

FEATURE

School pupils using technology at heritage sites to improve literacy: bridging divides

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School pupils using technology at heritage sites to improve literacy: bridging divides

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Aberdeen's Reading Bus conducted a series of mobile learning heritage activities as part of its Apardion initiative in 2012. The Reading Bus is the focal point of a cutting-edge literacy initiative in Aberdeen City that delivers rich cross-curricular learning experiences. It aims to engage young people in real life contexts with tangible outcomes for a genuine audience. This feature explains the activities that led to the creation of e-books, podcasts and animated films by pupils (with support from many partners) around the theme of the leopard Apardion. The springboard for the initiative was the publication of the Reading Bus' 5th commercial book, *Apardion, A Leopard's Quest* by Sheena Blackhall. The book recounts the tale of a spirit from the Northern Lights who visits Aberdeen to discover if this might be his birthplace.

In the story Apardion visits 14 heritage landmarks in the city and the 52 participating schools (primary and secondary) each adopted a landmark. Their activities combined literacy, creativity, collaboration and communication across the curriculum. 116 different classes were involved and they created a hub of resources to celebrate the rich history and culture of Aberdeen, "the Granite City". These resources included films, books and podcasts and they were used to populate the Apardion website, <http://apardion.com> and the Apardion iPhone app.

Apardion received funding from the Heritage Lottery Fund, Talisman UK Ltd, TAQA Bratani Ltd, Hess Services and the Scottish Book Trust. AVC Media Enterprises were the media partner and created both the website and iPhone app. The Reading Bus team worked closely with many partners and organisations to deliver the Apardion initiative. The school participants worked with a wide variety of professionals including artists, storytellers, archaeologists, historians, writers, poets, researchers, film specialists and broadcasters.

The researchers were interested in how the initiative bridged the divide between heritage and literacy through the use of technology and authentic experiences. Over 50 schools took part with 120 classes and 3,500 pupils involved in total. Three projects were observed and researched and treated as individual case studies in order to evaluate the project and showcase pupils' work.

The initiative was designed to sit within the Scottish Government's Curriculum for Excellence framework for the education of young people from 3 to 18 years of age. In particular, the focus was on literacy experiences and outcomes which highlight how young people engage with and create a wide range of texts in different media, taking advantage of the opportunities offered by information technology. The project aimed to develop an understanding in the young people of what is special, vibrant and valuable from their own cultures and languages. A further aim was to help the young people explore the richness and diversity of language, how it affects them and the wide range of ways in which they can explore their creativity. The project also attempted to utilise cross-curricular elements of the learning experiences of literacy by incorporating aspects of Social Studies and Expressive Arts in order to develop an appreciation of the heritage and culture of Scotland and its place in the world. This was to enable the young people to locate, explore and link periods, people and events in time and

place. The other cross-cutting theme was to enhance learning with and through information technology.

The Apardion initiative aimed to encourage young people involved in the project to become actively engaged in their own learning. A number of elements have been identified that facilitate comprehension and promote meaning-making and effective learning within an educational context: Carraher and Schliemann (2000) highlighted authenticity; Brown, Collins and Duguid (1989) context; Caine and Caine (2008) active participation. It can be argued that these elements are present in the approach that the Reading Bus takes to literacy and the Apardion initiative in particular. The authenticity of the work was potentially achieved through the use of local land marks and culture which the young people can see around them on a daily basis and have a tacit knowledge of by the fact that they are living in that area. This position is aligned to a constructivist view of learning which sees the learner actively constructing new ideas based on acquired knowledge or experiences. Instead of behaviourist and cognitive approaches which highlight a teacher-centred view of the classroom with the teacher being the possessor and dispenser of knowledge, a constructivist approach to learning, is centred on the individual who internalises concepts, rules etc. that can be applied within certain contexts. Social constructivists argue that this process of constructing knowledge is undertaken when individuals interact socially in activities. Therefore, learning can be seen as a process by which individuals are introduced to culture by more skilled members.

In the Apardion initiative the application of different media allowed for a range of outcomes and experiences. Different media were used to both create and disseminate the outcomes of the participants' experiences and knowledge. This approach linked literacy, content and technology. One type of artefact created in the initiative was podcasts. Campbell (2005) suggests that the use of podcasting is developing as a tool for communication and learning. The use of these current technology tools can offer alternative business and educational experiences. There is the possibility that podcasts can be interactive, with listeners asked to comment on the content which provides feedback to those that have produced the work. Educators are gathering research that indicates that podcasting is beneficial for cross-cultural experiences (Zuckerman-Parker, 2006). Using podcasts as a tool in the teaching of English improves young people's communication skills as well as their creativity.

There were a number of common themes that emerged from the young people, the teachers and the project partners: the impact of group work; authenticity of their experiences; motivation and confidence to use technology. The emerging themes from the evaluation of the Apardion initiative present a number of potential challenges to the way we view learning and teaching. How can we ensure that the themes of authenticity, relevant content and context along with active participation are incorporated into classrooms?

How can these themes be embedded into an active literacy strategy providing linkages between "initial skills", "literacy practices" and "literacy events"? Although the focus of literacy teaching has tended to be on initial literacy skills, which is highlighted in the active learning approach, there is a need to consider "literacy practices" and "literacy events". Literacy is essentially social, and it is located in the interaction between people. The project facilitated places and spaces for interactions. These interactions were set within a framework of activities with written text or texts central to the activity. These activities can be seen as literacy events. Looking at different literacy events it is clear that literacy is not the same in all contexts; rather there are different literacies which need to be recognised and incorporated into a literacy strategy to ensure the maximum engagement of all pupils.

In order to maximize the conclusions drawn from the project there needs to be consideration of the further development of resources that can be used by teachers in order to use technology to improve literacy. These resources should not only focus on content but also highlight the importance of context and authenticity. These resources could possibly be developed into professional learning opportunities on a number of levels:

1. informing learning and teaching practice; and
2. the practical use of different media / technology for learning and teaching literacy.

Finally, the research team would like to thank the pupils and teachers for their time and enthusiasm in participating in the research and all the partners involved in the initiative: the 52 education authority schools in Aberdeen City; Duthie Park; Urban Studies; The Barracks; Gordon Highlanders Museum; City Museums and Art Galleries; Archaeology and Archives; City Libraries; Station House Media Unit; Astronomical Society; University of Aberdeen; St Machar Cathedral; Bell Ringing Society; and the many freelance musicians, artists, authors, storytellers and photographers who also took part.

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