

Utilising the Entrecomp Framework, critically evaluate your own creativity and enterprise and consider how you might be able to develop the creative and enterprising skills of primary learners through your own pedagogy.

Creativity is a challenging concept to define (Wilson, 2009). It has been defined as ‘mess, freedom, jumbled thoughts, words, and deeds each fighting to claim their own space in the mind’ (Thorne, 2007, p. 17). Fumoto (2010) explains that all definitions of creativity should be context specific, stating that creativity takes different forms in different situations. With this in mind, any definition must be broad enough to accommodate creativity in its many forms. The National Advisory Committee on Creative and Cultural Education (NACCCE) (1999, p.30) defines creativity as an ‘imaginative activity fashioned so as to produce outcomes that are both original and of value’. Here, NACCCE state that in order for an idea to be considered creative, it must have value, therefore, be specific to the context in agreement with Fumoto’s statement. The definition by the NACCCE will be carried forward in the forthcoming.

Enterprise Education can be described as pedagogy with the aim of enhancing pupils’ capacity to produce ideas, as well as possessing the competencies to follow these ideas through to completion (QAA, 2018). QAA explains that Enterprise Education is separate from Entrepreneurship Education in that it does not aim to apply these skills to business. It could be argued that Enterprise Education occurs when creativity is taught, and ideas are progressed to their full potential.

With the introduction of Donaldson’s (2015) Successful Futures curriculum, it is evident that education in Wales is developing with a view to achieve the requirements of modern learners. Donaldson establishes the importance of creativity and enterprise skills in the twenty-first century by identifying the development of ‘enterprising, creative contributors’ as one of the four purposes of the new curriculum. Donaldson explains that learners should be able to make connections between segments of knowledge in order to generate ideas and solve problems.

The idea of teaching learners to be creative has its fans as well as its critics. It can be argued that creativity allows freedom to explore and engage with the world without judgement (Vanlint, 2017). This is supported by TeachThought (2019) who also explain that creativity

is multi-disciplinary and provides a sense of purpose. This is justified by Donaldson (2015) who states that any curriculum should be engaging, encouraging learners to enjoy learning and relish in the challenge of mastering new skills. Donaldson also states that to ensure a successful curriculum, learners should be provided with the opportunity to think creatively and take part in problem-solving activities.

However, Berreby (2011) states that people do not associate creativity with good leadership skills and that other skills are considered to be more important. Furthermore, it is suggested that being creative and producing ideas may seem beneficial when considered in abstract, however, they tend to be destructive in operation (Levitt, 2002). Higonía (2016) explains that a disadvantage of teaching for creativity is time. Higonía states that applying time constraints to a creative activity stunts learners' productivity and makes the task less effective overall. It has also been implied that creative thinkers have poorer impulse control with a lower threshold for boredom (Premuzic, 2015).

I will be referring to the Entrecomp Framework to assess my own creativity and enterprising skills (European Union, 2018). This framework describes the skills needed to be entrepreneurial in the twenty-first century. The Entrecomp Framework provides a visual representation of a range of creative and enterprise skills at different competency levels. This makes it an informative tool to use when assessing one's creativity. However, many of the skills and competency levels that are detailed on the framework are not relevant to creativity in the view of Enterprise Education, holding more relation to Entrepreneurship Education. These skills hold more value in the context of creating a business, than in the context of generating ideas and developing skills.

Within the competence of 'Creativity' there are five threads. The first thread is 'be curious and open'. I would place myself at the 'Intermediate' level of proficiency at level 3 as I am beginning to experiment by implementing my established skills into new situations. On my Professional Teaching Experience (PTE) I have created games using ICT that have been used in mathematics lessons, which has been commented on throughout my formative assessments (Appendix 1).

Curiosity can be defined as 'the urge to know more' (Clark, Harbaugh & Seider, 2019, pp. 98). Curiosity is a trait that may be beneficial in allowing me to develop new, innovative

teaching methods in order to progress not only my established skills, but ones which I am yet to develop. In order to progress onto level 4, I would like to develop my use of divergent thinking. Divergent thinking is the production of many different solutions to open-ended problems (Fumoto, 2012). In support, Runco (1991) states that divergent thinking is vital in creativity production. I believe that developing my divergent thinking will allow me to create more inventive lesson plans and take more risks to find solutions that meet my requirements. For example, I could develop my methods of teaching long division by questioning if there were other ways to teach it, other than using a whiteboard. This may be essential in developing my creativity as a whole as Robinson (2016) states that divergent thinking is an essential capacity for creativity. Divergent thinking also correlates to the idea of lateral thinking, a theory by De Bono (1971). De Bono explains that lateral thinking is used to generate as many different approaches as possible and that when an idea is chosen and carried forward, vertical thinking is taking place. Improving my lateral thinking may help me to become more creative in my teaching approaches, allowing me to generate new ways to develop learning in all of the areas of learning. However, according to De Bono, improving my vertical thinking is likely to develop my decision-making skills, allowing me to select the most effective ideas that have been produced via the divergent, lateral thinking process.

The second thread is 'develop ideas'. I would place myself at the 'Foundation' proficiency level at level 2 as I am able to use my research to develop ideas that are able to be implemented into the classroom. Appendix 2 shows a segment from one of my formative assessments from PTE where it is noted that my I am able to produce ideas in my planning, supporting these ideas with research to ensure that they are valuable for the learners. The next proficiency level requires experimentation. In order to progress, I will begin to experiment with different teaching techniques and attempt to use the resources that are available to me in an effective and innovative way. I believe that to achieve this, I need to reduce my functional fixedness. Functional fixedness is a cognitive tendency to only see objects as having the purpose that they were made for (Cherry, 2019). Guildford (1967) developed the 'Alternative Uses Test' which was designed to predict creativity. In this test, participants were asked to suggest unconventional ways to use common objects. It could be argued that in this test, Guildford is not assessing creativity as a whole, but is instead assessing participants' Functional Fixedness. Despite it being suggested that Functional Fixedness is a negative trait, Cherry progresses to explain that functional fixedness often acts as a shortcut to determine practical uses for an object, aiding the brain in high-pressure situations. It could be suggested

that reducing my functional fixedness would allow me to use a wider range of resources in my teaching, hence helping to reduce the functional fixedness of pupils. To accomplish this, Boyd (2013) suggests engaging with problem solving activities to encourage the brain to view problems in a new way.

Another thread is 'Define Problems'. I believe that I am at the beginning stages of developing this thread, so would assess myself as being at Foundation Level 1. I believe I am at this stage as I am able to approach problems with curiosity. For example, on PTE I was faced with the task of creating a maths activity based on Chinese New Year. In order to ensure learners gained a valuable experience, I decided to create a Chinese Restaurant role play area in the class (Appendix 3). Learners who were 'customers' were sitting at tables behind placemats with ordinal numbers on them, and discussing who would go first, who would go second, and who would go third. The customers would then order their meals and pay for them using the correct money. Meanwhile, other learners were taking orders, with higher attaining learners being tasked with providing change, with more complex sums of money being used. This activity engaged learners well and their understanding of the use of money and ordinal numbers developed significantly as a result. However, I do need to develop my ability to explore problems and generate multiple solutions. There were a range of activities that could've been used to develop these skills whilst linking to the theme, I believe that I may have been too quick to use vertical thinking (De Bono, 1971). Sommer (2014) highlights the importance of traits such as creativity and intuition for those in leadership positions in the twenty-first century. With this in mind, it is vital that I develop my strength within this strand in order to be a successful practitioner leading successful learners.

The next thread is 'Design Value'. I would place my competency level at Foundation Level 2. I have demonstrated my ability to improve activities to suit the needs of learners in my class by identifying that higher attaining learners in a Nursery class were able to write easily on paper. For this reason, I decided to provide these learners with the experience to practise their handwriting on the floor of the playground using a larger writing utensil (Appendix 4). Substituting a pencil for chalk, providing a rough writing surface, and removing guidelines provided a good level of challenge to be beneficial to the pupils.

The next competency level requires the ability to identify the functions of a prototype to indicate the value of an idea. In order to achieve this, it could be suggested that I develop the

scholarly habits of mind (Costa et al, 2000). The habits of mind value evidence, reflection and logic over reflex and emotion in order to achieve a well-rounded understanding of a topic. Costa et al states that 'Thinking Flexibly' is a habit of mind that requires the learner to change perspectives to generate a range of different options to consider. The value of an idea varies depending on the perspective in which it is viewed, it may be suggested that being able to think flexibly would allow someone to be more creative as 'value' is relative to the context. This would be supported by Thorne (2007) who stated that creativity was a culmination of jumbled thoughts, these could potentially be ideas from a range of perspectives that would have value in different contexts. An additional habit of mind to consider is 'Remaining Open to Continuous Learning' as a prototype is not a complete product, functions and elements of it are subject to change after a trial. Without this habit of mind, it is possible that elements that were not beneficial to the prototype would not be altered and improved. One of Donaldson's (2015) purposes of the curriculum mentions learners that are prepared to learn throughout their lives. This requires learners to remain open to continuous learning, as suggested by Costa. Developing the habits of mind would allow me to improve my practice by designing activities with the perspectives of different types of learners in my class in mind.

The final thread is 'Be Innovative'. Innovation can be described as challenging the ways in which things are conventionally done by combining ideas from different contexts to form one creative idea (Greenwald, 2014). I would place my competency level at Foundation Level 2 as I am able to describe how different innovations have transformed the way in which we live, however, I am not yet able to distinguish between the different types of innovation. It has been speculated that many of the most effective innovations exhibit a combination of technological interventions (Rowson et al. 2012). Appendix 5 is an ARC reflection where I had used a virtual reality headset to encourage pupils to become immersed in a scene when learning about the different elements of imagery. The scene that learners were describing was underwater in a tropical climate. Using the headset put the learners into the scene themselves, transforming their view of the task by transforming it into a real-life experience. Woods (1990) identified innovation as a key characteristic of creativity, alongside ownership, relevance and control. Again, it is suggested that, in order for an idea to be considered creative, it must have value, and be relevant. Woods states that a combination of ownership, relevance and control leads to innovation. In order to improve my competency level in this

thread, Woods would suggest combining the three other characteristics in a task, in order to lead to an innovative response.

An additional competency that I believe is vital for creativity and enterprising is 'Working with others', particularly the 'work together' thread. I would place myself at Foundation Level 1 in this thread as I am able to involve others when I am being creative, for example when lesson planning. Appendix 6 documents comments made in a formative assessment with regard to how I discuss my planning with others so feedback can be implemented before the lesson takes place. Yogalakshmi (2019) explains that creativity is not purely mental, but also a social cognitive process, generating ideas using a combination of creative minds. This view is supported by Brolin (1992) who states that a creative person is often open to influences beyond themselves. It could be synthesised that both authors believe that the creative process should involve multiple people and a range of opinions. With this in mind, in order to progress it is vital that I begin to contribute to creative activities, such as long-term planning on PTE.

An alternative test for creativity is the Sommer-Sommer Brain Test (Sommer-Sommer, 2019). This 30-second, online test aims to identify which side of the brain the participant relies upon most. This result can then be used to identify the qualities of the person, associated with their stronger side. Upon completing the 30-second, online test, I received the result that I use both sides of my brain equally (Appendix 7). This suggests that I rely on rules and logic, equally to how I rely on creativity and curiosity. This test appears to be far more intuitive than the Entrecomp Framework, making it easier for young learners to assess their own creativity and understand the different sides of the brain, being able to identify different activities that could be used to strengthen each side.

Dweck (2012) proclaims that a growth mindset is when a learner is confident that they are able to develop their abilities. Dweck further explains that when a learner has a growth mindset, they visualise themselves as work in progress with endless creative possibilities. The author also explains that children with fixed mindsets avoid challenge as they believe that their abilities are static. De Bonno (1992) implies that those with a fixed mindset, who demonstrate 'bad attitudes', do so as a result of having little confidence in their thinking, having not been taught how to think effectively. In order to convert learners with a fixed mindset into growth-mindset learners, it may be beneficial to incorporate confidence building

interventions. Fraser (2018) states that one-off interventions are not suitable to promote a growth mindset in learners on a long-term basis. It is further suggested that a productive and sustainable approach is required to encourage learners to maintain a growth mindset throughout their lives.

Price (2015) recommends five methods of fostering a growth mindset including: being open to new ideas, and identifying connections in different contexts. These methods would be beneficial in not only promoting a growth mindset in learners, but also in developing creativity and enterprise skills. Von Oech (1973) suggests that errors should be encouraged and celebrated as they are signs that the learner is diverging from their common train-of-thought. The author also recommends that pupils are made aware of the benefits of failure: learning what does not work, and having the chance to attempt a new approach. This approach to errors and failures is likely to encourage learners to fully embrace a growth mindset and try to involve it in all future learning.

If the theory of 'Growth Mindset' is to be implemented into the classroom, it is vital that it is effectively explained to learners. Papadopoulos (2019) alleges that if the theory is misinterpreted, learners may be likely to persist with learning strategies that are ineffective as a result of focusing on the effort they are making. The author also highlights the issues associated with learners becoming frustrated when they display fixed mindset behaviours, even when they are attempting to fully apply themselves to a task. If this method was to be implemented in the classroom, the role of the practitioner would be to encourage progression by providing learners with activities to promote growth mindset behaviours. The consistent use of the technique will certify its value for pupils, even those who may be reluctant to engage with the technique initially.

Von Oech (1973) has identified ten fixed mindset style attitudes as being 'mental locks'. Examples of mental locks include: looking purely for the right answer, and remaining within an area of expertise. In order to avoid these mental locks, Von Oech recommends what he has labelled as a 'whack on the side of the head' (Von Oech, 1973, pp. 24), where a learner changes their typical routine in an attempt to dislodge the locks. It is also recommended that learners are taught to identify their mental locks in order to temporarily forget them when attempting to generate ideas. Von Oech has identified a selection of creativity strategies and compiled them into a 'Creative Whack Pack'. The pack of sixty cards has range of potential

uses, including introducing them into creative tasks to encourage learners to attempt it differently (Albagquintana, 2015). White (2007) supports the use of this pack for the development of creativity, explaining that it provokes creativity and inspires thinking. Within this method, the educator will be leading the learning as it will be the responsibility of the teacher to select elements that relate to the Area of Learning.

As discussed, there are many different definitions of creativity, thus making it challenging to develop methods of assessing it (David, 2014). Sternberg (2009) argues that creativity is needed in order to test creativity. Sternberg maintains that to assess a learner's creativity is to attempt to understand how they imagine, invent, discover, create, make predictions, and take assumptions. This leads the reader to believe that a learner's creativity can only be assessed efficiently if the practitioner themselves is creative to a similar degree.

Guildford (1967) refined a method to test divergent thinking that assesses four distinct elements: fluidity, the quantity of responses; flexibility, the quantity of different categories; originality, how distinct responses were; and elaboration, the complexity of the response. Brookhart (2013) recommends the implementation of these elements into an Assessment for Learning (AfL) technique where pupils are made aware that these elements will be assessed in certain tasks to allow them to demonstrate their creativity effectively. Brookhart states that providing learners with the criteria for each element of creativity is likely to increase pupils' awareness of them as well as increasing their capabilities within each element. This method is also likely to increase the value of creativity to learners as it is often the case that creative responses and solutions are not significantly rewarded with better grades and results (Sommer, 2014).

Another method of developing creative and enterprise skills in learners is utilising De Bono's (2000) SCAMPER technique. De Bono explains that SCAMPER is an acronym, with each letter referring to a thinking process. The processes are: Substitute, identifying elements that can be exchanged; Combine, merging ideas to produce a more effective output; Adapt, discussing modifications that could improve ideas; Minify/Magnify, adjust the scale of the idea; Put to another use, using an idea in a new context; Eliminate, removing an element of an idea to make it more suitable for purpose; and Reverse, rearranging an idea to explore its potential. This technique is supported by Elmansy (2015), who explains that it is a direct method for creative thinking and problem-solving, allowing the user to explore problems and

scenarios from a range of perspectives to arrive at the best decisions. Further support is evident from Toraman, et al. (2013) who articulate that the SCAMPER technique stretches learners' thinking and allows them to transition from a 'right or wrong' mindset, to one with the flexibility to be creative. There are however limitations to this technique. Toraman, et al. state that there are limited opportunities to apply the SCAMPER technique, implying that it is difficult to implement. The author suggests that this technique should only be implemented when learners are looking for solutions to problems. This method will initially require the practitioner to lead the learning, to familiarise the pupils with the technique. However, once the pupils are proficient in the use of SCAMPER, the educator will become a facilitator, allowing the learner to use it their own way.

In order to promote creativity, Ryan (1990) suggests Thinking Keys to 'unlock' creative and critical thinking. Ryan explains that there are twenty keys covering a range of topics, allowing them to be used across all curriculum areas and with the full spectrum of learners. Examples of Keys include 'What if', where learners produce questions that promote 'what if' thinking, and 'Brainstorming', where learners are asked to suggest solutions to problems (Thinking Schools Academy Trust, 2019). It could be recommended that in order to increase pupils' creativity, Thinking Keys should be identified at the beginning of every day. This would introduce learners to a new thinking skill every day to develop their creative and critical thinking skills. Similarly to the 'Creativity Whack Pack' method, the practitioner is likely to lead the implementation of this technique as the large selection of topics may be confusing for learners.

However, it is the belief of many that curiosity should not be demanded, it should be sparked by creativity and imagination (LEGO Foundation, 2019). Furthermore, Collard (2019) depicts that creative teaching and learning requires a flexible use of time to suit the activity, rather than an activity to fill a one-hour time slot. Collard states that this allows learners to take time to develop their ideas and consider their next steps. Despite this, I believe that using Thinking Keys at the beginning of a task is a useful method to prompt alternative thinking and develop pupils' creative and critical thinking skills on a long-term basis.

It has long been assumed that creative thinking is an independent process that could only be developed individually. Dewey (1933) identifies the importance of children developing independent ideas and curiosity. Whilst Piaget (1948) identifies children as being 'lone

scientists' and independent learners. Alongside this, there is evidence to suggest that group work may inhibit intellectual performance as groups are likely to share common ideas, rather than focus on unique solutions (Paulus & Nijstad, 2003). Moreover, Paulus & Nijstad allege that exposure to the ideas of others may limit a learner's capability to think divergently.

Despite this, it has been said that collaborating with others allows for the sharing of ideas between peers, cognitively stimulating creativity (Dzindolet, Nicholas & Paulus, 2012). In parallel, Pestalozzi reported that children should learn in groups, reporting that social interaction is fundamental for development (Pound, 2006). Piaget (1930) theorises that collective creativity is a spectacle that is responsible for a large percentage of inventions that would not have been possible without collaboration. Likewise, Gomez (2007) claims that creativity can be advanced by meticulously selecting group activities although individual instruction is also required, similarly to most skills. In order to promote creativity Paulus & Nijstad (2003) recommend group writing where all group members are able to share their ideas at the same time, whilst also monitoring the ideas of their peers. There is an element of independence in this method as learners are recording their own ideas, in preparation for a discussion afterwards. This also prevents premature exposure to the ideas of others in order to allow divergent thinking to progress.

Runco (1993) highlights the importance of the practitioner when encouraging children to realise their creative potential and exceed their expectations. Runco states that teachers should be involved in the learner's personal construction of knowledge. Despite this, it is vital that this is done sensitively as Malaguzzi (1993) explains that children must be provided with opportunities to construct their own learning with limited adult intervention. Malaguzzi states that these activities are likely to instil a joy of learning in pupils as they are able to learn their own way. Often, this joy can be reached through play. Russ (2004) explains that play holds direct links with creativity as children are using divergent thinking to provide contexts and create stories. Constructive Alignment is an approach to teaching that ensures the optimal conditions for learning (Biggs, 2003). Biggs explains that students are 'constructing' meanings through different activities, learners are not being fed knowledge by the teacher, they are instead being tasked with finding it for themselves. This element is supported by Piaget (1936) who theorises that children construct a mental model of the world as they learn, adding to and changing elements as they progress. Biggs states the 'Alignment' element of the approach refers to the set task being aligned with the intended outcomes. The

author appears to scrutinise this element, expressing that the learner is ‘trapped’, unable to escape the task without meeting the success criteria. If adults become too involved and make children’s play too prescriptive, it is possible that they may discourage them from immersing themselves in fantasy or taking on more complex ideas in play.

In order to develop the creative and enterprising skills of primary learners, it could be suggested that andragogy may be more beneficial than pedagogy (Knowles, 1973). Pedagogy is defined as the science and art of teaching children (Kapur, 2015). Knowles defines andragogy as the science and art of assisting adults in learning, stating that andragogy follows a problem-solving approach to learning, opposing to the didactic method of pedagogy. Andragogy is described by Kapur as being self-regulated and self-directed, where the learners contribute to what they would like to learn. This method of teaching is concerned with meta-cognition, where pupils are navigating knowledge and self-regulating their learning, encouraging them to think about their own learning and development. Within andragogy, the practitioner is purely a facilitator to the learning.

Andragogy requires pupils to work at a higher metacognitive level than pedagogy, as pedagogy does not require them to self-regulate and take responsibility for their own learning (Knowles, 1980). Led by teachers and with little contribution from pupils, Knowles states that pedagogy is concerned with cognition, the realisation and understanding of knowledge. Providing choice often provokes a positive response in pupils, increasing the likelihood that they will engage in the task (HMIE, 2006). Pupil choice is strongly supported by Estyn (2016) who states that pupil participation should be promoted and an integral part of the vision and ethos of a school. Estyn further discuss that when inspected, high achieving schools ensured that pupils were involved in decisions that would impact them, for example teaching, and learning experiences. Furthermore, it is the right of all children to express their views in matters that affect them, these views should be taken seriously and considered at all times (UNCRC, Article 12, 1989).

However, it is evident that andragogy as a teaching method may not be appropriate for all age groups as it is consistently referred to by Knowles (1980) and Kapur (2015) as a learning theory for adults. Kapur states that both pedagogy and andragogy are on a continuum, explaining that learners progress from one to the other as they mature. With this in mind, it

could be recommended that elements of andragogy are implemented into pupils' learning beginning in Key Stage 2.

To conclude, in order to develop the creative and enterprising skills of primary learners, it is vital that I endeavour to enhance my own. Using the Entrecomp Framework, I am able to identify the threads which I would like to develop in order to convey the importance of creativity to learners. Although the framework does make frequent reference to Entrepreneurship Education, it is possible to bypass these elements if irrelevant. The detail provided for each progression step within the framework provides clear direction for the user to improve their performance in each thread. In order to progress in my creativity, it can be recommended that I strive to improve my divergent thinking, functional fixedness, and frequently employ a selection of habits of mind. As Sternberg (2009) speculates, a practitioner cannot assess a learner's creativity accurately if they themselves do not exercise their creativity to its full potential.

It is of upmost importance that the practitioner is wholly invested in encouraging learners to reach their full creative potential (Runco, 1993). Although Runco supports practitioners being involved in learners' construction of knowledge, it is imperative that they are also given opportunities to do so independently (Malaguzzi, 1993). This may be done through play as children often think divergently to create stories and contexts for their self-lead activities (Russ, 2004). In order to monitor the input of the practitioner in learning, the teaching method of andragogy may be advisable. The emphasis on pupil-choice and leadership ensures that learners are engaged in the tasks at hand. Pupil choice is also a prominent feature in the ethos of the highest performing schools (Estyn, 2016).

Evidence suggests that group work may encourage the production of common ideas that lack individuality (Paulus & Nijstad, 2003). It has also been suggested that collaborative tasks limit learners' divergent thinking capabilities. With this in mind, children should be offered chances to form independent ideas and allow their own creativity to prosper (Dewey, 1933). On the other hand, the sharing of ideas has been known to cognitively stimulate creative thinking (Dzindolet, Nicholas & Paulus, 2012). Furthermore, collaborative creativity has been liable for many inventions as individuals are able to adapt and add to ideas to produce a more valuable outcome (Piaget, 1930). In a bid to achieve the best elements of group work, without stunting learners' creative flow, group writing followed by a group discussion would

be recommended (Paulus & Nijstad, 2003). This allows learners to share all of their ideas in detail, whilst also considering the ideas of others.

Learners should be encouraged to adopt a 'Growth Mindset' approach to creativity. This ensures that they possess the confidence to step out of their comfort zones to progress their skills and abilities (Dweck, 2012). A pupil who is displaying 'Fixed Mindset' behaviours may have little confidence in their abilities and may not have as developed thinking methods as others (De Bonno, 1992). Confidence building interventions would be recommended to encourage those who need them to visualise themselves as a work-in-progress, and make the relevant steps to achieve their full potential.

The SCAMPER technique provides a range of perspectives on an idea and can be recommended in order to encourage those with a fixed-mindset to transition from 'right or wrong' thinking, and into a flexible, creative frame of mind (Toraman, et al. 2013). This method may be best employed in a problem-solving context. Thinking Keys may be a more flexible approach to encouraging creativity in the classroom as the vast selection of topics ensures that at least one should be applicable to each Area of Learning (Ryan, 1990). However, creativity should be a natural addition to a task. Learners' curiosity should be sparked by their imagination to supplement the task holistically, rather than forcing links in order to meet a requirement (LEGO Foundation, 2019).

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Appendices

Appendix 1

PEDAGOGY- Refining teaching (towards sustained highly effective practice)

Not on track

- **Comments and Evidence**
- **Targets for improvement and suggested ways forward**

Jade began her lesson with a Big Little Maths session followed by sending the children off in their groups to the two support staff. Work was planned for each group. During the lesson there were links to the reading strands of LNF. Jade created her own ICT game to introduce her activity to the group. She is becoming increasingly aware of individual needs and targets. The observation confirmed how Jade is able to deliver a planned lesson but needs to work towards recognising when adaptations are needed to ensure the children learn rather than what they will do. Jade's lesson showed an ability to engage most children who appeared to enjoy the activities set. Target :- To be aware that lessons may need adapting if children are not gaining an understanding of intended learning objective.

Professional Learning

On track

- **Comments and Evidence**
- **Targets for improvement and suggested ways forward**

Following discussions of future lessons Jade regularly carries out personal research in order to support planning, teaching and assessment effectively. She is now using more age appropriate resources to support the children's learning. Jade herself has very good ICT skills and is becoming more competent at including ICT skills in her planning and lessons.

Appendix 2

Professional Learning

On track

- **Comments and Evidence**
- **Targets for improvement and suggested ways forward**

Following discussions of future lessons Jade regularly carries out personal research in order to support planning, teaching and assessment effectively. She is now using more age appropriate resources to support the children's learning. Jade herself has very good ICT skills and is becoming more competent at including ICT skills in her planning and lessons.

Appendix 3



Appendix 4

Casgliadau a chamau gweithredu/ <i>Conclusions and actions</i> Beth yw eich atebion posibl i'r materion siomedig a nodwyd? <i>What are your possible solutions to the disappointing issues identified?</i> Beth ydych yn mynd i'w wneud nesaf? <i>What will you do next?</i>	Plan to complete more activities that aim to develop the children's fine manipulative skills before repeating a handwriting activity to assess for change. Repeat the activity forming the letter 'p' outside using chalk. It will be made more difficult by the rougher writing surface, the larger writing utensil and the lack of guidelines.
Y profiad newydd / <i>Transformed experience</i>	

Appendix 5

Gwerthuso a dadansoddi/ <i>Evaluate and analyse</i> Beth fyddych chi'n cadw'r un fath i sicrhau dysgu ac addysgu effeithiol yn y dyfodol? <i>"What will you keep the same to ensure effective teaching and learning in the future?"</i> Beth oedd achos yr elfen siomedig bwysicaf? <i>"What was the cause of the most important disappointing element?"</i>	I will include interactive, pupil-lead activities such as this again, as well as using welsh efficiently and including paired work. I used both hands-up and no-hands up questioning in order to ensure that pupils were discussing their work in their partner-talk-time. I will call the class back mid-way through to gage a general understanding of where everyone is, but I will do it more often. I will use a Virtual Reality headset when teaching imagery to allow pupils to become immersed in the situation that they are describing using twenty-first century technology. The pupils thoroughly enjoyed being able to use a new, innovative piece of technology as they enjoyed imagining that they were underwater using the VR headset as a stimulus.
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Appendix 6

- **Comments and Evidence**
- **Targets for improvement and suggested ways forward**

Jade has settled into the Reception class well and is showing a growing level of independence in teaching and monitoring. Jade is developing a good ability at reflecting on own practice and the impact it has on learners. She willingly discusses her lessons with myself and others and is always willing to take advice. This has been particularly evident when telling stories eg. becoming more expressive and controlling the behaviour of the class. Jade shows a caring attitude to the pupils.

Appendix 7

