Education Departments' Superhighways Initiative

Group F: Additional Projects

Interim Reports

Educational Internet Providers Project
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Lingu@NET – A Virtual Language Centre
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Multimedia Portables for Teachers Project
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Evaluation of additional projects

Educational Internet Service Providers Project

1. The evaluation in this report is based on the four core schools, those that have received the local area networks purchased by NCET on behalf of the DfEE. Information has been collected by questionnaire, interview and visits. The full report, scheduled for publication in 1998, will also include information gathered from the 50 'focus' schools that have been nominated by the EISPs, through questionnaires and some follow-up interviews, and approximately 300 volunteer schools who will be sent a questionnaire in September.

Lingu@NET

2. Since Lingu@NET is a developmental project, there is no formal evaluation element and no evaluator was appointed. Moreover, the project has seven more months to run. This Interim Report, however, aims to give a subjective indication of what the project has achieved to date.

Multimedia Portables for Teachers

3. The Interim Evaluation is based on the result of a survey of over 1000 participating teachers and more than 30 school visits. The final evaluation, due later this year, will contain detailed results and recommendations.

The Projects

The following reports are based on the findings of three projects which were not part of the original EDSI submission, but are wholly funded and administered by Government Departments and agencies. Each brings a unique perspective to the use of the superhighways which is not replicated by other EDSI projects, and therefore provides a broader picture.

The three additional projects and their unique features are:

- the Educational Internet Service Providers project, which explores the effect of networked access to the Internet for teaching and learning

- Lingu@NET - a virtual language centre, which explores the development of a World Wide Web site for language teachers

- the Multimedia Portables for Teachers Pilot, which has provided individual teachers with portable computing facilities, including access to the Internet and e-mail.

Because the starting dates of these three projects were different from the main EDSI projects, only interim reports are available at this stage.

Project F2.1: Educational Internet Service Providers Project

Description of the project

1.   The aim of the Educational Internet Service Providers project (EISP) is to investigate the curriculum benefits of Internet service providers and the effect on teaching and learning of networked access to the Internet. The project is funded by the Department for Education and Employment (DfEE) and is administered by the National Council for Educational Technology (NCET). Additional support is provided by Dialnet and RM Internet for Learning in the form of some initial free access to the Internet. The project currently involves over 350 schools.

2.   Four 'core schools' were selected on a bid basis to receive equipment and resources to the value of over £35,000 per school to establish a distributed Internet network. This 'core' comprises two secondary schools, one primary school and a special school. Conditions of the bidding process included a requirement that each school provided £10,000 per year from its own resources and showed in its development plans a commitment to information and communications technology (ICT). They were provided with a basic network cabling infrastructure and ISDN2 Internet connection, a router, a file server and a number of multimedia computer systems, either Research Machines (RM) or

Acorn, together with a range of curriculum-related software. The schools spent additional funding where they required additional cabling or wished to connect additional computers. The Internet service is provided by either RM or Dialnet.

3.   Fifty 'focus schools' are taking part in the project, representing a range of geographical locations, types of installation and types of school, in order to make comparisons between:

- stand-alone Internet access and networked access

- styles of classroom management

- effects on learning

- management and technical issues associated with connectivity.

4.   Half of these schools are in the primary age range, including four middle schools, four are special schools and the rest are a range of different types of secondary school located across the country.

5.   Towards the end of the project, approximately 300 'volunteer schools' will be completing a questionnaire on their use and perceptions of the Internet for teaching and learning.

6.   Professional development was undertaken by the service providers in the first instance and also by the NCET project officer. The nature of the training has moved from being very general and technical to being targeted at particular curriculum needs. Demand for training is continuing throughout the project.

Aims and outcomes

7.   The project aims to evaluate:

- the impact of Internet access on learning

- the value of specific educational Internet services currently on offer to schools

- the impact of Internet access on management and administration both in the classroom and in the whole school

- how technical issues affect the process of learning.

8.   The NCET project officer has provided training and supported staff at the four core schools. This has included curriculum areas, technical matters, Web site creation, searching effectively, e-mail and newsgroups. A mailing list has been set up to which any schools using the Internet may subscribe.

9.   Early indications are that the Internet is being used in five ways:

- personal search by pupils

- integration of Web materials into teaching

- tasks based on Web searches

- Web page creation

- communication.

Costs and cost benefits

10.   The core schools are being asked to provide a breakdown of these and details will appear in the final report together with case studies and a detailed evaluation of the project.

Project F2.2: Lingu@NET - A Virtual Language Centre

Description of the project

11.   Lingu@NET is a UK developmental project led by two Government-funded organisations, the National Council for Educational Technology and the Centre for Information on Language Teaching and Research (CILT), to develop a Web site of quality-assured resources for language teachers. Its address is www.ncet.org.uk/linguanet. The Lingu@NET project began in January 1996 and currently runs until December 1998. European funding is being sought to continue the project until 2000. The project and the budget are managed by NCET, who report to a steering group consisting of representatives of DfEE, CILT and NCET. NCET and CILT jointly design and structure the site, define the criteria for inclusion of materials, and promote the site.

Aims and outcomes

12.   The aim is to establish a Web-based language centre, based on networked information technology, providing UK language teachers with quality-assured information, INSET materials and expert advice. The objectives of the project are to:

- test the concept of an on-line education support centre as a replicable model

- provide material for education professionals, related to the teaching and learning of languages on a Web site

- obtain evidence relating to networking, quality control, user needs and commercial opportunities

- set up a high-performance Sun Netra server.

13.   Since Lingu@NET is a developmental project, there is no formal evaluation element.

14.   The project has met its four aims, in some respects exceeding them:

- The site contains over 50 documents not available elsewhere and has links to over 150 other sites. The documents include those in English, French, German, Spanish and Welsh.

- The site includes an on-line enquiry service and opportunities for feedback. By December 1997, there will be a discussion group and more links to materials supporting professional dialogue.

- Through the on-line feedback form, reports from the user groups, discussions with CILT and publishers and those experienced in setting up the server, there is now a clearer picture of what language teachers want from the Internet, an understanding of commercial and quality-assurance issues in a new medium and a deeper appreciation of server and connectivity issues.

- The Sun Netra server is now running and performing to specification. A secure transaction system is expected to go live in 1997.

15.   The following outcomes have been achieved:

- The Lingu@NET Web site is established on a high-performance server.

- A network of formal and informal user groups has been set up.

- Partnerships are in place between government-funded organisations, the public and private sectors, providers and users, and the UK and other countries.

- There is considerable interest among publishers, and NCET and CILT have assisted them in going on line and reaching a market outside the UK.

- Further evidence has been gathered of how the Internet is truly a global phenomenon, with implications for how the UK education service functions.

- Evidence suggests that the use of Lingu@NET by teachers for their own professional purposes may well provoke change in their attitude to and use of ICT in classrooms, for example by helping learners to develop the information-handling skills they need to access language-related support materials.

- Lingu@NET works for language teachers. There is no reason why the concept could not work in other curriculum areas. The potential of on-line professional support is vast. There is much more to do, notably in the areas of peer-to-peer networking, for example by SENCOs, teachers as publishers, and through on-line tutorials and international partnerships.

Sponsors and other partners

16.   The project was 100% funded to March 1997 by the DfEE. Other parties, in addition to NCET and CILT, include commercial publishers and international partners in G7 and other countries. Over 200 different users visit the site every week, using the full range of connectivity. The project is funding user groups who have contributed materials and ideas and are developing innovative practices.

Costs and cost benefits

17.   Lingu@NET is only as far away as a telephone line. Users in Cornwall, Lancaster and Wales are not disadvantaged by the distance to CILT and NCET as they are if they need to travel to a conference or exhibition. The quality and authority of the materials is not reduced if the school lacks local guidance or expertise in languages.

18.   Everything on the site is free of charge to the user. Since there is no training or support element, there are no additional costs as more people access the resources and so the more accesses, the more cost-effective. Whether people would pay to access Lingu@NET is yet to be determined; the resources offered would be free of charge if obtained from NCET, CILT, the Association for Language Learning (ALL) or if collected at an exhibition, but on-line access is more convenient and has fewer travel or time overheads.

19.   Where Lingu@NET really begins to save travel time, then the money saved could be moved into equipment and access provision both in school and at home. However, a visit to a virtual language centre and publishers' exhibition can, of course, never recreate the bonds forged at a real event.

20.   Lingu@NET uses standard Internet tools and norms; it has no proprietary features or requirements. This is particularly important for novice and overseas users. The site (as with others in English) should welcome people and explain itself in other languages, as is the practice on non-English sites.

21.   As a means of national organisations reaching their target audience, Lingu@net would be cost-effective if more teachers were on line. The on-costs of preparing a page of information are about £40 and that page can be seen by thousands of people.

22.   Lingu@NET could be commercially viable if it could bring customers to product suppliers, generate its own income through product sales, or enable existing funding of an organisation's work to be redirected, for example from a telephone/letter enquiry service to an on-line information-provision service and thereby to more efficient ways of working.

Project F2.3: Multimedia Portables for Teachers Pilot

Description of the project

23.   The Multimedia Portables for Teachers Pilot is a project to investigate how the provision of high-quality portable computers with software and Internet access could support the development of teacher confidence and competence in the use of IT.

24.   The project was funded solely by the DfEE and has two phases. In Phase I, there were approximately 1,150 teachers in 65 primary, 24 middle, 462 secondary and 16 special schools involved in the project, distributed pro rata in each of the English local education authorities and the grant-maintained sector. Every school had two teachers working on the project, each with their own machine. The evaluation of Phase I is complete.

25.   This pilot has been extended into a second phase with a further 390 teachers. Phase II runs from January 1997 to July 1998.

Aims and outcomes

26.   The aims of the initiative are to:

- provide a varied group of teachers with personal computers that support multimedia and/or communications

- increase teacher confidence and competence in the use of ICT resources

- promote better learning in the pupils taught by the teachers taking part in the pilot.

27.   The evaluators found that teacher competence has significantly increased with high figures for successful usage in all areas of the technology provided. Over 98% of teachers made successful use of the computers, over 90% of teachers made successful use of CD-ROM and 76% made successful use of the Internet. In addition, 95% of the teachers used the computers at school for teaching purposes and 90% for administrative activities.

28.   Evidence showed that 99% of teachers used the computer at home to complete work started at school, and it was apparent that for most teachers the equipment had become fully integrated into their professional lives.

29.   Improved confidence was identified in both the statistical and the case-study evidence, with teachers feeling they had increased their knowledge of IT substantially and that the project had provided positive benefits for teaching and learning.

30.   NCET, who managed the project on behalf of the DfEE, considers that four main conditions contributed to the success of the pilot:

- initial and immediate success with the technology

- personal ownership and exclusive use of the computer over an extended period

- the portability of the equipment, which enabled it to be moved between work areas and between home and school

- formal and informal support were required, and the combination of ownership and portability provided teachers with the flexibility to access a great variety of support from peers and other sources.

31.   The final report will be published shortly.

Costs

32.   The cost of the equipment provision was approximately £5 million. This provided a total of some 1,500 machines, in two phases, with personal productivity software and a selection of CD-ROMs and Internet-access accounts. A three-hour on-site demonstration was also provided as part of the funding. The market cost of each package, including hardware, software, Internet access and demonstration, would be in excess of £4,000 for Phase I of the project, although this price is falling substantially.

33.   The independent evaluation was carried out by a team led by Professor Colin Harrison from the University of Nottingham. The evaluation used quantitative and qualitative data gathered between June 1996 and May 1997 and included detailed statistical and case-study analysis.