

‘Children must develop high levels of competence with frequent opportunities to develop, extend and apply across the curriculum’

(Donaldson, 2015).



Two theoretical models of cross-curricular teaching in literacy, numeracy and digital competence as cross-curricular responsibilities.



(SLF, 2018)

‘Cross-curricular learning occurs when skills, knowledge and understanding are applied to a single theme, problem , idea or experience’

(Barnes, 2015).

In 1967, it was found by Powden (1967) that children’s learning ‘does not fit into subject categories’ (cited in Kerry, 2015: p.3). As a result of this realisation, a new approach was implemented into teaching of interdisciplinary learning. This approach was hoped to enable learners to explore clear and relevant links across the curriculum (Kerry, 2015). In the 20th century, this developed into ‘cross-curricular’ teaching which allows opportunities for skills and knowledge to be applied through a ‘single theme, problem, idea or experience’ (Barnes, 2015: p.62). Barnes (2015) describes eight types of cross-curricular which aim to combine creative thinking with challenging work to develop learner’s skills and knowledge.

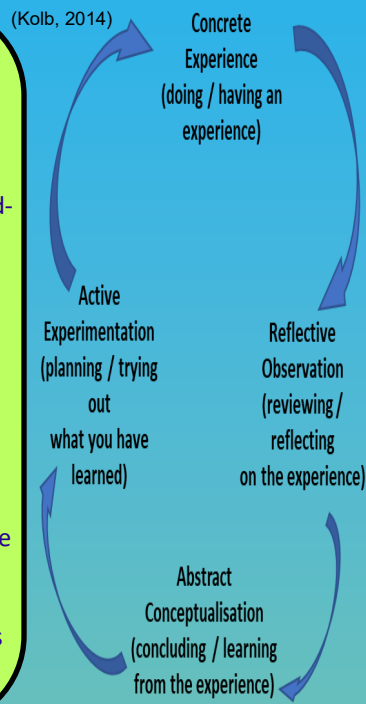
Theme-based teaching

Benefits

- A theme-based approach uses a theme for children to explore through a variety of different subjects.
- Generates exploration through the eyes of several different subjects (Barnes, 2015).
- A ‘life skills’ approach is undertaken from a range of subjects (Knoblock, Ball and Allen, 2007) for children to make extended connections and apply skills in different contexts.
- Creates engaging lessons to motivates children. Children learn best when they are excited and engaged supported by Donaldson (2015). However, Hoodless (2008) disagrees with this as it is the subject itself which needs to be engaging for children to learn.

Limitations

- Not all subjects will link to a theme, however some teachers will try and force it to link. Barnes (2015) suggests that subjects should not be included in a theme if they do not deepen understanding of skills. The skills can be taught independently or as part of another theme.
- Subject knowledge and theme knowledge are essential for the teacher to deliver meaningful lessons (McNamara, 1991).
- Children must be kept engaged with the same theme for a whole term without children or teacher becoming bored of the theme.
- Some children may not be interested in a particular theme. As a result, they may not be engaged with any lessons linked to the theme. This means these pupils are then missing out on a large amount of work over the period of the theme. This is supported by Barnes (2015: p.70) in that an ‘authentic theme may be used to generate learning which engages children. If children are not engaged, they will not learn.



Opportunistic teaching

Benefits

- Kolb (2014) describes this approach simply in the diagram beside.
- Allows learners to decide what they learn in each subject from a shared theme or experience (Barnes, 2015). This can be done using ‘EPIC’ planning or ‘KWL’ grids where children are encouraged to take an active role in their learning by planning as a class. Dylan William (2018) discusses the importance in planning to develop understanding and engage learners.
- The chosen theme / experience can be looked at in numerous subjects where learning opportunities can arise from anywhere (Barnes, 2015).
- Confident teachers with good subject knowledge can capture random moments from children to build upon these and develop pupils understanding (Barnes, 2015).

Limitations

- Not easily planned from session to session. Only a broad planning. Lessons will be unpredictable as they must follow learner’s lead (Barnes, 2015). If children decide they want to take another route next lesson, this opportunity should be relished.
- Student absence will create a lack in knowledge and understanding as some lessons may follow on from each other as children decide where to take their learning next.
- Teacher subject knowledge must be ‘good to teach unexpected exploitations’ that children decide they want to learn (Barnes, 2015: p.76). Therefore, teachers require the same opportunities as pupils before generating genuine answers to questions.
- Support from schools and colleagues is not always given. This limits teacher’s ability to deliver lessons that are decided by the children (Camden, 2015 and Barnes, 2015).

In a year 5 class theme of ‘Extreme Weather’, pupils could receive opportunities to develop the following skills.

<u>Core Subject</u>	<u>Strand, Element and Curriculum Skill</u> (DfES, 2014)	<u>Lesson Ideas</u>	<u>Other Areas of Learning Developed</u> (DfES, 2014 and 2016, DCELLS, 2008)	<u>Successful Futures</u> (Donaldson, 2015)
<u>Numeracy</u>	Using measuring skills. Angle and position. Use co-ordinates to specify location.	Use grid references to specify location.	Geography— Locating places using co-ordinates and four-figure references.	Understand geographical factors upon other people (p.46).
<u>Numeracy</u>	Using number skills. Manage money. Plan and track money and savings by keeping accurate records. Realise that budgeting is important.	Plan to ‘rebuild’ a small village after a disaster with limited resources and budget.	PSE— Value others and respect differences. Develop cooperation and teamwork. Literacy—Communicate essential resources they will need to provide and why they will be needed.	Enterprising individual (p.45). Rich challenging context to work collaboratively (p.44).
<u>Literacy</u>	Writing. Organising ideas and information. Adapt structures in writing for different contexts, e.g. reporting an event.	Adapt structures in writing for different contexts, e.g. reporting an event. Write a weather report. Write a letter for help after a natural disaster.	Geography—Draw conclusions to make decisions about environments and the affecting geographical issues.	Research, discuss and write about complex issues (p.47).
<u>Digital Competence</u>	Interacting and collaborating Develop skills across the curriculum by finding, developing, creating and presenting information.	Work in groups to create a presentation of a country of their choice. Informing of the weather, climate, etc.	DCF— Adjust search techniques to find relevant and accurate information.	Have a strong sense of the wider world (p.28). Ethical, informed citizens of the world (p.29).

A year 5 class could experience ‘The White Feather’ play. Following this, they could generate questions they want to find out about WW2 to further their learning.

An example of possible activities and skills which could be covered are shown below.

	<u>Activities</u>	<u>Curriculum Skills</u> (DfES, 2014 and 2016)	<u>Successful Futures</u> (Donaldson, 2015)
<u>Digital Competence</u>	Children work in groups to create a presentation on a theme of their choice on WW2.	Create and share work with groups. Explain reasons for layout and content of own work. Invite feedback/responses from others. Combine a range of multimedia components. Cite sources of research explaining the importance of this.	<u>Ambitious, capable learners who:</u> Set themselves high standards seeking and enjoying challenges. Undertake research and evaluate critically what they find . Build up a body of knowledge to connect and use in different contexts.
<u>Literacy</u>	Groups plan, prepare and deliver a presentation.	Speak clearly, using formal language and projecting voice effectively to a large audience. Listen to presentations using techniques to remember main points. Ask questions and respond to speakers’ viewpoints. Build on ideas through group discussions. Use strategies of skimming. Identify and explore ideas and information of interest.	Understand how to interpret data and apply mathematical concepts when dealing with their rations. <u>Enterprising, creative contributors who:</u> Connect and apply their knowledge and skills to create ideas as to how to save ingredients to have sufficient supplies for the party.
<u>Numeracy</u>	Children decided to plan a WW2 themed party incorporating rations into their planning.	Realise that budgeting is important. Identify appropriate steps and information needed to complete the task. Use appropriate notations, symbols and units of measurement (e.g. £, g, ml). Make use of conversions. Extract and interpret information (from ration cards). Plan events and activities and make calculations as part of the planning process.	Lead and play different roles in teams effectively and responsibly to plan, prepare and organise the presentation and party. Think creatively to reframe and solve problems such as only receiving limited eggs and flour per person. <u>Healthy, confident individuals who:</u> Form positive relationships based upon trust and mutual respect working collaboratively. Face and overcome challenges dealing with limited resources and supplies.