

**Key findings for further education colleges
based on evidence from the evaluation of the ICT Test Bed
Project**

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The ICT Test Bed Project

The ICT Test Bed Project (2002-06) was initiated by the Department for Education and Skills (DfES) to explore how ICT can be used to support the Government's wider agenda for education reform. The project took a holistic approach to ICT implementation in three ICT Test Bed areas of relative socio-economic deprivation. A total of £34 million was invested over four years, which gave the 28 ICT Test Bed schools and three FE colleges access to very high levels of ICT hardware and appropriate software. The funding also provided for investment in staffing release and training support to make the most effective use of this investment. ICT Test Bed work focused on using ICT to:

- raise standards and performance, especially in the areas of school and college improvement, student attainment, and raising the quality of teaching and learning
- enable more effective leadership and management in schools and colleges
- help teachers to concentrate their time on their core task of teaching
- enable more effective collaboration between schools and their local colleges
- provide wider learning opportunities to students, their families and the wider community in a home environment.

All three ICT Test Bed local authorities have high concentrations of deprivation compared to the national average, though manifest in different ways.

Methodology

The ICT Test Bed Evaluation is based on three strands of data collection and analysis:

Quantitative data

- Benchmarking of changes in performance on national tests against matched comparator schools and national averages.
- Modelling of e-maturity to track institutional change over four years.
- Annual surveys of teacher, pupil and parent attitudes and working practices.

Qualitative data

Site visits including classroom observations, interviews with local authority managers, headteachers, teachers, administrative staff, technicians and students, and document analysis.

Action research data

During the project, more than 90 teachers and para-professionals from the ICT Test Bed Project institutions completed 116 action research studies of their innovative work with ICT. 47 of these were written by staff from the FE colleges.

The final summative evaluation reports of all three strands, together with a number of more detailed evaluation reports from the four years of the project listed in Appendix A, will be made available on the ICT Test Bed Evaluation website [www.evaluation.icctestbed.org.uk].

Key findings for the Further Education (FE) sector

These key findings have been drawn from multiple reports authored by the ICT Test Bed Evaluation team.

In each of the three FE colleges, ICT investment was focused in three different departments (none of which was ICT). Findings relate to these specific departments in the main, rather than to the entirety of the colleges. The very small sample size must be borne in mind.

Leadership and management

Whole organisational change was a powerful strategy for accelerating improvement

Investment in ICT in a small number of curriculum areas in the colleges had far less impact than investment in schools across all departments. The major impact in the ICT Test Bed colleges has come from developments in MIS and learning platforms, which were installed for use across the whole college. The curriculum areas that received ICT Test Bed funding have been able to transform their teaching methods and members of their staff have become models for innovative practice. However, they have necessarily become islands of innovation, which may be difficult to sustain.

It took time to embed change and develop e-maturity

The departments developed their e-maturity in a more or less linear fashion, with maturity growing rapidly in the first two years, and then slowing down between year 2 and year 3 and year 3 and year 4. This reflected the rate of change in schools. The levelling off of the rate of change was anticipated, because maintaining the momentum for change is less achievable as the integration of the systems becomes more complex. The plateauing of skills and integration of ICT is a reflection of the now steady increases in staff knowledge and expertise.

Technological and pedagogic sustainability needed to be planned for from the start

Revenue funding to give people time for new support roles, and regular meetings for planning and training, are important conditions for success in changing practices. Real sustainability means embedding ICT in pedagogic change. In the ICT Test Bed schools, installation of ICT equipment in all classrooms at the same time proved to be one of the best ways of getting staff to form a mutual support group and learn together. In the long term, this had a profound and positive effect on embedding pedagogic change. The colleges, in which technology was introduced into only three departments, did not experience this wholesale change in teaching and learning. However, we saw major effects from enhanced MIS systems and VLEs, perhaps because these had an impact across the whole institution. It is worth noting that in colleges, as in secondary schools, equipment which is permanently installed or which is common to all classrooms, such as display equipment, has been most effectively embedded. Equipment and software that is subject-specific is generally well used as well.

Procuring and implementing a large amount of ICT placed strain on all existing college systems

Procurement of the equipment in a short space of time placed heavy demands on the college finance team and caused tensions where spending limitations were in place. Installation of the new equipment had to be integrated into the existing college infrastructure and systems and phased in with other work and developments. This placed an additional load on the technical staff in all three colleges and led to further delays.

Change management should be regarded as the top priority

This is difficult with major ICT investment, which requires time-consuming procurement decisions to be made. Change management is concerned with changing structures and cultures. It is therefore a much deeper process than staff training, and one that has an impact upon working practices across institutions. It requires strong, visionary leadership and clear change management tools and procedures. The active support of a senior manager and supportive interest of the whole senior management team were needed to manage change effectively in the colleges. Colleges appointed project managers and established new committees to maximise staff participation, so that staff became partners in change. ICT tools that provided structures for (a) project management (b) collaborative working and (c) financial planning/tracking (spreadsheets) were powerful in managing change and tracking its progress.

Leadership strategies needed to fit the existing culture of the organisation and play to the strengths of all participants

The models of change management were quite different in each of the three colleges.. Two models are described here.

Franchise model:

“It’s like a series of franchises internally, that’s the way I think of it, you have got schools, departments... you have got lecturers and each one is given an element of freedom for what they want to deliver, but they have to use the supplied materials. In the well known franchises you are all similarly branded but in essence you are almost self-employed, and you have got a larger degree of autonomy.” ICT Test Bed Project Manager, College A

Empowerment model:

“Initially there were individual practitioners who were the obvious choice either because of the role they were playing or ... [personal qualities]. But others have come through – the team has evolved a true sense of bottom-up implementation. At all levels it’s welling up from practitioners across the piece. For example, the joinery technician has taken it on himself to video things and produce demo materials for students. It’s been really empowering staff – it’s about having the faith in staff to truly empower them, not just empower them as long as they are doing what you want.” ICT Test Bed Project Manager, College B

MIS provided greater efficiency and effectiveness for managers and teachers

All three colleges upgraded their existing MIS with ICT Test Bed funding. The upgraded MIS streamlined business processes across the colleges. It made providing course information, dealing with enquiries and enrolling students much quicker and easier. Managers made regular use of data to help them manage the curriculum and their staff and to monitor performance. MIS personnel report that the new systems work better and help them to be more efficient and effective. The biggest impact has been at curriculum management level. Managers were able to pull off tailor-made reports from the system without having to request them from the MIS section. In the words of one ICT Test Bed Project Manager, “What was previously specialist is now open to all staff across the college.”