

Lambeth Education Services

Educational ICT Classroom Consultants for Secondary Schools Summer Term 2001

Evaluation

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Schools: London Nautical
Dunraven
Stockwell Park
Lilian Baylis

Introduction

The outcomes of the consultancy vary considerably, but I have no doubt that the classroom support was worthwhile and is in fact the best way to ensure progress in teaching and learning with ICT.

Work in three of the four schools chosen, has resulted in tangible outcomes. Notable progress has been made in both London Nautical and Dunraven Schools as described below. The development work I undertook in Stockwell Park School was limited in time but has potential for further development. Classroom support in Lilian Baylis School did not take place, though plans were made to introduce Datalogging in Science. The Summer Term is a difficult one in secondary schools, due to examinations, extra-curricular activities and staff shortages, which have reduced the time available for curriculum development. Those that did accept the support have benefited in a range of ways.

ICT and Geography London Nautical School



Year 7 ICT and Geography Unit of work

Subject: ICT

Unit of Work: Geography - Understanding World Climate and Weather

Duration: 7 weeks (7 classroom sessions, 7 fifty minute lessons per class), plus admin time.

Meetings: 1 initial meeting, 1 evaluation meeting

Year Group: Three Year 7 classes

Teachers: Peter Gilbert, ICT Co-ordinator, Liz Beckenham, Head of Geography, two supply teachers.

The Unit of Work (1)

The Head of Geography (HOD) and the ICT Co-ordinator created a new unit of work for discrete ICT lessons. The HOD had recently attended a course on the use of ICT in the subject and was able to immediately use the skills she had learnt with the pupils.

The activities included:

- copying and pasting files and maps
- renaming read only files
- using graphs and charts to display weather data
- collecting weather data from the Internet
- using drawing tools in MS Word to label satellite images

- analysing weather data and satellite images
- evaluating weather web sites

Classroom support was provided in the form of team teaching with the HOD, and help with the diagnosis, of any technical problems, which arose during the lesson.

Having understood the Geography knowledge and understanding required by working with the HOD in the first lesson of the day, I was asked to lead the subsequent Year 7 lessons which were staffed by non-specialist supply teachers, who had neither Geography nor ICT as their specialism. In this way all pupils benefited from the Geography input of the HOD, which I passed on to them.

A projector and screen were requested for the computer room, which facilitated whole class teaching and meant that the structured tasks, which sometimes involved many steps, could be explained more clearly.

The unit was developed lesson by lesson during the term. The tasks will be collated into a coherent pack, which can be used by supply teachers, non-specialists and specialists alike who may be called upon to teach to Year 7 ICT from September 2001.

Pupil Attainment

The majority of pupils acquired ICT skills through the tasks listed above over the course of the project. The work in the ICT lessons was complemented by their studies in Geography lessons at other times during the week about climate, weather patterns, countries and the interpretation of weather maps.

Pupil evaluations suggest that they enjoyed their work: they had learnt more about Geography and had improved their ICT skills. They particularly enjoyed using the weather web sites to view moving satellite images. The project has improved their understanding of Geography, enriched the content of the ICT lessons and given pupils greater opportunity to reach the higher levels of ICT capability.

The unit of work did not correspond totally with those in the QCA document for Geography and ICT and the pupils achievements may have fallen slightly short of the QCA expectations. However, most important is the fact that they had moved on from where they were at the start of the unit of work – it was the first time they had used the Internet in the ICT lessons.

Year 9 ICT and Geography Project

Subject: ICT

Project: Geography – Is there a North/South Divide?

Duration: 4 sessions, 50 minute lessons plus admin time

Year Group: Year 9

Teacher: Mark Williams, Teacher of ICT

The Unit of Work (2)

The teacher of this class was neither an ICT nor a Geography specialist. However, he was a confident and competent user of ICT and developed the unit of work along with the ICT Co-ordinator and a Geography teacher. The initial idea was for pupils to produce a database using data from the Internet, based on an aspect of Geography. I suggested that to make the task more meaningful, the pupils needed to be able to use the database, once created, to answer a geographical question. It was decided that the question should be “Is the southern hemisphere poorer than the northern hemisphere?” or “Is there a North/South divide?” - an idea I came across in another school. Pupils familiarised themselves with Information Workshop 2000 and used a web site called InfoNation to collect economic, social and political data of their choice, which they thought would help them to answer the question. The final aim of the project was to produce a report using data from the database which, provided evidence for the pupils’ answers to the geographical question. The task could be differentiated to cater for all abilities.

Pupil Attainment

All pupils were able to access the web site, collect the data, create a datafile and enter the data about a number of countries with relative ease. Some pupils examined the data more closely, having displayed it in the form of graphs. They were then able to comment on its reliability and accuracy. Some individuals could see how easily data could be misinterpreted and the wrong conclusions drawn about particular facts. I came to the conclusion that the pupils were very able and could probably achieve at much higher levels. They already had a good understanding of Geography and ICT.

Staff Development

The teacher is capable of helping the pupils to achieve more, given time to further develop the unit of work. One strategy would be to provide pupils with a written outline of what they are expected to achieve and a structure for the final report, highlighting the main points they should include. More liaison with the Geography department would also improve the unit over time.

The Year 7 project was successful because of the recent external training and classroom support the HOD had received. She was able to produce most of the ICT worksheets and worked with the ICT Co-ordinator on the creation of on-line tasks. There was also technical and curriculum support from the ICT Co-ordinator and much encouragement and interest from SMT. The Deputy Head is actively developing extra-curricular ICT activities.



Conclusion

The ICT Co-ordinator has worked hard to sustain this model of ICT curriculum development and will ensure it continues, particularly since a new full-time ICT teacher is due to arrive in September 2001. A successful History and ICT project based on the First World War, already takes place in Year 9. The Art department have exciting plans for a project involving the use of video and computer graphics. The current curriculum developments will be strengthened by the programme of NOF training, which is due to start in September 2001, further classroom support and other external training, if available. In this way, all subject teachers will eventually be capable of helping pupils reach the higher levels of attainment in ICT and other subjects in the curriculum.



Please see the evaluation written by the ICT Co-ordinator for more information about the impact of the support.

ICT and Modern Foreign Languages Dunraven School



Consultancy in this school arose because I had contacts there, and chose to use them due to difficulty contacting one of the other designated schools. The ICT Co-ordinator wanted to develop the use of ICT in Modern Foreign Languages (MFL) and one of the teachers of Spanish was very keen to use computers in her teaching. A previous Language Assistant was teaching in Colombia and the MFL teacher wanted to exploit this to introduce electronic mail and use of the Internet in her lessons with a Year 9 group.

MFL Internet Project

Subject: MFL - Spanish

Unit of Work: Exchanging information with a school in Colombia via email and web pages.

Duration: 4 sessions of classroom support

Meetings/Staff development/Admin: 6

Year Group: Year 9

Teachers: Harry Wood, ICT Co-ordinator; Michaela Emanus, Teacher of Spanish, second in-charge of Languages Department

The aims of the project devised in conjunction with the MFL teacher are outlined below.

- Aims:**
1. To develop pupils' Spanish language skills;
 2. To acquire a deeper insight into the daily lives and culture of young people in Colombia;
 3. To further develop pupils ICT skills, knowledge and understanding in the context of MFL.

- Objectives**
1. Pupils use electronic mail to exchange information about their daily lives with pupils in a school in Colombia;
 2. Pupils use a selection of web sites to find cultural information about Colombia;
 3. Pupils select and synthesise the information to create web pages giving a view of Columbia/London of interest to young people;
 4. The web pages are published on the school web site.



It was planned to give the pupils a lot more support than they actually needed. The project has been a complete success even though there were initial problems with the email links. One exchange of information has taken place between the two schools. The pupils will be emailing right until the end of term.

Pupil Attainment

The web pages produced by the pupils are outstanding. Many pupils had very good prior knowledge of the Internet and web design and needed very little input in order to create the bilingual pages. This can be attributed to their ICT lessons and the use of home computers. Before my arrival, some pupils had already carried out web-based research on Colombia for homework. This research, and the information received by email from the Colombian pupils helped them determine what would be of interest on their bilingual web pages. Rather than write about their view of Colombia, or life for young people in London as originally planned, they preferred to write about their own interests particularly where they knew the Spanish students shared them. One boy produced a trilingual page in which he wrote about his interests in English, Spanish and German. In some lessons a Spanish assistant was present and helped to check the pupils' writing in the target language, which was already of a high standard.

Staff Development

The MFL teacher was provided with one-to-one support for the planning of the project, and training in web design. Communication between the teacher and myself often took place via email using attachments. Classroom support was also provided for some lessons. More assistance was offered, but the MFL teacher overcame any initial concerns about using the technology with the class very rapidly. She soon saw the benefits the use of ICT brought to her teaching and the pupils learning.

The Year 9 class was not the only one to benefit from the project. All of the MFL teacher's classes experienced lessons in the computer room during the summer term as a result of her increased confidence.

The ICT Co-ordinator was another source of encouragement and ensured that the network worked smoothly. He arranged for photographs to be taken of all the pupils so that they were available to be sent as attachments by those who chose to do so. He is also very keen to assist with the development of the MFL departmental web site. It will contain among other things, examples of the pupils' web pages and a description of the project. This will no doubt enhance the school site.

Conclusion

This project will have a lasting impact on the MFL department at Dunraven. The MFL teacher intends to maintain the email link with the school in Colombia from September 2001. The most significant educational gain was made by the MFL teacher herself who has progressed from only personal use of ICT, to its use with all of her classes in the computer room this term to support their language learning. In this way a greater number of pupils benefited indirectly from the project than originally planned. This in turn will contribute to the development of ICT capability for the whole school.

Stockwell Park School

Subject: GNVQ Intermediate Business (Part one)

Unit of Work: Evaluating a business case study using a Multimedia Dictionary of Business Terms

Duration: 3 sessions in the school, 5 sessions developing materials, 2 planning meetings

Year Group: 10

Teachers: Bill Branney, Deputy Head and GNVQ Business teacher

After two planning meetings it was decided that I would support a GNVQ Intermediate Business group. The Deputy Head had identified the fact that the students had difficulty understanding business concepts. A search of business education web sites revealed that there was little on-line help in this matter. It was decided that I would create a simple database of business keywords, whilst supporting a particular group of special needs students. They had already been provided with a paper-based glossary but the definitions were difficult for these students to understand.

The plan was as follows:

- Classroom observation of pupils and support for their creative writing based on the case study provided;
- Creation of a simple on-line dictionary of business terms and concepts using MS Access;
- Trial and evaluation of database by pupils and teacher in the classroom;
- Amendment of database based on comments from pupils and teacher;
- Use of database to support the understanding of business concepts in the GNVQ lessons

I am not a software developer, so it was understood, that I would only have time to make a start and produce something, which could be trialled for improvement later on if it was decided to continue with the on-line dictionary. There is certainly a need for such a resource.

The classroom support involved a group of students identified as having difficulty understanding business concepts. I was asked to support their creative writing about a given case study. The students responded well to the extra attention.

I also produced a searchable database of more than 50 keywords. The definitions have been taken from the paper list provided for students, but supplemented with web sites, which further illustrate the business terms. Also graphics and animation have been added where an appropriate example has been found. The use of sound clips would also add clarity to the explanations given. Finding appropriate graphics and sound clips which illustrate business concepts rather than items, proved to be time-consuming, but worthwhile.

A paper copy of an early version of the database was used to explain the terms 'aims' and 'objectives' to students. Later on in the lesson, one of them was observed referring to the document when another student asked him for the meanings of the

same words. There was therefore some indication that the dictionary was worth pursuing in the early stages. The hope was that during the project, students could be more involved in its development and add their own definitions, once they'd understood a particular concept. This could still happen.

The project ran into difficulty after half term when 4 planned visits had to be cancelled due to the Deputy Head's exam supervision commitments, the students going on study leave for two weeks, a conference that I had to attend at the Learning Circuit and finally a timetabling change. These were all unavoidable setbacks. We agreed finally to communicate via email until the end of term. The database continued to be developed on days when I was not expected to provide classroom support. A copy has been sent to the Deputy Head for evaluation. Hopefully, both teachers and pupils will provide me with some feedback about it's potential. A software developer may be interested in the idea.

Lilian Baylis School

Work in Lilian Baylis was deferred until the Autumn Term 2001 due to staff shortages.

Overall Conclusion

Please contact Dunraven and London Nautical Schools for samples of the pupils' work and the teachers' own evaluations about the support received, which as far I as I know have been very positive. I can also provide samples of materials produced and used in the classroom on request.

The development of strategies for effective teaching and learning with ICT is a long-term process. I hope that the consultancy continues in the new term in some form so that more teachers can receive support.