

Cross Curricular Responsibilities In A Year 1 Class

Theme based

Includes the use of a theme to allow exploration of several subjects to unify teaching and learning (Barnes 2015).

- Minibeast theme
- Knowledge and Understanding of the World Area of Learning (Welsh Gov, 2015).

The pedagogical reasoning behind selecting this model is based on understanding of the benefits and limitations of the model.

Hayes (2010) and Barnes (2015) define cross curricular learning as the combination of knowledge, skills and attitudes of numerous disciplines integrated to a single experience, idea or problem meaning the experience of learning is considered on a macro level. From Barnes (2015) taxonomy a thematic and opportunistic approach will be discussed as way to incorporate literacy, numeracy and digital competence as cross curricular responsibilities.

Opportunistic

Allows children to shape the depth and direction of learning arising from a shared theme or experience (Barnes, 2015).

- The class will visit the local forest as a part of their topic – “my local area”.
- Knowledge and Understanding of the World Area of Learning - Places and People (Welsh Gov, 2015).

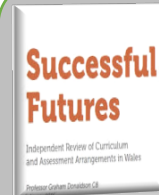
Selection of this model was influenced by the benefits and limitations.

Benefits

- Children are more likely to be engaged and motivated (Fogarty and Stoehr, 2008 and Barnes, 2015).
- Creates rich, meaningful experiences (Rowley and Cooper, 2009, Grigg, 2015 and Barnes, 2015).
- Learning can be generated in more than the two or three subject areas that are recommended in cross curricular teaching (Barnes, 2015).
- Enable subject knowledge and skills to be developed across the curriculum at a high level (Barnes, 2015).
- Children can begin to identify the relationship between concepts (Kerry, 2015)

Limitations

- Subjects can be forced and compromised in order to fit within the theme, and not used to deepen understanding (Rowley and Cooper, 2010 and Barnes, 2015).
- Children may be unaware of the subject skills they are developing (Barnes, 2015).
- Subject aims can be unclear resulting in poor assessment opportunities (Barnes, 2015).
- Learning may not build upon what children already know, understand or can do (Grigg, 2015).
- Subject progression can be difficult to achieve (Barnes, 2015).



Donaldson (2015b)

12 pedagogical principles:

9. “Reinforce Cross Curricular Responsibilities including literacy, numeracy and digital competence and provide opportunities to practice them” (ImpactWales 2018). For the next generation to achieve the four purposes of the new curriculum literacy, numeracy and digital competence as cross curricular responsibilities are crucial to ensure children are prepared for the future.

Benefits

- Child-led resulting in increased engagement and motivation (Barnes, 2015)
- Learning can arise from any interaction with the world (Barnes, 2015).
- Supports UNCRC – pupil voice (Barnes, 2015)
- Creates powerful, personal learning experiences (Barnes, 2015).

Limitations

- Can not be easily planned (Barnes, 2015).
- Learning and outcomes can be unpredictable (Barnes, 2015).
- Teacher requires strong subject knowledge (Barnes, 2015).
- Teachers may have lack of confidence with this model due to them being predominantly trained in pure subject learning (Westbrook et al., 2013).



Donaldson (2015b)

The children will be learning about the life cycle of a bee. The children will create models representing each stage of the life cycle. The children will need to talk in detail about the life cycle of a bee in order to identify each stage. Allowing development of *organising what they say so that listeners can understand while explaining information using relevant vocabulary* (Welsh Gov, 2013) Opportunity will be given to select their own materials and then reflect upon their choices (Welsh Gov, 2015). Estyn (2016) identifies good practice of art and design being a fantastic means of developing children’s oracy skills.



Donaldson (2015b)

The children will have prior knowledge on;

- identifying different minibeast and their habitats
- pictograms and tally charts.

Estyn (2011), emphasise the importance of learning outdoors and highlights the increased engagement, and deeper understanding it has on knowledge and understanding of the world. Therefore, the children will go on a minibeast hunt around their school grounds to see how many minibeast they can find, while gathering and recording their data using tally charts (Welsh Gov, 2013). Prior to the minibeast hunt, the children will make predications on what minibeast they think they will find, and which one will be the most popular. This way of learning is supported by Kolb (1984) and Donaldson (2015a), who argue that experiential learning is the most effective motivator for learning. The children will then create a pictogram on Hwb using J2E to show their findings, allowing them to develop their skills from the Digital Competence Framework (Welsh Gov, 2016). Comparison can then be made from their pictogram and their predictions to aid discussion (Welsh Gov, 2013).



Donaldson (2015b)

The children will collect objects from the forest that they find interesting allowing them to make choices when choosing materials (Welsh Gov, 2015). When returning back to the classroom the children will design and make a journey stick that represents their visit to the forest. This will allow them to develop their skills in “mixing, shape, arrange and combine materials to create their own images and objects that communicate and express their ideas, feelings and memories creatively” (Welsh Gov, 2015 p.47). The children will use their journey stick to support them with talking about things from their experience and share information (Welsh Gov, 2013) based on their visit to the forest.



Donaldson (2015b)

After the visit, the children were requesting if they could go on a second visit to the forest. Acting as the facilitator the teacher suggests that the children should send an email to the head teacher at the school requesting a second visit, including an attachment of images that were taken on the class Ipad during the visit. This allows the children to “send simple online communication from a single user account” (Weksh Gov, 2016) and “communicate purposefully in writing” (Welsh Gov, 2013). Our National Mission for Wales aims for young people to become more digitally competent (Welsh Gov, 2017), by exposing children to online communication and the advantages and disadvantages that come with it could allow them to ensure they conduct themselves safely online.



Donaldson (2015b)

Pound (2011), argues that by developing numeracy across the curriculum children’s understanding is enriched, challenged and affirmed. Many children were naturally engaged searching for the largest stick in the forest. Acting as the facilitator (Barnes, 2015), the teacher suggests that the children order the sticks they find to compare the length of the sticks (Welsh Gov, 2013), in order to identify which is the largest and which is the smallest. The teacher will ask the children how could they measure the sticks, allowing the children to then use non-standard units to measure length (Welsh Gov, 2013). This will allow children to view numeracy as relevant to them and their surroundings (Pound, 2011). Scaffolding will be given for children who require support (Barnes 2018 and Vygotsky, 1962). Questions will also be asked such as, why have they placed each stick in a particular order? Frobel and Steiner (Cited in Barnes, 2018) agree with this style of learning, arguing that the child's interest and choices should be overriding.

Ambitious Capable Learners

- Can explain ideas and concepts
- Building upon their knowledge and have the skills to connect and apply that knowledge in different contexts
- Questioning and solving problems

(Donaldson, 2015a)

Enterprising, Creative Contributors

- Connect and apply their knowledge
- Think creatively to reframe and solve problems
- Express ideas

(Donaldson, 2015a)

Ambitious Capable Learners

- Can explain ideas and concepts
- Building upon their knowledge and have the skills to connect and apply that knowledge in different contexts
- Questioning and solving problems
- Use digital technologies to communicate

(Donaldson, 2015a)

Ethically Informed Citizens

- Knowledgeable about their community

(Donaldson, 2015a)

Enterprising, Creative Contributors

- Connect and apply their knowledge
- Think creatively to reframe and solve problems
- Express ideas

(Donaldson, 2015)

Reference list

- Barnes., J. (2018). *Applying Cross-Curricular Approaches Creatively*. Routledge.
- Barnes, J. (2015) Cross-curricular learning 3-14 (3rd edition) London: SAGE.
- Donaldson, G. (2015a) Successful Futures. Independent Review of Curriculum and Assessment Arrangements in Wales. Available at: https://dera.ioe.ac.uk/22165/2/150225-successful-futures-en_Redacted.pdf
- Donaldson, G. (2015b) Successful Futures. Independent Review of Curriculum and Assessment Arrangements in Wales. Available at: https://dera.ioe.ac.uk/22165/2/150225-successful-futures-en_Redacted.pdf [image].
- Estyn, (2011). Outdoor Learning an evaluation of learning in the outdoors for children under five in the Foundation Phase. Cardiff: Crown.
- Estyn (2016) Improving literacy through creative learning. Cardiff: Crown.
- Fogarty, R. and Stoehr, J. (2008). Integrating curricula with multiple intelligences. Thousand Oaks, CA: Corwin Press.
- Hayes, D. (2010) The seductive charms of a cross-curricular approach, Education 3- 13, 38:4, 381-387
- ImpactWales (2018) Donaldson’s 12 pedagogical principles and what you should do with them. Available at <https://www.impact.wales/wp-content/uploads/2018/01/12-Pedagogical-Principles-1.pdf> Accessed on 05.12.19
- Kelly, L. and Stead, D. (2013). *Enhancing primary science*. Maidenhead: Open University Press.
- Pound, L. (2011) Teaching mathematics creatively. New York: Routledge.
- Vygotsky, L. (1962) Thought and Language, Cambridge, MA: The MIT Press
- Welsh Government (2013) National Literacy and Numeracy Framework. Available at: <https://hwb.gov.wales/storage/64812b0e-3d20-4d10-94e8-68221e47a38d/to-support-schools-in-introducing-the-national-literacy-and-numeracy-framework.pdf>
- Welsh Government (2015) Foundation Phase Framework. Cardiff: Crown.
- Welsh Government (2016) The Digital Competence Framework. Available at <http://learning.gov.wales/docs/learningwales/publications/160901-dcf-excel-en.xlsx>
- Welsh Government (2017) Education in Wales Our National Mission. Cardiff: Crown.
- Westbrook, J., Durrent, N., Brown, R., Orr, D. Pryor, J., Boddy, J. and Salvi, F. (2013) Pedagogy, Curriculum, Teaching Practice in Developing Countries. London: DEFRA