

14-19 EDUCATION IN LONDON

SUPPORTING LEARNERS THROUGH ICT

FEASIBILITY STUDY

EXECUTIVE SUMMARY



GOVERNMENT OFFICE
FOR LONDON



Learning+Skills Council
London East



1. EXECUTIVE SUMMARY

1.1 PROJECT SCOPE

The purpose of this project is to investigate the potential and practicability of ICT to underpin the Government's drive towards a coherent phase of 14-19 education. It looks at the benefits that ICT systems might deliver in a number of specific areas:

- Management of the learning and learner
- Delivery of the learning
- Assessment of the learning
- Management of institutions involved in learning
- The ability of the learner to access different learning environments and opportunities
- Region-wide management including allocation of funding, collection of key statistics and measuring and recording outcomes

The project also looks at managerial and organisational issues including ownership of the learner and the learning, partnership management and student mobility, as well as at issues directly involving the effective use of ICT. The project conducted research at three levels - national, regional and local. Regional research was focused on London, and chiefly London East, and local research on the borough of Lewisham because of its progressive participation as both a 14-19 Pathfinder and IRT Trailblazer.

The project was sponsored by the Government Office for London, the Learning and Skill Council London East and RM plc.

In 2003, Becta produced an excellent overview of ICT in 14-19¹. Its contents remain very relevant to the latest thinking and we have used it as a starting point for many of the ideas set out in this report.

1.2 CURRENT STATUS AND INITIATIVES

1.2.1 The Education Management Perspective

There are a number of current national initiatives relating to 14-19 provision - the Working Group on 14-19 Reform, focusing on curriculum and qualifications reform; the DfES' 14-19 Pathfinder Initiative, identifying good practice to inform future national

¹ Becta (2003) *Using Technology to support the 14-19 Agenda*.

developments; and the LSC's Strategic Area Review, looking at the provision of learning opportunities.

Regionally, the LSC London East is focused on developing participation and retention, and improving achievement; London East Connexions is planning to use widely-gathered student data to enhance its advisory potential; and London Challenge, whilst mostly focused on a sub-set of London boroughs, is also investigating ways of maximising the impact of pan-London planning and provision.

Locally, in Lewisham, the colleges and schools are already providing courses to address the needs of those students who are not yet ready to engage with currently accredited courses. They are looking at greater ways to link up their provision through federations and increased student mobility.

1.2.2 The ICT Perspective

Nationally, the Pathfinders are developing a variety of ICT projects to enhance their impact. Some are focused on linking MIS systems in a variety of ways, some are developing e-learning programmes and are implementing Virtual Learning Environments (VLEs) as a way of managing e-learning. Some of the resources are being acquired from commercial providers and some are bespoke developments.

Other national initiatives are the Connexions Customer Information System (CCIS) project supporting standardised data transfer and the Unique Learner Number (ULN) project which, if progressed, could provide the means for cross-institution hosting of linked student data. In addition, the Joint Information Systems Committee (JISC) and the Centre for Educational Technology Interoperability Standards (CETIS) have completed a lot of work in developing recommended interoperability standards.

Regionally, the London Grid for Learning has set up a strong level of provision to support the learning of school-based students with London-wide high bandwidth connectivity, web space for these students, and resources for teaching staff.

Locally, Lewisham, through Lewisham College and through its own Pathfinder, is looking at how the use of a VLE can be developed and integrated into a wider MLE. Research has been undertaken into the connectivity of the schools' MIS systems with a view to integrating data across institutions.

1.3 ISSUES IDENTIFIED

In the course of our research, a number of issues were identified that affect the provision of a coherent phase of 14-19 education in London.

1.3.1 Management of 14-19

The division of accountability for 14-19 means that it will be extremely difficult to make progress in meeting educational objectives, with or without the support of ICT.

1.3.2 Learner support

It is difficult for learners to acquire information about the availability of courses. It is also difficult for institutions to track their progress when they do, because a consolidated method of tracking students through the system from 14-19 does not exist.

1.3.3 Management of online Individual Learning Plans (ILPs) and Portfolios

There is little scope at the moment for the ILP to be portable outside the local environment until interoperability standards are laid down.

1.3.4 The 16+ transition

The 'education stop' at 16 is reinforced by the lack of continuity of ICT systems and provision across that divide.

1.3.5 Dataflow analysis

Dataflow analysis has not taken place, yet is a prerequisite to any detailed design of interoperating systems.

1.3.6 Message exchange standards

Current message exchange standards are not adequate to handle the likely demands for increased system interoperability.

1.3.7 Managed Learning Environments

Implementation of an MLE is complicated by the need to integrate or replace legacy systems, in which there is often a large investment.

1.3.8 Data ownership, sharing and protection

Issues relating to data ownership, data sharing and data protection must be understood and agreed before effective inter-operation can occur.

1.3.9 Implementation issues

The introduction of 14-19 as a coherent phase sets a number of practical challenges for students, staff and institutions in terms of how the required systemic flexibility will be implemented.

1.4 PROJECT PROPOSALS AND RECOMMENDATIONS

We are proposing a programme of ICT development which can provide the essential support required for the new demands of 14-19 education, and overcome many of the issues identified. This will underpin the further development of an educational system that allows all students to fulfil their potential in an integrated and supportive environment.

It is important to note that our proposals build on the many outstanding ICT developments that we have come across in the course of our research. We have sought to incorporate them into a regional infrastructure with a single point of management.

The scope of the programme is large, but it has been designed so that it can be introduced in a modular form, in manageable stages, as an agreed regional vision is developed and funding becomes available.

We have constructed our recommendations for ICT systems into five modules or projects.

1.4.1 Project 1 - London Portal

This Portal is a comprehensive gateway to the full range of online information and resources required by 14-19 year-old learners throughout London. It provides a full range of information on course options and availability in the region, and assists with student support through moderated online community forums.

1.4.2 Project 2 - Support Unit

The services that we are proposing must be underpinned by a Support Unit offering services in three main areas - to students accessing the London Portal and online ILPs, portfolios and forums; to teachers and tutors to assist with 14-19 related professional development; and to systems administrators and operators as a frontline helpdesk and online support service to enable effective management of the technology infrastructure. This Support Unit should grow in parallel to the implementation of the other four projects.

We recommend that the first project tackled as a pilot is Project 1, the London Portal. This can be commenced on a small scale and developed in phases, matched to the initial levels of funding. It will also need a proportional part of Project 2, the Support Unit to be put in place to ensure its success.

1.4.3 Project 3 - Regional Registration Service

This project aims to increase student participation and improve retention through a centralised registration process that provides for more efficient registration and enrolment. The Regional Registration Service allows for one-time student registration and a repository for master student data, shared between institutions. It should be viewed in co-ordination with the ULN concept, and could indeed become London's component of any national system.

To make rapid progress with Project 3, the Registration Service, we recommend that urgent representations be made for London to act as a regional pilot for the system of Unique Learner Number allocation whatever the outcome of the current consultation. This Project will provide the vital foundation for the benefits which will accrue from the next stages of ICT development.

1.4.4 Project 4 - Gateway

By establishing a data warehouse and a communications hub, this project provides a means of standardising, centralising, updating and sharing core administrative data, such as enrolment records, attendance records, tracking and returns data and exam registration. It allows MIS data to be shared with a partnership of learning providers, eliminating paper-based and ad-hoc systems and hence the 'administrative stop' that currently occurs at the end of compulsory education. Furthermore, it rationalises the process of data analysis and report production.

We recommend that, to progress Project 4, 'Gateway', the opportunity is taken to pull into one project the current data-sharing initiatives which are taking place across the region. These would include Pathfinder and Connexions as well as other, more local projects. A detailed technical specification for a region-wide solution would need to be developed before this substantial project is put out to tender.

1.4.5 Project 5 - Learning Management

Building upon the Regional Registration and Gateway Projects, this proposal aims to create a central storage system for student records, mainly in the form of e-portfolios, records of achievement, and ILPs. Assisting in the drive towards personalised learning, it provides a logical solution for the tracking of students' progress through the education system and would be a core resource for students, learning providers and careers and guidance agencies.

This is an extensive project. We recommend that work on the early phase comprising a centralised facility for e-portfolios should begin at the earliest opportunity. So too

should the planning for the later stages of this project. Its implementation becomes possible once the other projects are operational.

1.5 MEASURES OF SUCCESS

As projects are implemented, they can be specifically judged by their success in delivering the following:

1.5.1 Increased student retention

More students will continue in education and training beyond the age of 16 because of improved levels of information and support right through the 14 to 19 phase. This is supported by:

- Information on a wider range of options for learners communicated through the London Portal
- A more straightforward, centralised registration process for learners which paves the way for easier enrolment activities
- A more efficient and error-free registration and enrolment process. Checking and verification reduced owing to removal of duplication and repetition
- Tracking of students undertaken throughout the region, and at critical stages of an individual's education, especially at age 16

1.5.2 Improved management of educational provision

To ensure the prioritisation of provision to meet current and future needs, it will be essential to have available pan-London data on uptake of courses and student retention. This is supported by:

- Administrative records passed between schools and colleges as students progress and migrate, eliminating re-keying of data and reducing errors
- Data analysis and reporting performed on a London-wide basis, with comparisons available at provider, partnership, borough and pan-London levels

1.5.3 Raised standards of attainment

Raised student attainment, as measured by increases in the levels of qualifications achieved, will be facilitated by:

- Support and guidance based on wider range of up-to-date information, delivered to the learner by a variety of means of communication
- Development for each student of an engaging individualised learning pathway, reviewed, updated and managed by all learning providers
- Incorporation into visible and attested e-portfolios of students' achievements inside and outside the classroom leading to increased motivation and higher attainment

1.6 OTHER RECOMMENDATIONS

To support the required systemic change, we have made four additional recommendations.

1.6.1 Clear definition of roles and responsibilities for the delivery of 14-19 reform

Despite the positive actions that organisations and institutions have taken towards 14-19 reform over the past number of years, isolated innovation and independent projects will not be sufficient to deliver reform of the extent envisaged by the Government. For this, clear ownership of 14-19 is required. As has already been widely recognised in the context of 14-19 reform, a difficulty with the present structure is that at a regional and local level no organisation is responsible for education from the age of 14 through to 19. If a move towards a coherent phase of 14-19 education is to be successful, the DfES will need to be considering its most effective means of delivery. Sufficient power must be given to the relevant organisations to galvanise stakeholder support. Without transparent roles and responsibilities, attempts to transform the system may flounder.

1.6.2 Ownership of 14-19 within institutions

Definition of roles and responsibilities within institutions is also important. We believe there is a requirement for each institution to appoint a senior manager with a key responsibility for 14-19, where this has not already happened. The purpose is to ensure each institution is aligned with the movements in strategic direction required by 14-19 reform and also to manage the very demanding partnership approach to the delivery of 14-19 education and its consequent funding and assessment issues.

1.6.3 Further study into how collaboration can be developed among partners

A significant aspect of proposed reform relies on institutions pooling resources and working together. This requires transition from an institution-centric system to a learner-centric system. Collaboration is necessary on several levels. Our study has shown real progress towards this end in Lewisham with four federations covering each of the secondary schools in the area. To support these, and other, initiatives, we recommend that specialist advice and support are further developed and provided at a local and regional level to ensure the necessary extent of collaboration can be encouraged and implemented. We envisage pan-London bodies such as the Government Office for London, the LSC London region and the London Challenge playing a key role in strategic planning and support for the region.

1.6.4 Pan-London management of ICT developments

None of the ICT projects we have proposed can be undertaken by a single institution, and so we recommend that the accountability for their implementation is held by a single organisation at regional level. The requirement is to implement a pan-London approach, building on current local initiatives. This organisation must be able to reflect the interests of all stakeholders and to make decisions about a development that must, by its nature, be regional. It would, of necessity, be the prime budget-holder.

1.7 NEXT STEPS

We are confident that this study provides some insight to how a strategic and focused approach to ICT can underpin 14-19 educational reform. It is hoped that our report will encourage discussion and support decisions among all stakeholders as to how London can best grasp the opportunities presented by 14-19 proposals.

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