



Cross-Curricular Responsibilities



Key references
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Abstract

The intended purpose for this poster is to demonstrate how the three cross-curricular responsibilities: Literacy, Numeracy and Digital Competence can be embedded into the curriculum through a variety of methods and approaches to teaching. Donaldson (2015) indicates that integrating all three responsibilities is significant to enhancing a child's development, preparing them with correct skills for the evolving world. Gardner (2004, cited in Barnes, 2015, p. 6) states that acquisition of all basic skills and competences should be integrated into our learning to develop understanding and meaning on important themes and discussions. Adhering to this, Beauchamp (2016) and Estyn (2018) indicates that for effective cross-curricular pedagogy, learning has to be meaningful and delivered in a variety of contexts. The chosen year group will be a Year One class, with a range of diverse abilities within the class. Barnes' (2015) taxonomy acknowledges that cross-curricular approaches enhance creativity, critical thinking and challenge through various lesson intentions and styles to learning. Therefore, for the purpose of this poster, the preferred models of learning will include a thematic-based approach and an opportunistic approach through two different themes of using an author to stimulate the learning experience and Animals (e.g. Habitats). Both themes will be a term long where model one will commence first and model two would be the second term.

Two Cross-Curricular Models

Theme-Based Learning

In accordance to Barnes (2015), effective theme-based learning consists of applying a theme across the whole curriculum whereby only using additional subjects that are suitable to the learners and deepens understanding is essential. For instance, the diagram in figure one adapted from Barnes' taxonomy (ibid.) demonstrates the use of theme-based learning.

Integrating theme based learning into the school curriculum allows practitioners and learners to make connections between their learning and their experiences (Savage, 2011; Didau, 2014). Additionally, Rowley and Cooper (2009) and Cremin and Arthur (2014) indicate that themes stimulate engagement and creativity amongst learners. Barnes (2015) acknowledges that cross-curricular learning is not restricted to themes, however, engaging lessons are the most motivating and memorable.

The theme for this learning experience will be focused on a specific author that the learners have engaged with, Julia Donaldson, in which she has become a reoccurring favourite within the class at story time. Therefore, embedding the series of books alongside its characters into different areas of the curriculum in series of lessons will engage the learners intrinsically. Cremin et al (2009) and Didau (2014) synthesise that using books as stimuli enhances the emotional and imaginative development therefore implying that effective subject knowledge in relevant texts and literature is significant. Illustrating this, the use of books as a stimuli to learning can be effective at any age where Ofsted's (2010) case studies highlight the cross-curricular engagement from those in secondary school. The theme will last a term where the activities would take place in the classroom and in areas around the school. For instance, use of the school kitchen would be required. Throughout this theme, the role of the teacher will be to facilitate.

Activities

- Numeracy = 'Brilliant Books' Bookshop as continuous provision voted by the children. Cremin et al (2009) supports the ideology of this that allowing learners to build and choose their role play areas increases the engagement and interest.
- Literacy = Creating Instructions and recipes for Wonderful Wands Biscuits after receiving a letter from Room on the Broom's Witch.
- Creative Writing= alternative endings
- Science and Technology= Making wonderful wand biscuits in groups
- Digital Competence= Cooking show- learners will record using iPads their written instructions.
- Julia Donaldson Day- learners and the staff will dress up as their favourite character from the books at the end of the first term.
- Westland (2009) supports themed days as it embeds creativity in to the learning.



(SK, 2019)

LITERACY
Cross-curriculum

Literacy skills, particularly oracy and reading, is enhanced as learners will obtain a greater knowledge in stories and improve their vocabulary (Cremin et al, 2009). Additionally, the bookshop provides a real-life experience to the learners where they can imitate and develop their communication skills and collaborative ideas within role play (Gross, 2013; Barnes, 2015; Welsh Government, 2019). This theme would also enhance the learners' written skills where they would use their prior knowledge of writing instructions to sequence a recipe, in groups, ensuring they can write accurately (WG, 2019). As the learners will be able to peer assess other groups, they will have to have a variety of reading strategies to be able to identify key words on their instructions (WG, 2019).

- Role of the teacher would be to scaffold vocabulary used to later support written work (Gross, 2013).

NUMERACY
Cross-curriculum

Numeracy is enhanced through continuous provision that allows learners to pay for Julia Donaldson books and receive change from up to 20p and £1 depending on their chilli challenge questions placed in the shop achieving progression step 2 (WG, 2008; 2019). Hansen (2011) and McAteer (2012) indicate that providing role play opportunities to manage money is crucial to enhance understanding of value and currency to aid problem solving. Additionally, knowledge of measuring skills in grams are required within the science and technology cooking activity (WG, 2008; 2019). Cotton (2016) concurs that practical activities, such as cooking, allows learners to compare the weight of different materials.

DIGITAL COMPETENCE
Cross-curriculum

According to Beauchamp (2016), digital technologies facilitate a range of experiences in cross-curricular education. Therefore, most learners will be redrafting their instructions on computers. Also, using iPads, the learners will record their group's cooking show instructions (WG, 2019). Audain (2014) synthesises that allowing the learners to record themselves, whilst thinking about the essential requirements to a video, is essential to familiarising themselves with different tools and effects.



Challenges

Model One

Benefits

- Develops new vocabulary and encourages discussions (Gross, 2013).
- Thematic approaches enhance provision and consolidates understanding (Bloomfield and Childs, 2013; Estyn, 2018)
- Enhances motivation and interest from both learners and practitioners (Barnes, 2015)
- Desailly (2012) emphasises that cross-curricular learning relates learning to real-life experience aiding them to extend their knowledge.
- Promotes group work enhancing literal skills and inquisitiveness with regards to problem solving (ibid.; McAteer, 2012)

- Practitioners need to divert from assessing the quantity of work produced and focus on the engagement (Barnes, 2015)
- Unless deep subject knowledge, approach may be ineffective (Hayes, 2010).
- Barnes (2015) acknowledges that using cross-curricular learning can distract the learners from the purpose of the lesson.
- Choosing themes and areas of learning allows practitioners to choose based on preferences which decreases the enthusiasm and flexibility for other important areas of learning (Gunzelmann, 2011).

Model Two

- Opportunistic approaches allow learners to take control of their learning (Barnes, 2015)
- Encourages learners to enhance their creative, critical thinking and ability to collaborate with others (Barnes, 2018).
- Promotes enquiry and curiosity (Driscoll, Lambirth and Roden, 2012).
- Learning is more monumental to children through creative, active experiences (Desailly, 2012; Didau, 2014).
- McAteer (2012) acknowledges that children learn through meaningful teaching where learning is not focused on objectives and skills.

- Opportunistic approaches can be identified as risky therefore the role of the practitioner should be to apply new challenges and knowledge to the learning (Driscoll, Lambirth and Roden, 2012).
- Correct Curriculum coverage as teachers are required to make appropriate judgements on the progress of learning (Desailly, 2012). Therefore, effective planning is required (Barnes, 2015)
- Behaviour management – children may only have positive attitudes if they are able to do something that interest them (Kelly and Stead, 2013).



(Nicholson, 2016)

Opportunistic

Opportunistic approaches fixates on learning and environments that are controlled and directed by the learners (Barnes, 2015; 2018). Therefore, planning for this approach involves the result of a shared discussion between the learners (Driscoll, Lambirth and Roden, 2012). Starbuck (2006) and Briggs and Davis (2008) adhere to this that if partial control is given to learners, it engages them to be more involved and creative in their learning. Additionally, Unicef (2010) and Estyn (2018) indicate that learners should be able to make decisions and express their opinions whereby practitioners should consistently ask for the learners' thoughts on the learning process. Dunn (2017) and Grigg (2015) synthesise that effective enquiry-based learning stimulates the interest of the learning. Adhering to this, Westland (2009) and Estyn (2018) state that opportunistic and inquiry based learning actively influences the emotions of both the learner and the practitioner.

The topic used throughout this model will be Animals and the activities below were discussed within a 'KWL' grid so learners could identify what they knew already, what they wanted to find out and eventually, what they have learnt. The learners could identify different animals but they wanted to know where different animals lived, their diet and life cycle. An interesting question asked about hibernation which stimulated discussion on how different seasons affect the different animals will be a priority for this theme. In order for the children to find this out, the learners will visit Folly Farm, in Pembrokeshire, to gather information and complete some of the activities below. The other activities will commence within the school environment after the trip. Donaldson (2015) concurs that educational visits illustrates authentic teaching whereby it provides learners with a variety of experiences. Hence, learning experiences outside of school are a key recommendation (ibid.). Adhering to this, visits to a farm can enhance understanding on the care of an animal and allows the learners to explore land that they may have not experienced prior to the visit (OEAP, 2019).

Activities

- Creating an Animal Fact file top trumps to play in class
 - Group the animals seen on the trips into chosen categories using pictures and tally charts.
 - Story board of life cycle of an animal of their choice e.g. a chick
 - Interview with Farmer Fred where the children can ask questions and see how everyday farm life works
- What area of learnings are covered? Knowledge and Understanding, Language, Literacy and Communication, Mathematical Development

LITERACY
Cross-curriculum

Literacy skills are developed through communication and discussion during KWL grids (WG, 2019). Additionally, this will be developed through knowledge and understanding of living things where learners will use their written skills to produce an animal fact file and a life cycle of an animal of their choice. They will need to be aware of a variety of writing types in order to create the fact file (WG, 2019). Therefore, lessons consolidating and creating their own success criteria will commence prior and after the visit.

NUMERACY
Cross-curriculum

During this approach, learners will develop numerical reasoning to communicate their findings and represent data within their tally charts (WG, 2019). Askew (2011) indicates that practitioners should plan for the misconceptions of indirect learning such as interpreting data. Thus, ensuring the learners understand the mathematical terminology is significant (WG, 2019). Cotton (2016) states that reasoning enhances problem solving and encourages learners to apply the skills to areas outside of the learning environment.

DIGITAL COMPETENCE
Cross-curriculum

Digital competence is integrated through the learners collaborating on digital work (WG, 2019). This will range from the learners taking images whilst at the farm and then transferring their numerical data and recording it into tally charts (ibid.) Haylock and Manning (2014) and Turvey et al (2016) indicate that numeracy and digital competence are intrinsic elements for future development emphasising the importance of organising and presenting data.

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