

ESEF Cymru

“Outdoor Classroom”

Presentations by

Abigail Brown (Herefordshire and Worcestershire

Earth Heritage Trust, The Geology Trusts)

Kim Polistina (Outdoor Learning, University of Glamorgan)

4.30 pm – 7.00 pm, 11 July 2006

National Museum of Wales

ESEF-Cymru met at the National Museum of Wales to discuss Earth science and the ‘Outdoor Classroom’. Sustainable development is at the heart of the Welsh Assembly Government’s work. Environmental education for sustainable development, fieldwork and outdoor learning are keys to Earth science education.

The speakers outlined the present position and indicated future possible developments in “Education Outside the Classroom” and the “Outdoor Manifesto” generally. The debate encouraged wider participation, appreciation and understanding of Wales as an outdoor classroom.

Martyn Bradley gave a short introduction to the development of the Geology Trusts and their relationship with UKRIGS (UK Regionally Important Geological Sites). The Geology Trusts are made up of groups covering 10 counties. Half of the Geological Trusts are still part of UKRIGS.

Abigail Brown Abigail_m_brown@hotmail.com

Abigail gave an overview of the range of activities that the Geology Trust provide for children, schools, local communities and others including preparing and publishing geological trails, arranging rock and fossil roadshows and giving presentations. Abigail runs the Whitman’s Hill Geodiversity Discovery Venture, which is funded by English Nature through Defra’s Aggregates Levy Sustainability Fund (ALSF). A ten-year lease has been purchased, so that the steering group can look at developing the Venture in the long-term.

Whitman’s Hill was a working quarry up until the 1990s and is still one of the best sites for exploring the rocks of the Much Wenlock Limestone Formation and collecting fossils which are sufficiently numerous that groups of children who visit to collect fossils don’t go away empty handed.

The site provides an ideal venue for ‘outdoor learning’, as well as the quarry there is an area of woodland, and both geodiversity and biodiversity audits (with the Woolhope Naturalists’ Field Club Volunteers) are being carried out. The visitors can explore the quarry under supervision and follow up work enables them to continue their learning back in the classroom, via web-based worksheet and interactive data

gathering assessments. Studying the local history and involving the local community via public meetings and talks enables a greater sense of 'ownership' by the local schools, the students and their families.

Tarmac are helping with website development, which will include a 3D reconstruction of both geology and landforms enabling flights around the area, with the added excitement of being able to home in on particular sites for a closer look. The virtual Whitman's Hill will make the venture accessible to those who are unable to visit, but can still gain a great deal from the 'virtual experience' and can also be used as part of pre-visit preparation or post-visit follow up.

Leading on from the presentation, John Davies mentioned the work being done in Gwent by Rollo Gillespie, Tom Sharpe and the South Wales Geologists' Association, Margaret Wood in NW RIGS and by Cynthia Burek in NE RIGS. This would be explored further at the March meeting, which will cover the topics of geodiversity and geoconservation. Jane Davies mentioned some of the work of the Brecon Beacons NPA and Sunita Welsh was introduced as their Education Manager. The benefits of being part of a geopark include the opportunity to raise awareness and publicise events by different organisations within the geopark as well as avoiding duplication of effort, sharing staff and office space etc.

Kim Polistina kjpolist@glam.ac.uk

Kim is a senior lecturer at the Department of Outdoor Learning in the University of Glamorgan. Her main aim is:

'Linking institutional curriculum to holistic lifestyle as an educational setting rather than dominance of formal education settings'.

This is achieved through non-formal (e.g. concentrating on sharing of knowledge between families, community, institutions and other interested groups), informal (working with local community outdoor clubs and associations) and formal learning, with visits to sites and project-based research by students on aspects of outdoor learning. Examples included getting local mothers involved with an environmental project, and clearing part of the river and removing rubbish in order to improve the environment (the Taff River clean up day). The importance of involving mothers and of women in outdoor learning was shown by the 'mothers' project'. Initially many felt that they had little to offer, but the project showed that they had a good understanding of the local environment, but due to lack of confidence or in recognising their own value, they had seldom talked about it.

In order for outdoor learning to be successful and for youngsters to have an understanding and enjoyment of the outdoors, family background and community support are paramount. If a love of the outside is instilled in children by their families they are far more likely to benefit by outdoor learning and to want to be involved in the outside environment.

Kim and the University of Glamorgan are working with organisations such as the Girl Guides, Scouts, Duke of Edinburgh and National Youth Agency to raise the profile of

outdoor learning and an understanding of the level of learning and skills that can be acquired. Through the development of GCSE and A level pathways in Outdoor Learning, a Gold Duke of Edinburgh Award is equivalent to an A level and can be included on their CV. However, universities have not yet taken this on board. There is a BTEC in outdoor learning, but sport and sport science has a higher profile than 'the outdoor Learning'.

Following the presentations there was a discussion on the value of outdoor learning and a discussion on how field trips are run, how the public engage with the environment and how Earth scientist view the outdoors. Up until the age of 11, parents are the most important in helping to influence the values of outdoor learning on their children. Once the children are at senior school, peer group pressure plays a greater role and the youngsters generally want to spend time with their friends. We all know that younger children are fascinated by dinosaurs, diamonds and fossils when they are young, but many turn away from science in senior school. Earth science and outdoor learning are intimately linked – and there are lessons that we can learn from the work that is being done at the University of Glamorgan. Evaluation is key to funding and evaluation of the benefits of outdoor learning was discussed along with how outdoor learning can be evaluated. It was suggested that we ask all the Earth scientists at the next meeting, just what it was that interested them in Earth science and that a questionnaire be designed, one of the questions to ask who first introduced them to the outdoors (going as far back as they can remember).

Cally Oldershaw
Executive Secretary
12 July 2006