who they wish to not be present for the research activity. In the aim to gain consent and adhere to the ethical guidelines parental consent was requested for the participation of the children, this was executed via a letter from Yr Athrofa which was given to every pupil in the class prior to the research date.

### Lesson Study and Discussion

From the lesson plan in appendices D it is evident that it was agreed that the lesson would focus on a developing the children's skills in knowledge and understanding of the world. The lesson also focused on developing the children communication and critical thinking skills. The lesson would be facilitated in school 1 and would be taught by the research member who was familiar to the children, the other research member would then be a non- participant observer. The research team would then meet and refine the lesson in preparation for the second lesson. The second lesson took place at school 2, where the teacher roles were reversed to ensure that the children were comfortable with the teacher. It was agreed with that the time of year would be used as an advantage, using the Easter Bunny as a hook. The activity was to create a suitable basket for the Easter Bunny to protect the egg.

### School 1

The teacher introduced the lesson by reading a letter from the Easter Bunny, then showed an example of two different baskets. The teacher dropped both baskets and asked the children to inspect if the egg had survived. The teacher then asked the children what they felt were the best qualities of the baskets and created a success criteria together. It was then discussed with the children what was meant by a fair test. The children identified that the height need to be the same for every group and only changing the baskets, consequently the children chose to drop the basket at one meter. The teacher then went on to put the children into different attainment groups. Providing each group with the same amount of material.

It was predicted by the research team prior to the lesson study that the higher attainers would refer to the success criteria throughout the process. However, it is also evident in Arc A (appendices E) that this was not the case, it was observed that throughout the activity the children that were of a lower attainment referred to the success criteria, consequently it was those children who were of a middle attainment that constantly referred to the success criteria *'to make the best basket ever'* (Child 1b) (appendices A). Prior to the SA the children performed the experiment, dropping each basket and the teacher prompted the children to assess their own basket against the success criteria. After each group had taken part in the experiment the teacher provided the children with a QR code dice (appendices C) which once the children scanned a selection of SA questions would come up on the screen.

During the SA process at school 1 a themed started to develop amongst the children's evaluation responses of their designs, (appendices A). The children at first when asked, *'What did you like about your basket?'* (appendices C) were reserved and commented only on the appearance, until Child 1C (appendices A) stated that he liked his groups basket because the egg survived the drop. The evidence here would support Harris & Brown (2013) concern about the accuracy of SA due to the influence of peer-relationships. However, when asked the question, *'What would you do different next time?'*

(appendices A) the children began to assess their work against the success criteria and suggesting possible improvements that could be made to their design. One child went into specific detail stating that next time the group should create a '*hot air balloon*' design. Consequently, when this question was asked to a group where the egg did not survive, the children responded that they would '*make it more secure and follow the tick list.*' Therefore, supporting the DANZ (2009) and the NFER (2012) suggestion that for SA to be successful the children must feel safe to make mistakes and as a result make improvements. The teacher as a response to this encouraged the children to scan the next QR code, the question '*did the success criteria help you?*' appeared on the screen. This stimulated a mixture of responses. Whilst throughout the observation it was those pupils of lower attainment that referred to the success criteria, during the SA it was the children who were of higher attainment that said they would use the success criteria as a tick list to help next time. Evidently, this supports the ARG (2002) suggestion that for SA to be successfully used in the classroom the children must receive training. Also, the research team found it interesting that the ARG (1999) implies that the use of SA raises the standards of those children who are of a lower attainment, however, during the observation it became clear that the use of the success criteria was allowing the SA process to be reflective for all the different attainment groups.

Finally, when asked the question '*what would you change about the activity?*' child 1C (appendices A) suggested that working on their own to be better because it would allow them to do what they wanted and make their own mistakes. This supports Harris & Brown (2013) concern that peer-relationships has an impact on the result of SA. However, it was discussed by the research team that if the children were familiar with the process of SA they would feel confident to assess their own contribution. Consequently, supporting the ARG (2002) suggestion that for SA to be successfully applied in schools the children require suitable training and opportunities to use SA.

## School 2

Prior to conducting the research lesson in the second school the research team discussed how to refine the process to improve the lesson. It was highlighted throughout the lesson study in school 1 that the children's lack of experience in SA impacted on the SA aspect of the lesson study. As a result of this the research team decided to adapt the introduction of the lesson to provide the children with training on how to use SA. It was also observed that the children used the success criteria as a tick list, therefore, the research team refined the process by providing the children with a tick list of materials and instructions.

As stated previously, the roles of the teacher and observer were reversed so that the children felt comfortable with the teacher of the lesson. The teacher introduced the lesson but before putting the children into different groups the teacher provided the children with some training on how to use SA

and explain the process in more detail (ARG, 2002). The children also discussed the success criteria as a class before creating a *'tick list of jobs'*.

During the observation it was pleasing to witness the children referring to the success criteria while constructing their basket with no prompt from the teacher. After undertaking the experiment, the children assessed their basket against the success criteria to ensure that they included every element. It was discussed by the research team that the method of refining and repeating the lesson study as Dudley (2015) suggests proved to have a positive impact on the outcome of the lesson.

During the SA process the children from school 2 used the same QR code dice (appendices C) as the children in school 1. Comparing the responses from the SA at school 1 and school 2 it was evident that the training had been successfully received, *'the tick list helped us a lot'* child 2A (appendices B). The children understood from the training that it was a personal opinion. Thus, when asked *'what do you like about your basket?'* the responses from the children differed to that of school 1 because they gave an overall summary of what they like about the basket and the process of working as a group. This supports the ARG (2002) statement that the children require training for SA to be successful.

It was also observed by the research team that the children's attitude to the activity altered in school 2 by the teacher emphasising throughout that it was okay if the egg did not survive, the important element was how they made the basket. This is evident in appendices B, child 2C stated that although the egg broke it was okay because the group would make the basket stronger next time. This supports DANZ (2009) and the NFER (2012) suggestion that for SA to be successfully used in a classroom environment there needs to be a positive ethos and a culture where the class celebration making improvements.

Reflecting, on the lesson study method in both schools it became evident that most of the findings were coherent with the literature that had been studied throughout the process, this supports the ARG (2002) and NFER (2012) statement that SA had been considered by professionals to be an effective method in improving the children's understanding of the learning outcome.

It was discussed by the research team that it would be interesting to repeat the sequence of lessons in school 1 refining the process of providing the children with training and a better understanding of how SA is used, and by providing the success criteria as a *'ticket list or method of success.'* However, due to the time restriction on the study it was noted that this was not a possibility and therefore limits the research team's findings. Consequently, another limitation that was discussed was the importance of the pupils' voice within this lesson study. During school 1 there was a concern throughout the discussion of the accuracy of the learners voice (Harris & Brown 2013), however, during the SA process at school 2 it became evident that the training and positive ethos within the class was mirrored in the response of the SA being honest and arguably a true reflection (DANZ (2009) and (NFER 2012).

### Recommendation

Regrettably, as previously stated this research was a small-scale study that was limited by time. Consequently, it is recommended that the findings are to be shared with professionals for the research to continue. This will allow the limited research surrounding SA (Harris & Brown 2013) to be explored and as a result the use of SA can be refined with the purpose to improve the children's understanding of the learning outcomes in all schools in Wales. Therefore, it is suggested that this research is repeated using the lesson study method, focusing on only one group to have a true understanding of that cohort's attainment, repeating the same sequence of lessons.

It is also recommended from this research study that there is a focus on providing the children with training using SA in school, this in turn would improve teacher practice when developing suitable success criteria (DANZ 2009) for there to be an improvement in the learning outcome. Furthermore, research should take place to explore if the use of SA is a valuable method of bridging the gap between different attainment learners, instead of just raising the higher attainers learning and outcome. It has also been highlighted throughout this research paper that for the successful implementation of SA in a school, there needs to be a positive ethos and a classroom culture that is encouraging and celebrates improvement (DANZ ,2009) and (NFER, 2012). It is therefore recommended that all staff in schools adapt this ethos and culture which in turn will allow the successful implementation of SA because it will encourage and give children the confidence to develop and become a true reflective learner.

## Conclusion

The purpose of this research study was to use the lesson study method to investigate the use of SA in a classroom. Specifically, it focused on refining a lesson to improve SA strategy where SA seemed to have little or not effect on the children's understanding of the learning outcome. Through research and experience as a classroom practitioner it was highlighted that while SA was being used in schools it was not an effective method. This was due to the children's lack of confidence, peer-relationships and the concern for the lack of accuracy when the children were assessing their own work (Van Gennip 2010 as cited in Gerristem, 1999).

Reflecting on the process, using the lesson study method proved to be an effective structure to conduct this research. Using the lesson study it allowed the research members to focus on one specific element (SA) to be studied, refined and improved in a classroom setting. Undertaking this research study with other professionals was productive, motivating and rewarding. Working within a research team proved to be effective whilst discussing elements of the lesson study because it was evident that the aspects of the lesson that was refined were found to be appropriate. It was decided by the research team that the process of refining and repeating lesson was an effective way of measuring the use of SA in the classroom. However, it was also discussed by the research team that there were limitations due to the time restriction it was not possible to refine and repeat the lesson a third time as Dudley (2015) suggests.

It was also discussed that the lesson study method proved be an effective design to facilitate the research because it allowed the research team to use multiple methods to gather data (Taber, 2007). Taber (2007) suggests that the collection of data enhances the strength and trustworthiness of the research. Nevertheless, it must be taken into consideration that the matters that were identified during the lesson study process were distinctive to the classes in school 1 and 2 and therefore can not be generalised. Also, it was acknowledged by the research team that due to the time limitations the classes used during the research project were from a small sample. Consequently, the two lesson study classes were from two different year groups and consisted of many different attainment levels which could have potentially had an impact on the results.

Nevertheless, using the lesson study method had a positive impact on the research because it allowed to learners a voice. As stated previously, it is evident from the ethics form that was submitted that it was vital that the children's voices were heard through the lesson study process and during the SA. However, as suggested by Harris & Brown (2013) there was a concern for the lack of accuracy throughout the process of SA due to the children's lack of training, confidence the possibilities of exaggeration. Therefore, it could be argued that this hindered the learners voice being a true reflection of what they felt.

This research study has also highlighted that for SA to be implemented successfully in schools the children need to have been given suitable and significant training (ARG, 2002). It has also become evident throughout relevant literature and the lesson study, that for SA to be successful it needs to be nurtured in a classroom that has a positive ethos and a culture that encourage children to make mistakes and improvements, (DANZ, 2009) and (NFER, 2012).

Finally, this research study has identified the use of the lesson study method to be useful and a motivating while reflecting on research and my own practice. As a result, I will use this research to inform my practice on my next school placement, ensuring that I plan a series of lessons that provide children with the opportunity to explore and understand SA. As Dudley (2015) suggests I will aim to use the lesson study method in my practice to develop elements of my teaching and learning to help improve the children's attainment and outcomes. Also, linking this research to my own practice, I will set an objective that NFER (2012) highlights as being the key success in implementing SA in the classroom. I will strive to provide the children with a classroom environment that is positive and celebrates the making of mistake not just the success. Thus, as a result would improve the learning and teaching in my classroom and encourage the children to be reflective through SA and myself as a practitioner.

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[https://servicesforeducation.co.uk/index.php/may-17-peer-and-self-assessment/1567-opportunities-and-obstacles-to-consider-when-using-peer-and-self-assessment-to-improve-student-learning-case-studies-into-teachers-implementation/file.html?option=com\\_docman&view=download&alias=1567-opportunities-and-obstacles-to-consider-when-using-peer-and-self-assessment-to-improve-student-learning-case-studies-into-teachers-implementation&category\\_slug=may-17-peer-and-self-assessment&Itemid=591](https://servicesforeducation.co.uk/index.php/may-17-peer-and-self-assessment/1567-opportunities-and-obstacles-to-consider-when-using-peer-and-self-assessment-to-improve-student-learning-case-studies-into-teachers-implementation/file.html?option=com_docman&view=download&alias=1567-opportunities-and-obstacles-to-consider-when-using-peer-and-self-assessment-to-improve-student-learning-case-studies-into-teachers-implementation&category_slug=may-17-peer-and-self-assessment&Itemid=591) accessed 12/04/2018

Appendix

Appendices A

School 1

|                     |                                                                                                                                                                                                                                                                      |   |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| ese<br><br>Child 1a | Comments                                                                                                                                                                                                                                                             |   |
|                     | Engaged well throughout. Took the leadership role within the group and was confident to share his ideas with others. Was able to quickly identify problems that may occur and reacted well using his problem solving skills.                                         |   |
|                     | Self Evaluation:<br>When asked what would you do different next time, he replied "I would surround it with newspaper and create a 'peep-hole', and make it look nicer with decorations. When asked what was important, he replied that "it needed to be a fair test" |   |
|                     | Leuven Well-Being Scale                                                                                                                                                                                                                                              | 5 |
|                     | Leuven Involvement Scale                                                                                                                                                                                                                                             | 4 |

|                 |                                                                                                                                                                                                                                                                                                   |   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Ash<br>Child 1b | Comments                                                                                                                                                                                                                                                                                          |   |
|                 | Had a clear idea of how best to protect the egg, and shared it with the group immediately. Came up with the idea to cut straws into small pieces for additional cushion and shared how it will fit into small gaps on the side of the basket.                                                     |   |
|                 | SE<br>When asked what she would do different, she replied "I wouldn't put the straws at the bottom but make a cushion around the side and the top." When asked what was most important, she replied "that everyone dropped from 1 metre." "The straws didn't do much padding but only look nice!" |   |
|                 | Leuven Well-Being Scale                                                                                                                                                                                                                                                                           | 3 |
|                 | Leuven Involvement Scale                                                                                                                                                                                                                                                                          | 4 |

|                   |                                                                                                                                                                                                                                 |   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Jesse<br>Child 1c | Comments                                                                                                                                                                                                                        |   |
|                   | Was excited to complete the challenge and showed willing to work independently. Took a short amount of time to become accustomed in working as a team and at times found it difficult to share ideas and negotiate with others. |   |
|                   | SE<br>When asked what he would do different, he replied "create a floating device like a hot air balloon" and "make it tighter"                                                                                                 |   |
|                   | Leuven Well-Being Scale                                                                                                                                                                                                         | 4 |
|                   | Leuven Involvement Scale                                                                                                                                                                                                        | 3 |

Appendices B

School 2

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Child 2a | <p><b>Comments</b></p> <p>Engaged well at the start, but got distracted with <del>other</del> materials towards the end of the activity. Took a step back and allowed other members of the group to take the lead and create a design.</p> <p><u>SE</u> When asked what would he do different next time, he replied "make a bigger pillow" and also when asked what he found difficult, he suggested working with the girls/other as a team, because he wanted to make his own.</p> |    |
|          | Leuven Well-Being Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 54 |
|          | Leuven Involvement Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 43 |

  

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Child 2b | <p><b>Comments</b></p> <p>Had high levels of engagement throughout the activity and had a clear understanding of the learning objectives and success criteria. Shared the idea of using Sellotape to prevent the eggs from falling out and not shaking in the basket.</p> <p><u>SE</u> When asked what worked well, she replied "the pompoms because they were so squiggly and soft," "like a pillow." When asked what would you do different next time, she replied "use more pompoms and straws."</p> |   |
|          | Leuven Well-Being Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5 |
|          | Leuven Involvement Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4 |

  

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| Child 2c | <p><b>Comments</b></p> <p>Had a clear understanding of the learning objectives, and was able to communicate her ideas to other members in the group. Shared the idea to create a "fence" around the eggs so that it would not fall out of the basket.</p> <p><u>SE</u> When asked what was the most important thing of the activity, she replied "you had to see the egg." Also, when asked what proved the hardest part, she replied "the egg kept moving", and when asked what she did to fix this problem, she said "I built a fence and Sellotaped the egg."</p> |   |
|          | Leuven Well-Being Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5 |
|          | Leuven Involvement Scale                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4 |

Appendices C



## Appendices D

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                                                                                                                                     |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Name of Trainee: Session ref:</b><br><b>Personal Training Target(s):</b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Date:</b> 29/01/18 <b>Class:</b> Nursery/Reception<br><b>No of chn:</b> 24-30 <b>Age:</b> 3-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                              | <b>Foundation Phase Focus Plan</b><br><b>2d</b>  |  |
| <b>Learning objectives/intentions:</b><br>WALT – manipulate and explore materials in a problem-solving activity                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Success Criteria:</b><br>WILF –                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                              | <b>Meeting learners' needs:</b>                                                                                                     |  |
| <b>Introduction/plenary tasks</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Main activities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Resources/Key Vocabulary</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Assessment for Learning (strategies and opportunities)</b>                                                                                                                                                |                                                                                                                                     |  |
| <u><b>Introduction</b></u><br>Can you protect a falling egg?                                                                                                                                                                                                                                                                                                                                                                                                                       | <u><b>Trainee focused task</b></u> (purpose, outline of trainee's role and children's learning):<br><b>Can you protect a falling egg?</b><br>Challenge –<br>Design and build a system that will protect an egg from a 1 metre drop.<br>Pupils to work in a small group and encouraged to discuss a suitable design and work as a team to create it.<br><u><b>Additional adult tasks</b></u> (purpose, outline of additional adults' role and children's learning): | <u><b>Key questions</b></u> <ul style="list-style-type: none"> <li>What happens when you drop an egg?</li> <li>What if you dropped the egg on a pillow or something soft?</li> </ul> Higher order: <ul style="list-style-type: none"> <li>What can we do to stop the egg from breaking?</li> <li>What materials will be good for this?</li> </ul> <u><b>Vocabulary</b></u> <ul style="list-style-type: none"> <li>Cushion</li> <li>Surface</li> </ul> <u><b>Resources</b></u> <ul style="list-style-type: none"> <li>Eggs</li> <li>Paper towels</li> <li>Tape</li> <li>Straws</li> <li>Recycled paper</li> <li>Container/basket</li> </ul> | Thinking time<br>Lollipop sticks<br>Think pair share                                                                                                                                                         |                                                                                                                                     |  |
| <u><b>Plenary</b></u><br>Self-evaluation:<br>Pupils to scan QR codes and discuss key self-evaluation questions such as: <ul style="list-style-type: none"> <li>✓ What would do differently next time?</li> <li>✓ What did you need to do?</li> <li>✓ What materials worked best and why?</li> <li>✓ what did you like the best about the lesson?</li> <li>✓ What problems did you experience?</li> <li>✓ Did the QR codes help you pick what you liked about your work?</li> </ul> | <u><b>Independent learning opportunities:</b></u>                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                                                                                                                                     |  |
| <u><b>Curriculum coverage (range and skills)</b></u> <ul style="list-style-type: none"> <li>choose appropriate materials, ingredients, equipment, tools/utensils and techniques, from a range made available to them</li> </ul>                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                                                                                                                                     |  |
| <u><b>Literacy (LNF)</b></u> <ul style="list-style-type: none"> <li>exchange ideas in one-to-one and small group discussions, e.g. with friends</li> <li>take part in activities alongside others, with some interaction.</li> </ul>                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <u><b>Numeracy (LNF)</b></u> <ul style="list-style-type: none"> <li>identify steps to complete the task or reach a solution</li> <li>use knowledge and practical experience to inform estimations</li> </ul> |                                                                                                                                     |  |
| <u><b>DCF</b></u> <ul style="list-style-type: none"> <li>control devices by giving them instructions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    | <u><b>Thinking</b></u> <ul style="list-style-type: none"> <li>determining success criteria</li> <li>determining the process/method and strategy</li> </ul>                                                                                                                                                                                                                                                                                                         | <u><b>ESDGC</b></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <u><b>YCC</b></u>                                                                                                                                                                                            |                                                                                                                                     |  |

## Appendices E

# Model Beirniad Wedi Adfyfyrio (BWA) Assisted Reflective Conclusions (ARC) Model

**Dyddiad/Date:**

**Digwyddiad critigol (Ffocws)/Critical incident (focus): Lesson study (School 1)**

| Profiad/ Experience                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Teimladau/ Feelings</b><br/>Beth yw eich teimladau ynghylch y profiad?<br/>"What are your feelings regarding the experience?"</p>                                                                                                                                                                                                                                    | <p>Overall I am very pleased how the lesson study went. The children remained engaged throughout and remained on task. I feel that I handled the transition from the carpet, to the work station to the outside learning area well, with very little disruption.</p>                                |
| <p><b>Cofio a Deall/ Remember and Understand</b><br/>Allwch chi restru'r agweddau ar y profiad dysgu a aeth yn dda?<br/>"Can you list the aspects of the learning experience that went well?"<br/><br/>Pa elfennau o'r profiad dysgu oedd yn siomedig?<br/>"What were the elements of the learning experience that were disappointing?"</p>                                | <p>The introduction to the lesson went very well and using the Easter bunny as hook worked well. Dropping the egg and it smashing on the floor was exciting for the children and captured their attention, it also allowed them to visually understand what the activity was asking them to do.</p> |
| <p><b>Gwerthuso a dadansoddi/ Evaluate and analyse</b><br/>Beth fyddwch chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol?<br/>"What will you keep the same to ensure effective teaching and learning in the future?"<br/><br/>Beth oedd achos yr elfen siomedig bwysicaf?<br/>"What was the cause of the most important disappointing element?"</p> | <p>Prior to the lesson we had discussed the prediction that the higher attainers would refer to the success criteria. However, it was interesting to observe that it was the children who were of lower attainment that used the success criteria as a 'how to' method.</p>                         |
| <p><b>Casgliadau a chymau gweithredu/ Conclusions and actions</b><br/>Beth yw eich atebion posibl i'r materiau siomedig a nodwyd?<br/>"What are your possible solutions to the disappointing issues identified?"<br/><br/>Beth ydych yn mynd i'w wneud nesaf?<br/>"What will you do next?"</p>                                                                             | <p>Our next step will be to refine the lesson study. We have discussed that we will refine the introduction to provide trainee or the children using SA and we will also provide the children with a hard copy of the tick list to refer to throughout the activity.</p>                            |
| Y profiad newydd / Transformed experience                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                     |