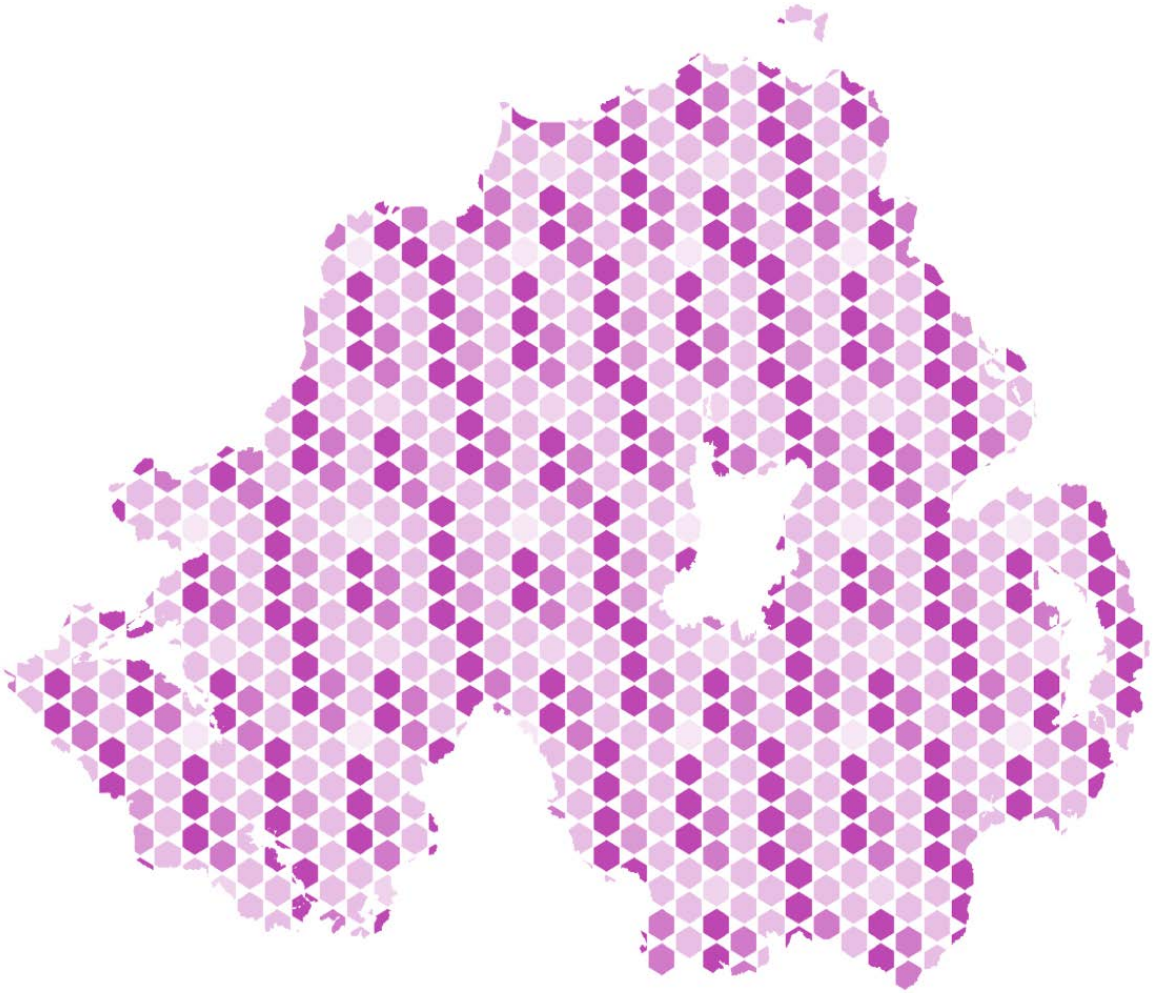
CULTURE, ARTS AND LEISURE INSPECTION



Education and Training Inspectorate

An Evaluation focusing on the Architecture and the Built Environment Policy Education Objectives

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The Education and Training Inspectorate - Promoting Improvement

Providing Inspection Services for

Department of Education
Department for Employment and Learning
Department of Culture, Arts and Leisure

CUSTOMER SERVICE EXCELLENCE

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1. Context

The Architecture and the Built Environment for Northern Ireland (A+BE) policy (2006) was published by the Department of Culture, Arts and Leisure (DCAL), and sets out the vision and strategies by which the Northern Ireland Government aims to raise the standard and quality of design, construction and performance of publically funded development. Through advocacy, exemplar public sector projects and collaboration with key stakeholders Government aims to challenge and inspire higher standards in the public sector. The policy sets out a vision of creating an attractive, healthy, safe and sustainable built environment which functions efficiently and enriches the experience of living for everyone in Northern Ireland along with guiding principles, objectives and specific actions required to realise the vision.

The policy included for the creation of a Ministerial Advisory Group on Architecture and the Built Environment (MAG), which was subsequently established in 2007. The current Chair was appointed in 2010, and is the only original member still in post. New members to the group were appointed in May 2014.

The A+BE policy is a cross-departmental strategy, but the MAG leads on most of the key educational actions working with the relevant departments such as the Department of Education (DE) and the Department for Employment and Learning (DEL). At the time of the evaluation, the MAG had mainly focused its limited resources on implementing the objectives around achieving excellence in design quality through a focus on infrastructure procurement, planning policies, and sustainable development.

In September 2014, DCAL commissioned the Education and Training Inspectorate (ETI) to consider and advise on how the educational objectives[1] of the A+BE policy might be developed to provide improved learning opportunities within the curriculum to highlight the value of good design to the quality of life, economic opportunities and sustainable communities.

2. Evaluation methodology

The ETI held discussions with the key stakeholders, including the Chair of the MAG, and representatives from the Curriculum Advisory and Support Service (CASS), DCAL, DE, further and higher education providers, **Planning Landscape Architecture Community Environment (PLACE)**, and Who What Where When Why (W5). The ETI also evaluated relevant documentation including policies, progress reviews, guidance documents, educational resources and information provided by the key stakeholders.

3. Architecture and the Built Environment within the curriculum

Across pre-school and primary education up to key stage 2, architecture and the built environment are not specifically promoted as a discrete topic but they are considered as part of the World Around Us (WAU) curriculum area. The WAU combines the three contributory elements of geography, history and science and technology. While there is no specific data collated on the use of architecture and the built environment to promote children's learning; inspection evidence does show that most schools do make reference to their local built environment as a teaching and learning resource. For example, it is used to promote

[1] *The guiding principles and objectives identified within the policy that are most relevant to promoting improved learning opportunities within the curriculum and education system are listed in Appendix 1.*

mathematical understanding by developing the children's thinking skills and to deepen their understanding of Science Technology, Engineering and Mathematics (STEM) subjects through activities such as exploring shapes; line and angles in buildings; and using the Houses and Homes topic to explore the use of building materials and the ages of buildings. This approach is supported to a limited extent by the STEM resources[2] that have been developed by the Primary STEM project to support children's' learning in primary years 1 to 7.

In 2014, the ETI published an evaluation of the implementation of the WAU in primary schools[3] which set out to identify the main trends and characteristics in relation to current practice. The evaluation indicates that children enjoy and are highly motivated in science and technology-based lessons when practical and active teaching and learning approaches are used. This is particularly the case when they are empowered to take greater responsibility for key aspects of their learning, such as testing out their ideas and theories. The increasingly widespread involvement of primary schools in the Eco-Schools NI programme[4] enables the children to develop and act upon their increased awareness of sustainable living through, for example, implementing energy saving initiatives and recycling and reusing materials. Where these programmes are incorporated explicitly within the school's planned programme, there is a greater and more lasting impact on the children's learning. In the significant minority of schools where the science and technology strand of the WAU is underdeveloped, the provision is too narrowly focused on low-level factual learning within isolated topics, and lacks purposeful practical and investigative experiences for the children.

In post-primary education, it is critical that the resources developed to support architecture and the built environment demonstrate clearly how active-learning approaches link to the core curriculum, and how the use of the resources will increase the children and young people's motivation and engagement; develop their understanding of the environment; and raise their attainment.

The Architecture and Built Environment Centre for Northern Ireland, PLACE and other organisations have developed a range of high quality resources that introduce children and young people to the subject of architecture and the design of buildings and public places. There is, however, limited awareness of these resources within educational organisations.

The Council for the Curriculum Examinations and Assessment (CCEA) promotes the use of thematic approaches to teaching and learning and has produced a number of exemplar units which illustrate cross-curricular approaches. These include, for example, the Bridges unit for use in the WAU curriculum for key stage 2. The CCEA units enable learners to make connections between the real world and their learning of mathematics and science, and support the development of their thinking skills. The resources also promote related career pathways, such as civil engineering. Resources and case studies are made available through the Northern Ireland Curriculum, STEM Works website[5]. The CCEA also have GCSE and GCE programmes that link to architecture and the built environment including a GCSE in Construction, and Technology and Design, and at GCE in Environmental Technology, and Technology and Design.

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2 *www.clounagh.org*

3 *www.etini.gov.uk/an-evaluation-of-the-implementation-of-the-world-around-us*

4 *Approximately 98% of all primary schools are registered with Eco-Schools Northern Ireland at various levels in 2013-14.*

5 *www.nicurriculum.org.uk/STEMWorks*

4. Going well

- The Civic Stewardship programme developed by the MAG, and the associated toolkit, engage children, young people and the public in a wide range of activities which are designed to encourage them to get involved in the design of their public spaces; "using places differently and creating more with less". Civic stewardship techniques have been used by all of the district councils.

Effective practice example 1

One district council employed stewardship techniques in the public consultation process for the town centre project using activities such as sports, music and fishing to encourage people to think about how their town centre could be used in unusual and different ways. In the twelve weeks period prior to the event the council had only received 24 responses to the consultation, on the day of the stewardship event they received approximately 240.

- The W5 centre has developed an extensive education programme focusing on their STEM links, in particular, Stadium STEM focuses on promoting and increasing awareness of the redevelopment plans for Casement Park, the Kingspan Stadium and Windsor Park. Stadium STEM engaged schools, pupils and teachers from pre-school to key stage 4 in a series of workshops.

Effective practice example 2

The Stadium STEM programme included the Construct and Build workshops targeting key stage 2 pupils, and Design it; Build it; Use it aimed at post-primary pupils. In total the education programme engaged 68 nursery and primary schools and 14 post-primary schools; nearly 7,500 pupils from across Northern Ireland were involved in all the events and workshops. Feedback received by W5 from pupils and teachers was highly positive and indicated that it "... demonstrates a need for innovative, hands-on and relevant education programmes for our young people".

5. Going forward

- While significant work has been done to utilise the rich opportunities in architecture and the built environment to create high quality resources and experiences; the A+BE policy is not the main driver for development. There is limited awareness or recognition of the policy by the bodies interviewed.

- In the ongoing review of the policy, it is of central importance that the key stakeholders are involved in the consultation process to ensure that there is a shared understanding of the vision and the guiding principles, objectives and actions that emerge. The policy also needs to articulate more clearly the role of education in promoting good architecture, landscape and urban planning in our cities, towns and neighbourhoods. It should provide a more detailed implementation plan that identifies the key actions to be taken with quantifiable and measureable targets and timescales.

- It is critical that the impact of the experiences and resources on children's and young people's learning experiences is evaluated to inform future development and to enable better targeting of the limited resources available; with a focus on developing the full potential of architecture and the built environment to enrich and deepen the learning experience.

- There is a need for the establishment of a steering group or sub-group of the MAG to concentrate on the education objectives of the policy.

- There is a need to raise awareness with schools and colleges about the high quality resources available to further support the integration of architecture and the built environment themes into the curriculum. The MAG should consider developing and supporting initiatives that raise teachers' awareness of how architecture and the built environment fits in and connects with the development of cross-curricular skills, and how the value of good design can be promoted.

- While collaborative working relationships have been developed by the MAG with the two universities, the engagement needs to be extended to include further education and work-based learning providers.

APPENDIX

- **Guiding Principle 1**: Creativity and Innovation:

    - Action 7: *Encourage education authorities to use architecture in the school curriculum to explain creative and innovative design.**

- **Guiding Principle 2**, Heritage:

    - Action 2.2: *Raise awareness of the value of our architectural and natural heritage through the school curriculum and higher education.**

- **Objective 3**, Knowledge and Skills:

    - Action 4: *Encourage the Department of Employment and Learning (DEL) through the Construction Industry Forum for Northern Ireland, to review regularly the skills and training needs to support the policy objectives and to ensure their inclusion in education and training programmes.*

    - Action 6: *Include an educational role for the proposed Ministerial Advisory Group.**

- **Objective 4**, Awareness:

    - Action 2: *Work with Arts Council of Northern Ireland (ACNI), DE, DEL, Queen's University Belfast (QUB) and Ulster University (UU) to raise awareness of architecture and good urban design through education, public debate and community participation.**

    - Action 3: *With the Council for the Curriculum Examinations and Assessment, QUB and UU encourage use of architecture and urban design as a cross-curricular subject and support design projects which engage pupils at primary and secondary levels.**

    - Action 4: *Through the Environment and Heritage Service (EHS) [6]promote the use of the built heritage as an educational resource.*

[6] *Environment and Heritage Service (EHS) is now replaced by the Northern Ireland Environment Agency (NIEA)*
** Actions for which the MAG has a role in implementing along with the relevant department.*