

Case Study

Using MIICE for ICT reviews in Dundee schools

Background:

Dundee City Council has invested heavily in its ICT infrastructure for schools. A five year hardware refresh cycle is in place (February 2010) , interactive whiteboards (IWBs) are in the majority of teaching areas, and a centrally-based ICT team supports the CPD needs of teachers. Consequently, it is important to show that this investment is having a positive impact on teaching and learning.

In recent years, an ICT review has taken place in secondary schools as part of Dundee's extended review process whereby the quality improvement team visits schools on a rota basis to validate the school's self-evaluation of their school improvement plan. The ICT reviews have been so successful that they are now being extended to early years and primary establishments, with some schools now requesting a review outwith the extended review cycle.

Developing the tools:

For many schools, the self-evaluation of their ICT usage seems like a daunting and complex task. They are unsure of where to start and, typically, lack the specialised vocabulary needed to compose the questions to ask. To address this, the MIICE quality indicators form a core part of the ICT MOT which is used in school reviews. The idea for this came from work undertaken in Aberdeen City Council where the ICT team had created an MOT for schools to use on an annual basis as a "health check" for their usage of ICT. The Dundee ICT MOT has extended the concept and comprises 3 sections:

- **Section 1** can be used to provide an annual snapshot of ICT in the school. It might be completed by the ICT Co-ordinator in consultation with others, and provides a summary of basic information on the number of machines, whiteboards, digital cameras, scanners etc in the school, together with a **5 strengths and weaknesses section** to highlight good practice and note problem areas, and an area for recording the current focus of ICT developments within the school. This section can act as a useful basis for planning future spend.
- **Section 2** takes a more in-depth approach and, during school reviews, it is used as a checklist for the central ICT team when undertaking classroom visits to see ICT in action. This section comprises a summary of quality indicators and themes from the MIICE toolbox , where grades 1-6 can be recorded. This provides a picture of

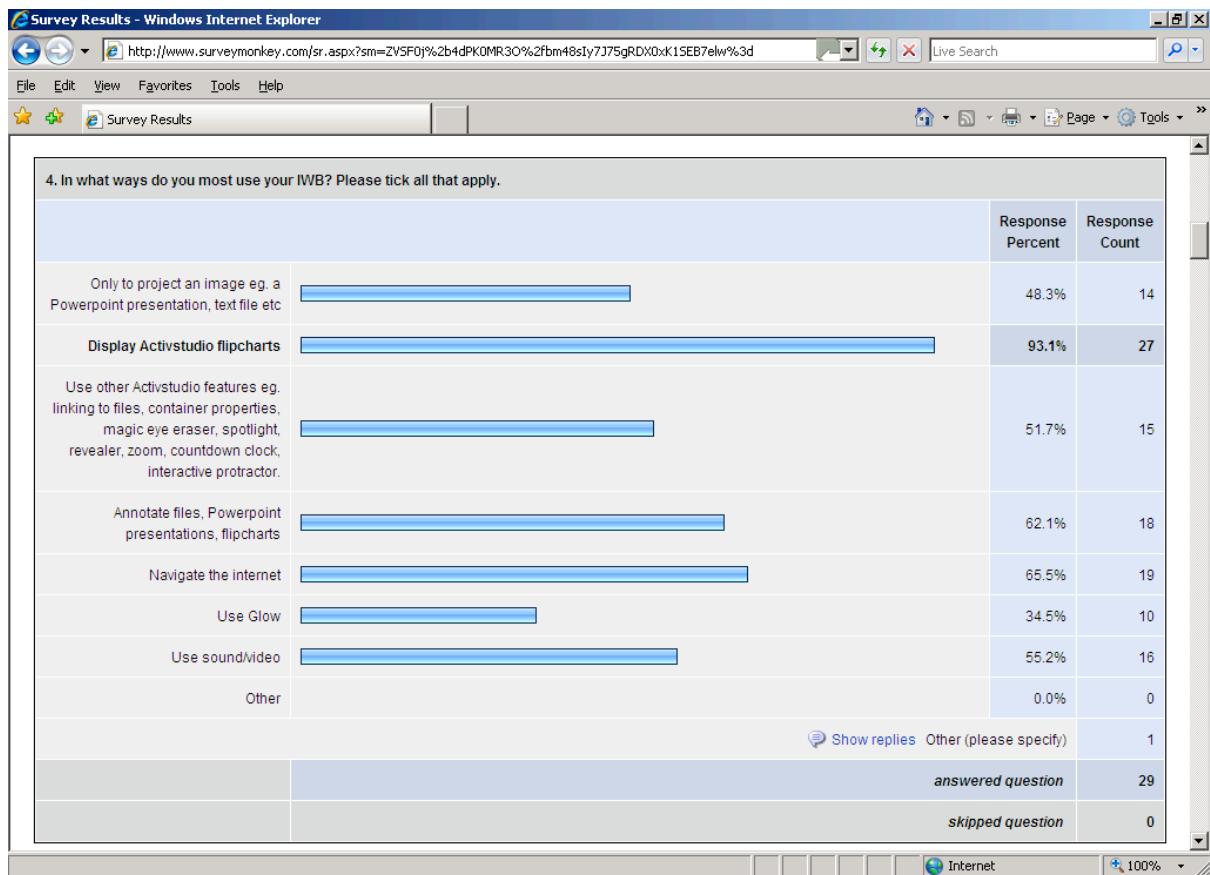
learner and teacher skills and attitudes and of the status of ICT developments within the school/department/ stage/class. This section can be used flexibly ie. a group of criteria might be selected in order to focus on the learners, management of learning or teachers' CPD in relation to ICT and might be completed by a teacher, a department, a management team, external reviewers etc.

- **Section 3** focuses on the **impact of ICT** in the school. It is designed to elicit more in-depth information which might inform the planning process, help schools to prepare for an extended review or Inspection, act as a stimulus for discussion and debate on ICT issues, and form the basis for requests for support from the central ICT team. It is normally completed by an appropriate working group or ICT committee in the school.

Several other tools have also been developed to assess the impact and sustainability of the input by ICT staff tutors when they work with schools, and to monitor the impact of Glow. An MIS MOT is also available for schools wishing to investigate how they make use of management information.

ICT reviews in schools:

When an ICT review is scheduled to take place, the ICT Manager, usually accompanied by an ICT Education Support Officer, visits the school for a pre-meeting with the headteacher and the ICT co-ordinator to discuss the parameters of the review. One area which we have looked at in some detail in several schools has been the use of interactive whiteboards (IWBs). These are now viewed as an essential classroom tool and we are well on the way to having an IWB in each teaching area. It is important, therefore, to ensure that these expensive items are being used to their full potential. We have created an online survey tool which staff are asked to complete. This provides some interesting information on the ways the IWBs are being used, the skill levels of staff in using the software, their CPD requirements, and any technical difficulties or other barriers hindering effective use.



16. Please add any comments/evidence.

1. But I find it makes learning more fun, interactive and easier to use different learning styles and tools.
2. I can prepare flipcharts incorporating all working (and colour coded) and reveal each line by moving a box which initially covers it from pupils view (sometimes use the reveal mechanism if I have time). This makes the working clear to all, for reading and copying, and demonstrates the layout expected of the working.
3. Would find it very difficult without, new resources all developed with IWB in mind.
4. EASIER TO PLAN LESSON NOTES IN ADVANCE.
5. Lessons are easily prepared and stored for future amendments. Can't imagine teaching without one - feel lost when it doesn't work or in a room where there isn't one available
6. You have a wider variety of teaching resources at a mouse click.
7. It makes me want to make my lessons more interactive, thus I find it easier to teach. Also, it helps that pupils are waiting to see what comes up next.
8. It is another tool in the arsenal. It brings a new set of possibilities and a new set of problems when delivering lessons.
9. It allows for more interactive learning to take place. Having a whiteboard should allow for pupils to become more involved and if they are they will 'buy in' to the process.
10. much easier to demonstrate activities to the class

The survey results also inform the school's decision about which classes we observe in the actual review, and we try to see a range of age groups, subject areas, examples of good practice and lessons where we believe that the IWBs are not being used to their full potential. After the classroom visits, we make use of the MIICE themes and quality indicators to structure our report and comment appropriately on the abilities and attitudes of pupils, the skill levels of staff, and the management of learning in the department or school. The report also makes recommendations about the next steps for the school, any areas which the ICT support team needs to focus on, and any technical difficulties which have to be resolved. In one secondary school, for example, there were a considerable number of problems with both the boards and the data projectors, and so some additional central funds were provided to assist the school in getting these rectified. The ESO and her team of ICT staff tutors then negotiated a support programme to help the staff to further develop their expertise.

Other areas we have worked on at the request of schools have included an investigation into the ICT skills of S1 pupils (and a comparison with the skills of P7s in the feeder primaries), the effectiveness of tracking and monitoring (using the MIS MOT), and a general look at the various uses of ICT in the school.

Feedback

The feedback we have had from schools has been extremely positive. They have certainly welcomed the input from the ICT team in leading the evaluation and in supporting the action points which emerge from the review. The provision of a small amount of additional funding (eg. to buy some Promethean wands for P1/P2 classes who couldn't reach the IWB) has also been welcomed!

And of course, it is not only the schools themselves which benefit from the reviews. The opportunity for the ICT team to spend time in classrooms, see technology in action, and speak to staff and pupils, has been invaluable in informing future decision-making and assessing the effectiveness of our own input. Slowly but surely, the ICT team and the schools in Dundee are seeing how useful the MIICE indicators and the other tools can be and, hopefully, in time, teachers will become more confident in their self-evaluation of the impact of ICT in their classrooms.

Rosetta McLeod
ICT Development Manager
Dundee City Council