

This is the ninth quarterly summary for all who have expressed interest in MIICE. If you have comments on what should be in this newsletter, please contact Roddy Stuart on roddy@miice.org.uk or on 0141-339 7127. Contributions about initiatives in schools, teacher education establishments or education authorities will be most welcome

Please feel free to pass this newsletter on to anyone who is interested in the use of MIICE to promote good learning and teaching using ICT. Please advise MIICE about changes of e-mail address or to recommend others to receive it - contact roddy@miice.org.uk

Please remember that all MIICE publications, including copies of previous MIICE Newsletters, are available from <http://www.miice.org.uk>

MIICE conference in November 2004

34 folk attended the sixth MIICE implementation conference in Moray House School of Education on Friday 19 November 2004. The conference was chaired by Bob Munro of the University of Strathclyde (Jordanhill)

Learning with digital video Karen Robertson, Quality Improvement Officer in East Lothian, spoke about the work which is being done in East Lothian schools to foster the uses of digital video for a aspects of learning, especially in the primary stages. The impetus for the scheme began with the attendance of 7 delegates from East Lothian at an Apple summer school in August 2003. They wanted to reproduce the benefits of that approach and set up a 'festival' for 36 pupils and 12 teachers from 12 East Lothian primary schools in the Innerwick Outdoor Education Centre over a 4 day period, with support from various agencies, including Apple's Apple Distinguished Educator programme. The children and their teachers had a thorough training in making movies and animations, including the underpinning skills, concepts and vocabulary

Karen showed a number of samples of the children's work, including a first project on *The scary side of Innerwick*, which included plasticene animation, *Clowning around*, a final project about a ball with a mind of its own with a striking use of special effects, and *Mission Way 2 Easy*, an adventure of the super hero Calum Cruikshank in foiling a robbery including an amazing (model) car chase using animation

They were interested in how to measure the success of this project and have noted considerable enthusiasm on the part of both the children and the teachers. There has been an immediate impact on teaching and learning in the 12 schools directly involved and they wish to repeat the exercise, including secondary schools. Their worry is about the sustainability of the enterprise

The delegates then broke into 4 groups to look at ways in which the MIICE toolbox might be useful as a way of articulating ambitions for (lifelong) learning, supplementing the undoubtedly worthwhile practical skills involved in movie making and animation. There was lively discussion which may result in the production of a MIICE subject guide on the use of digital video in schools

ImpaCT2 and the continuing quest to understand ICT and attainment Malcolm Hunt, Assistant Director, Evidence and Evaluation, at Becta spoke about Becta's work in the ImpaCT2 project which started in 1999 and subsequently about the continuing quest to understand the (causal) connections between ICT and learners' attainments. He reminded us that it continues to be difficult, even impossible, to isolate any single factor such as ICT in the complex series of factors which influence learning

The key findings of the government commissioned ImpaCT2 longitudinal study over the 3 years from 1999 to 2002 (involving 2179 pupils in 30 primary schools, 5 SEN schools and 25 secondary schools in England) included the observation that in 12 of the 13 comparisons (English, mathematics and science at each of KS2, KS3 and KS4, with history, geography, modern languages and design and technology at KS4 only), pupils in 'high ICT' schools achieved better results than those in 'low ICT' schools, including 4 which were statistically unassailable and some with differences equivalent to 4 months typical progress (0.2 of a National Curriculum level). He also looked behind the data to indicate some of the ways in which it is possible to explain variations in performance, in light of the unsurprisingly non-linear relationship between ICT activity in schools and individual attainments. Fuller details of the approach, the results and the work of the associated academic agencies can be found at <http://www.becta.org.uk/research/research.cfm?section=1&id=539>

Malcolm then spoke about reviews of literature on the impact of ICT which Becta commissioned a team at King's College in London to undertake on how and why ICT appears to have an impact on learning. The results of this review included the following

- there are positive effects of specific uses of ICT on pupil attainment in almost all national curriculum subjects in England
- the biggest impacts have generally been in mathematics, science and English where there has been a wider range of uses of ICT; in maths and science the greatest enhancement is where the ICT use is closely related to specific subject skills and concepts
- unsurprisingly the impact appears strongest where ICT has been embedded in teachers' practice for some time
- evidence of benefit is emergent about newer uses of ICT such as e-mail and web searching
- the key element is the teacher and their pedagogical approaches

Malcolm spoke at length about the factors which affect teacher uptake and use of ICT and those enabling factors which promote their use within teaching and learning. Full details can be obtained from

<http://www.becta.org.uk/research/research.cfm?section=1&id=3119>

Malcolm then summarised considerable recent analysis by Becta about the relationship between the results of Ofsted inspection ratings and test and examination data from the QCA in England. Among the very many interesting conclusions were

- the impact is greater when several of the (5) key ICT enablers are acknowledged to be working well in the schools (both primary and secondary)
- there appears to be a fairly standard pattern of stages in the evolution of schools' use of ICT from infrastructural provision through to improved outcomes for learning
- there is a considerable and perhaps growing impact of home ICT activities on the part of youngsters

Fuller details can be downloaded from

<http://www.becta.org.uk/research/research.cfm?section=1&id=538>

MIICE as a means of monitoring progress in a large secondary school Jim Scott, Head Teacher of Perth High School, provided an update on the use of MIICE as a means of articulating the purposes of the school's ICT policy, and for investigating the possible ICT effect which is beginning to become obvious in many of the subject departments

within the school

The background is that the school has a 4 year cycle for the introduction of ICT infrastructure around the 20 school departments (including the library and the guidance team); this is phased on the basis of skills and willingness to share their findings on learning and teaching with ICT, under the direction of a school-wide ICT steering committee. They are now in the third year of implementation and MIICE has proved to be a useful tool for auditing progress, including the baseline audit which is a feature as departments come into the programme. Jim handed round a printout of an Excel spreadsheet showing the progressions, in terms of ratings from 1 through 4 for each of the MIICE components which they have adopted to fit under their 5 main policy objectives of the school's ICT strategy

- monitoring implementation of EA and school policies
- encouragement of department planning and evaluation
- enhancement of learning and teaching
- impact of NGfL
- impact of NOF and other training

This was also illustrated by a copy of the detailed report from the English department, which is one of the phase 1 subjects. It is evident from both that there is progress, although it is neither unambiguous nor uniform. There are also clearly spin-off benefits for the third and fourth phase subjects, although the school is barely under way with phase 3. The self-evaluation process is now firmly 'owned' by most departments. CPD programmes within and between departments are working well. There are some major innovations coming from at least some of the staff. The next steps will be induction of the phase 3 subjects, provision of resources to sustain and enhance developments in phases 1, 2 and 3 subjects, continuing innovations (including the development of their Atomic Learning courses for the wider school community on a permanent basis), a new ICT policy and debate on future audit priorities

A further conference is planned for Friday 20 May 2005 in Moray House School of Education in Edinburgh. There will be discussion at the MIICE partners' meeting on 21 January 2005 about the purposes and arrangement of MIICE conferences, both conventional and by video link. Please pass on any views about the purposes and pattern of MIICE conferences to rodny@miice.org.uk

HMIE's Using ICT in Learning and Teaching

HMIE published (on 25 November 2004) their long awaited document on using aspects of *How good is our school?* "to evaluate how well your school is using information and communications technology (ICT) within learning and teaching". This - and the companion document on evaluation of ICT use in subjects and curriculum areas - can be downloaded, in either PDF or Word formats, from <http://hmie.gov.uk/publication.asp>

The document includes a statement about what effective teachers do with ICT

- "• use ICT selectively and appropriately to enliven the teaching process, to motivate pupils and to achieve positive attitudes to learning;
- provide pupils with good opportunities to take responsibility for their own learning, both in small groups and individually;
- identify aspects of coursework where pupils' individual needs can be met more effectively through the appropriate use of ICT; and
- use their ICT skills to access the wealth of resources now available online"

"The use of ICT has developed in different ways to meet the needs of learners in different curricular areas. The use of ICT can:

- help learners be creative;
- be a useful aid to problem solving;
- provide ready access to a world of knowledge and research; and
- improve the quality of presentation"

Six of the 33 quality indicators are used

- 1.1: Structure of the curriculum
- 1.2: Courses and programmes
- 3.2: The teaching process
- 3.3: Pupils' learning experiences
- 3.4: Meeting pupils' needs
- 6.6: Staff review and development

MIICE around Scotland

Glasgow MIICE was used to develop a framework for articulating aspects of achievement in learning (including being a reflective learner, being a developer of skills, being creative, being organised, being systematically investigative, being engaged). This was used as a basis for 72 interviews with staff and groups of pupils to monitor progress in the uses of ICT for learning and teaching

Midlothian A workshop is planned for Thursday 17 March 2005 for colleagues from the schools in Midlothian to explore ways in which they can make best use of MIICE

Leadership for Learning Masterclass - A workshop on MIICE has continued to be a feature of the new season of Masterclass for head teachers in the Stirling Management Centre

MIICE

MIICE - Measurement of the Impact of ICT on Children's Education - is a partnership of Scottish EAs and teacher education institutes, led by the University of Edinburgh (Scottish Interactive Technology Centre at Moray House School of Education). The partnership is dedicated to discussion and action research to enhance learning and teaching through appropriate use of ICT. We are pleased to have welcomed Shetland Islands Council and West Dunbartonshire Council to the partnership since the September 2004 newsletter

The partnership now has 30 EAs and 5 teacher education institutes

EAs		TEIs
Aberdeen City Council	Highland Council	University of Aberdeen
Aberdeenshire Council	Inverclyde Council	University of Dundee
Angus Council	Midlothian Council	University of Edinburgh
Argyll and Bute Council	The Moray Council	University of Stirling:
Clackmannanshire Council	North Ayrshire Council	Institute of Education
Comhairle nan Eilean Siar	North Lanarkshire Council	University of Strathclyde
Dundee City Council	Orkney Islands Council	
East Ayrshire Council	Perth and Kinross Council	
East Dunbartonshire Council	Renfrewshire Council	
East Lothian Council	Scottish Borders Council	
East Renfrewshire Council	Shetland Islands Council	
City of Edinburgh Council	South Lanarkshire Council	
Falkirk Council	Stirling Council	
The Fife Council	West Dunbartonshire Council	
Glasgow City Council	West Lothian Council	