

# Computing for Excellence

## HMIE / LTS Good Practice conference for computing and information systems

This joint conference, held in the Carnegie Conference Centre in Dunfermline on 3<sup>rd</sup> June 2009, has been organised at an important point in Scottish education. The Technologies experiences and outcomes of Curriculum for Excellence have been published and these cover the curriculum area of computing science. This conference, therefore, aimed to look forward to the implementation of Curriculum for Excellence, and to identify current and recent good practice which may contribute effectively to learning and teaching in new contexts. This conference concentrated on learning and teaching in the curriculum area of computing studies and information systems (referred to as computing science in Curriculum for Excellence documents), and its target audience was teachers in, and managers of, computing and information systems departments, along with education authority officers with responsibility for this subject area.

The study of computing, computing science, and information systems has an important contribution to make to the education of young people. In particular, through creative and imaginative approaches to learning and teaching about programming, learners develop knowledge, understanding and skills in structured problem solving and in working as a member of a team. These are highly valued skills in the workplace and are applicable in a wide range of contexts. Additionally, the study of data structures, particularly in the context of information systems, develops ways of seeing the world and analysing its features that are of particular importance in underpinning our understanding of the way the world works.

A number of conference workshops addressed the issue of promoting high attainment in Standard Grade and Higher courses that include programming and data structures as important aspects of study. Others highlighted innovative and imaginative approaches to learning and teaching in computing and information systems.

The study of computing science to first degree level is an important component of Scottish economic development. In recent years there has been a decline in the number of young people studying for a first degree in computing science. Universities are concerned to reverse this decline and see effective links with secondary schools as an important element in the revival of computing science courses at undergraduate level.

The conference aimed to allow participants to listen to and discuss issues with speakers from the university sector.

As Scotland's teachers prepare to implement the experiences and outcomes of levels 3 and 4 of Curriculum for Excellence, and anticipate the senior phase, this continues to be an appropriate time to highlight the good practice that exists in our secondary classrooms and to take steps, through this good practice conference, to secure wider adoption of effective learning and teaching approaches. Initiatives introduced through Curriculum for Excellence will be most successful where they are founded on effective approaches to learning and teaching. The *Computing for Excellence* conference will set a challenging agenda for teachers to enhance their teaching and so raise the standards of learning, achievement and attainment in young people.

In order to extend the opportunities for development of innovative and imaginative learning and teaching approaches beyond those who attended the conference in Dunfermline on 3<sup>rd</sup> June 2009, all of the keynote addresses and plenary sessions were available live through an Internet video stream provide through LT Scotland. All of the presentations will be supported by a teachers' CPD resource that will encourage teachers of computing science throughout Scotland to evaluate their own approaches to learning and teaching and consider the adoption of the sorts of approaches and strategies discussed during the conference. This CPD resource will be accessed here, through this LT Scotland website and will be available after the conclusion of the conference.