languages ICT

Setting up effective digital language laboratories and multimedia ICT suites for MFL

Authors: Graham Davies, Paul Bangs, Roger Frisby & Elizabeth Walton

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Table of contents

Terminology

Inevitably, a certain amount of jargon creeps into a document like this, often in the form of acronyms or abbreviations. We have tried to explain terms in full when they are introduced for the first time. Three examples that occur frequently throughout the document are:

- **ICT** or **Information and Communications Technology**. This tends to be the preferred term, replacing **IT (Information Technology),** because it shows the importance of electronic communications such as email, the Web and videoconferencing, as well as the computer aspect.
- **MFL** or **Modern Foreign Languages** is the preferred term in the UK, especially when referring to the National Curriculum, though elsewhere **FL** (Foreign Languages) is more common.
- **CALL** refers to **Computer Assisted Language Learning**, the term that is favoured worldwide to refer to the use of ICT in language learning and teaching in its broadest sense.

This document makes frequent references to the ICT4LT website, one of the largest collections of ICT training resources on the Web produced specifically for language teachers. There are also references to the Languages ICT website from CILT, the National Centre for Languages and the Association for Language Learning (ALL), which provides information and guidance for teachers of languages in UK schools on using ICT in the classroom.

Technology and language teaching: a brief history

Language teachers have been using technological aids for many years, some of which have been around since the beginning of the 20th century. These include:

- radio
- movie projector
- gramophone / record player
- television (terrestrial)
- tape recorder
- language lab
- videocassette recorder (VCR)
- computer
- audio CD player
- satellite television
- videodisc player
- CD-ROMs
- the Internet
- DVD-ROMs
- DVD player
- mobile phone
- personal digital assistant (PDA)

All of these devices and media can present **sound** and most of them can also present **video.** Sound is indispensable because teaching a language without offering the learner the opportunity of hearing native speakers' voices is unthinkable. Video offers additional opportunities for enhancing the learner's experience, ranging from

presenting a "talking head" so that the learner can see how lip movements and gestures relate to the spoken language, to films on life and culture in the target language country (Hill 1999).

It may be useful to look at some of the technological aids listed above in more detail:

The **tape recorder** has probably had the single greatest impact on language learning. Its introduction meant that the teacher could play recordings of authentic native speech, and the learner could also record his/her own voice, then play it back to hear how he/she really sounded. A modified version of this, the **Audio Active Comparative (AAC)** recorder, went a step further. It made it possible for the learner to record his/her own voice on the same tape as the recorded voice of a native speaker without erasing the original.

Language labs, which became popular in secondary schools and other institutions in the late 1960s and early 1970s, were a development from this. They were initially perceived as a solution to the problem of teaching a language to a large number of learners in a short time, and undoubtedly were a worthwhile invention. However, they gradually fell out of favour towards the end of the 1970s, partly because of unreliable technology but also because they had become closely associated with an outdated behaviouristic model for language teaching and learning. The main reasons for the lab's failure to achieve expected outcomes, however, were

- lack of proper training for teachers wishing to use it,
- lack of imagination in devising activities other than drills.

From around the mid-1980s, the language lab was given a new lease of life. This was due in part to improvements in technology, but also to more user-friendly controls, imaginative materials and improved lab design that got away from the battery-chicken-farm appearance of rows of booths. At the same time, **self-access** was coming into fashion and there was a wealth of new ideas on using the lab: pair work, group work, role-play, communication games, etc: see (Ely 1984) and (Davies 1997:28f).

Nowadays the language lab is no longer seen as the panacea, but rather as one of the many technological aids that the language teacher can choose to use to enhance teaching and learning.

The digital revolution

Digital technology dates back to the invention of the digital computer in Manchester in 1948. Initially, it was very much a specialist province, but nowadays most of the electronic equipment that we use in our everyday lives, such as the mobile phone, TV set and washing machine, incorporates digital technology. Since the 1970s, when the first affordable microcomputers appeared, a **digital revolution** has taken place.

Digital v. analogue technology

The basic meaning of **analogue** is "something that corresponds to something else": for example, the groove on a vinyl record **corresponds** to the nature and volume of the sound that has been recorded. Analogue recordings on vinyl records or magnetic tapes can be of very high quality, but they all suffer to some extent from background noise, and the quality of reproduction gradually degrades as the record or tape

wears out. If the recording is copied, the copy will not be as good as the original, regardless of the quality of the equipment used to copy it.

Digital equipment, on the other hand, stores and processes **numbers**. The modern computer is a typical example of digital equipment, as are the audio CD and DVD. In these, numbers are coded as a string of tiny pits pressed into a plastic disc. When the recording is played back, a laser-reading device retrieves the exact numeric values from the disc and converts them into sound and/or video. Digital recordings made from any source (existing tapes, television, radio, Internet, satellite, microphone or camcorder) can be edited easily, then stored on a computer, CD or DVD disc, network server, memory stick, etc. They can be copied without quality loss and, more significantly, can be used by more than one learner at the same time.

Major benefits are that those digital recordings

- are relatively free from noise and interference,
- offer high-quality reproduction,
- can be copied without a loss in quality,
- store information in a way that can be processed by computers.

What is a digital lab?

A **digital language lab** is a network of computers, plus appropriate software, which provides most of the functions of a conventional (analogue) language lab together with integration of video, word-processing and other computer applications. Although analogue (tape-based) labs are still manufactured, their numbers are dwindling. They can be expensive to purchase and maintain and really need a specialist classroom.

Digital labs can be **software-only labs** or **hybrid labs**.

Software-only labs have no connections between the computers other than a single, standard, network cable. Plus points are lower cost and flexibility, although they may be more dependent on the speed of the school computer network. Upgrading is easier and, apart from headsets, there should be no repair or maintenance costs over and above normal computer maintenance. A standard multimedia ICT suite can be transformed into a software-only lab with the addition of special software. A minus point is the slight delay in voice communication between teacher and learner. However, with a good system and a fast school network, this may only be the same as the delay when using a mobile telephone.

Hybrid labs, on the other hand, have additional cabling and interface boxes to carry voice communication and control signals. Plus points are instantaneous voice communication between teacher and learner, and they often have better monitoring facilities and teacher control of student desktops. Minus points are that their additional cabling can restrict room layout and sharing with other subject areas. Their cost is generally higher than software-only systems.

Dedicated digital labs

The following businesses specialise in the supply of digital labs:

- Activa Solutions (formerly known as ASC Telecom): SmartClass (Robotel), Esprit, Esprit LE and D.A.V.I.D.
- Artec Electronics: VACS-22 Virtual Recorder

- CAN-8 VirtuaLab
- Keylink Computers: Virtual Language Lab (VLL)
- Melissi Multimedia: Digital Classroom, Digital Lab, BlackBox
- Sanako (formerly known as Tandberg, Teleste & Divace Learning Systems) Lab100 (Elice), Lab 250, Lab 350 & Lounge100 Virtual Classroom
- Sony's Virtuoso/Soloist labs, marketed by SANS (Software And Network Solutions)
- Sun-Tech: Digital Language Laboratory (DLL)

Specifications vary enormously. For example, Artec, CAN-8, Keylink, Melissi and Sun-Tech labs are purely digital and only need normal network cables, whereas Sanako (Divace) also requires the room to have special analogue cabling. Activa Solution's Esprit uses hardware interface boxes for remote control and monitoring. CAN-8 requires that lessons are pre-authored with supplied tools, whilst the others allow the teacher more flexibility and spontaneity. Prices also vary considerably.

See the websites of the above suppliers for further information.

Dedicated digital labs provide:

- **Versatility:** Text, images, audio and video can easily be integrated, and the teacher can remodel and alter materials to fit the needs of different language teaching programmes.
- **Ease of movement between different applications** such as CALL (Computer Assisted Language Learning) programs, a word-processor, *PowerPoint*, the Web, etc.
- **Interactivity:** Learners can record their own voice and play back the recordings, interact with each other and the teacher, and store results.
- **Potential for teacher intervention** in the form of oral comments as in a traditional analogue language lab, control of learners' computers via the teacher's console, tracking of learners' work, etc.
- **Potential for independent learning** through access to resources beyond the timetable on a self-access basis.

However, issues that need to be carefully considered include:

- **Costs** of installing, maintaining, supporting and upgrading equipment.
- **Time** needed for staff training, selection and creation of resources.
- **Management of resources:** Storage space, lifespan of resources and the need for regular upgrading.
- **Training:** A totally new approach to materials and class preparation is needed. A cultural change by the teacher is vital. Digital labs give the teacher to chance to integrate all digital media easily. For a teacher to use a digital lab in the same way as an audiocassette recorder, for example, would be under-utilising the technology. If training is neglected or resisted, a brand new digital lab will be a waste of space and money. Training needs to take account of new social and cognitive/constructivist learning theories. See Stephenson (2001) and the section on Training (below).

Other digital facilities

Many educational institutions do not have dedicated digital language laboratories as described above. This may be for reasons of policy as much as for financial considerations. The majority of schools and colleges in the UK, however, have

access to non-dedicated computer resources. These occur in many configurations, for example:

- **ICT suites in a network configuration (intranet):** Although there are obvious advantages in using dedicated digital language labs, there are in fact few facilities that a well-run multimedia ICT suite cannot match.
- **Out-of-suite PCs attached to an intranet:** This may consist of a number of PCs within a department linked to an institutional intranet, or a trolley of laptop computers which are booked and wheeled into a classroom on demand. These are sometimes linked to the network via a wireless connection. Since we are still dealing with a network, the same issues apply as to the ICT suite configuration described above.
- **Stand-alone PCs:** In this case, a PC or a group of PCs are used within a department or classroom. There are some advantages in this arrangement as there is more flexibility in the set-up of both hardware and software for departmental needs. Use of a limited number of machines in a class situation requires a **differentiated** approach to learning, that may involve group activity (such as **carousel classrooms**) and possibly research- or task-based learning scenarios. Within the school community there is considerable expertise and experience in this area, especially in the primary sector. One possible problem, however, is the ever-present danger of malicious or accidental infection from viruses, etc. ICT managers, who often provide the only technical support for the institution, may be reluctant to guarantee full support in these stand-alone situations. It is also impossible to access the Internet and the World Wide Web without some form of external connection.
- **Interactive whiteboards and associated hardware:** These are becoming increasingly common in all types of teaching establishments. They can be used at varying levels of complexity, but there is an inherent risk that they may encourage a teacher-led approach. However, learners can participate actively, receiving feedback and checking their progress in a variety of ways, even when using programs that tend to be presentational, such as *PowerPoint*. The use of infrared keyboards and other devices, such as small multi-choice response buttons on the learner's desk, can further enhance the learning situation. These issues are discussed in more detail in the REvIEW Project (Research and Evaluation of Interactive Electronic Whiteboards), University of Hull. See also Section 4 of Module 1.4 (*Introduction to CALL*) at the ICT4LT website, which focuses on whole-class teaching and interactive whiteboards.

Shared facilities

One of the major problems that may arise when using shared facilities is **access**. Generic ICT suites are becoming more popular, since ICT is now tending to be seen as a discrete subject area rather than as part of a cross-curricular programme. Whilst the UK has an excellent record of provision of PCs per head of student body, regular access to them by non-ICT areas such as MFL can cause friction. MFL departments may encounter difficulties in negotiating their needs with the ICT manager in their institution. Also the special requirements of MFL for the use of full multimedia facilities can affect the hardware configurations, such as use of headsets and microphones and the physical environment of the room, and these can cause some difficulties.

Most PCs need to be set up for sound output and microphone use, and the control settings vary from machine to machine and in different versions of *Windows*. There may be a regular requirement for staff or learners to access programs such as audio-editing software to create learning resources, and often it is not easy for teachers to negotiate rights to do this with the ICT manager. In addition, ICT managers often find it easier to install new software at infrequent intervals to ensure stability on the network, and this in turn may cause delays and inflexibility.

Another issue is the question of "allowed" software on the PCs. Increasingly, restrictions are placed by ICT managers on the type of programs permitted on an individual machine The reason for this is primarily to protect the network from viruses, worms, Trojans, and hacker activity. In some cases, input devices such as floppy disk drives, CD-ROM drives and other devices are not allowed to be connected to individual machines. For the same reason, many intranets do not allow download of executable files, such as **EXE** files. Using compression programs such as *WinZip* and *WinRar*, and downloading compressed files from the Web, are also often banned, since they may contain hidden executable files. Whilst the need for this is understandable, it can cause problems for teachers wishing to develop their own materials.

Finally, a whole class of learners accessing the same remote site or Web page simultaneously will slow down response time. If those sites are media-rich, as is often the case with MFL sites, the problem will be even more acute. MFL departments need to be aware of these difficulties, and to discuss their needs with ICT managers when planning or upgrading networks.

Networking issues

Network licences are essential for legal use of programs that are accessible throughout the network. All institutions have a duty to ensure complete compliance with the law at all times. See the section on Copyright issues below.

The way in which networks are configured varies enormously. While some are very simple, others make use of a facility known as a **Virtual Learning Environment (VLE)**, also referred to as a Managed Learning Environment (MLE) or Course Management System (CMS). A VLE is essentially a Web-based facility offering learning and assessment materials, together with new methods of communication with peers and tutors. VLEs can be used to deliver learning materials within an institution or within a local education authority. They may even address a wider constituency, and may be used on a worldwide basis. VLEs have certain advantages in terms of ease of delivery and management of learning materials. They may, however, be restrictive in that the underlying pedagogy attempts to address a very wide range of subjects, and thus does not necessarily fit in with established practice in language learning and teaching. Popular VLEs that are currently available include Blackboard, Moodle and WebCT. *Moodle* appears to be gaining in popularity among language teachers. *Moodle* is **open source** software which, as the *Moodle* website states: "means you are free to download it, use it, modify it and even distribute it".

LAMS (Learning Activity Management System) is one of the latest systems to have found favour in the UK and is currently undergoing trials in various educational institutions. To what extent LAMS is suitable for MFL teaching and learning remains to be seen at the time of writing.

In the further education field (post-16), norms have been developed for the configuration of VLEs and for the software that will run on them. These can be found at the <u>NLN (National Learning Network)</u> website. The NLN is a national partnership programme designed to increase the uptake of **ILT (Information Learning Technology)** across the learning and skills sector in England. The NLN, which is supported by various educational bodies, achieves this by providing network infrastructure and a wide-ranging programme of support, information and training. It also assists with the development and provision of ILT materials for teaching and learning. The NLN web pages provide up-to-date information on who is entitled to this material and how to download it. Modern Foreign Languages are not yet well represented but this is currently being addressed.

Closely allied to the NLN is <u>BECTA (British Educational Communications and Technology Agency)</u>. BECTA is the UK government's key partner in the strategic development and delivery of its ICT and e-learning strategy for the schools and the learning and skills sectors. The BECTA website and the associated <u>ICT Advice</u> website for schoolteachers are useful sources of information.

Software resources

The range of both generic and subject-specific software and tools which can be effectively exploited for MFL teaching and learning is vast. The Technology for Languages section of the <u>Languages ICT</u> website provides a checklist of software types and technologies, with practical ideas for exploiting each category in the MFL classroom. <u>ICT4LT</u> training modules also provide detailed further reading in many of these areas.

Purchasing learning materials

A vast range of digital resources is available for MFL teaching and learning, on CD-ROM, on DVD or online via <u>the Web</u> (see below). The DfES <u>Curriculum Online</u> website lists approved digital resources and services across the curriculum, but the site is by no means comprehensive in its coverage of MFL resources and it is not easy to navigate. The following websites publish software evaluations but their coverage of MFL resources is very limited:

- <u>E-valuate</u>
- <u>Schoolzone</u>
- <u>TEEM</u>

Publishers' printed and online catalogues are generally more comprehensive, up-to-date and informative. There are also school websites offering free resources and reviews of software, e.g. the extensive MFL Web pages at <u>The Ashcombe School</u>.

Ring-fenced funding, known as e-Learning Credits (eLCs), has been allocated to schools in **England** to enable them to buy approved software packages. This funding is available to schools until 31 August 2006. More information on eLCs can be obtained from the <u>Curriculum Online</u> website.

Few language departments in schools find it appropriate to use complete commercial language courses (often referred to as **courseware**) either on- or offline. These courses, however, often contain useful elements that a teacher may wish to exploit. Before purchasing a course, it could be useful to analyse it from the point of view of whether or not it is possible to select and adapt sections for a specific learning aim. There are also many courseware items that may be used as components of an MFL

curriculum, some of which are designed specifically to support particular curriculum areas and educational objectives. However, quality can vary and it is often difficult to assess courseware before purchase, as many providers are unwilling to offer a "see before you buy" policy, for security and commercial reasons. Some manufacturers do provide "demo" or reduced functionality versions that allow potential purchasers to evaluate the product. Courseware is also reviewed in specialist MFL printed and online journals.

Guidelines for assessing the value of courseware, as well as pointers to the different categories that exist, may be useful but much depends on the specific needs of the learning institution and individual teachers' personal preferences. A list of criteria for evaluating MFL resources can be found in the combined **Software and Website Evaluation Form** that can be downloaded from the ICT4LT website: http://www.ict4lt.org/en/evalform.rtf

The general consensus is that courseware should reflect certain principles. These include:

- allowing the learner to proceed from dependence to autonomy in any learning activity;
- following a structure which moves from receptive to productive activities;
- differentiating between assessment **for** learning (most useful for the learner) and assessment **of** learning (most useful for the teacher);
- providing a rich environment in which learners can contribute towards creating their own route through the courseware, whilst offering default, "scaffolded" routes through it.

Ideally, courseware should also allow the learner the opportunity to move through the phases of:

- Exposition
- Establishing comprehension
- Querying
- Recognition
- Manipulation
- Production
- Extrapolation to new circumstances

There are sound theoretical bases for these procedures, and a useful starting point is the **conceptualisation, construction, dialogue model** discussed by Mayes (2001).

In addition, the following questions should be addressed when considering use or purchase of courseware:

- Is the material adaptable for specific use in my institution?
- Is it possible to use it in a blended learning way?
- Does the material match the pedagogical and methodological objectives of my curriculum?
- Does the material offer appropriate feedback to assist users to evaluate their inputs and make progress?
- Is the material structured in a way that offers a meaningful progression through it, allowing the learner to establish progress?

The Web

There is now a wide range of websites containing useful resources for the language learner and teacher, and many schools and colleges maintain lists of links to such sites. A useful starting point is the Webwatch Languages section of the Languages ICT website, which links to a selection of listings for MFL. See also Atkinson (2002).

Certain issues, however, need to be considered. The Web is undoubtedly an excellent resource for research and task-based learning, but educational institutions must give serious consideration to their access policy. This is especially important in the case of younger learners, as many websites contain undesirable material which young people can access by accident or design.

Use of **software that filters out undesirable material**, e.g. CyberPatrol or SafeSurf, is one way of controlling access to it. There could be serious repercussions if parents decided to take legal action on the grounds of the school's irresponsibility in allowing a child to access an offensive site. On the other hand, some filters are hypersensitive and deny access to completely harmless websites, so care needs to be taken in the selection of appropriate software.

In addition, any institution maintaining a list of web links should **investigate the suitability of the sites**, and **check the links regularly** to ensure that the contents have not changed in any undesirable way. There are documented cases of websites changing overnight from harmless sites into extremely unpleasant ones: see Davies (2004). Over-reliance on any one site should also be avoided as it could change or disappear overnight. There are millions of excellent websites dedicated to the provision of information, and the use of these for research is of obvious benefit. However, in terms of sites for language learning, too little attention is often paid to the needs of the end user, and many sites do not employ the same rigorous principles that are expected from other learning delivery mechanisms.

The question of **copyright** also needs to be considered when incorporating Web pages into learning materials: see Copyright issues.

Communications software

Communications software can be an effective tool for language learning, if well handled. Examples of this include:

Email: This can be a highly motivating facility, especially when used for contacts with partner institutions in the country of the target language. Although the individual teacher may have little control over the way email is handled within an institution, and may find that it is subject to certain restrictions, the institution usually takes care of problems such as computer viruses and other unwanted intrusions. The standard email application for the vast majority of institutions is Microsoft *Outlook*, which is often targeted by virus writers and hackers. Teachers setting up systems might like to consider that there are other email systems which do not depend upon *Outlook*, and which are less vulnerable in this respect. Module 1.5 (*Introduction to the Internet*) at the ICT4LT website, includes a substantial section (Section 14) on using email in the MFL classroom. See also Townshend (1997) and Gläsmann (2004).

Tandem learning: This is a system whereby two people with different native languages work together in order to improve their language skills and to learn more about each other's character and culture. Each partner can help the other through explanations in the foreign language, comparisons, etc. As it is always based on

communication between members of different language communities and cultures, tandem learning also facilitates intercultural learning. A tandem learning website is maintained at the University of Bochum, where more information, including ways in which partners can be identified, is available. See Section 14.9 of Module 1.5 (*Introduction to the Internet*) at the ICT4LT website.

Chat rooms: These offer online, synchronous, mainly text-based communication facilities where people can either drop in or arrange to meet at specific times. Text is typed in online and seen almost immediately by other students who are online at the same time. They can then respond immediately through the same medium. Chat rooms involve extensive time online and, when used for language learning, can put a great deal of pressure on students. This is because they are required to read and write fairly rapidly, with little time to reflect on the quality of the language used. However, despite receiving much negative criticism, chat-rooms can be an effective tool if well handled and monitored. See Section 14.2 of Module 1.5 at the ICT4LT website and Gläsmann (2004).

Authoring: a definition

The term **authoring** is used in this context to describe the creation of courseware using an **authoring program** or **authoring tool**. Authoring involves:

- creating or gathering resources, such as texts, images, audio recordings and video recordings;
- assembling these resources into a set of learning materials – for which teachers will need dedicated authoring tools that build the resources into an appropriate pedagogical framework.

More detailed information, plus links to many providers of authoring software, can be found in Module 2.5 (*Introduction to CALL authoring programs*) at the ICT4LT website. There is also information in Module 2.2 (*Introduction to multimedia CALL*) about the discrete aspects of creating multimedia materials. The suggestions and comments here are intended only as a starting point.

Authoring tools

Authoring tools enable the teacher to create complete programs of courseware, as opposed to content elements such as texts, pictures, and audio and video recordings, without having to learn how to program a computer. They vary enormously in style, but in essence all provide a shell, or **template**, into which the teacher can add content to create learning programs.

Teachers may be unaware that *Word* and *PowerPoint* can be considered as authoring tools. For instance, *Word* can be used to create quizzes and multiple-choice activities, whereas more advanced use of *PowerPoint* offers a range of interactive options. The use of word-processors and *PowerPoint* is dealt with in greater detail in Module 1.3 (*Using text tools in the MFL classroom*) at the ICT4LT website.

Authoring tools can be divided into those which are **generic** and those which may be **subject-specific**. *Authorware*, *Director*, *Dreamweaver*, *Shockwave*, and *Flash*, all of which are produced by Macromedia, can be said to be generic. They are extremely powerful but they require considerable time to master, and as such are more for the specialist or enthusiast. There are, however, simpler but nonetheless effective, tools specific to language learning which are accessible to most people. Some are

predominantly text-based, such as Camsoft's text-manipulation package, <u>Fun with Texts</u>, and Wida Software's <u>The Authoring Suite</u>: see <u>Hewer (1997)</u>. Others, such as mdlsoft's <u>TaskMagic</u>, offer a variety of templates for creating exercises and games, including activities suitable for use on an interactive whiteboard. These packages are easy to use, well supported and have a long track record of success in the language learning world.

Other packages are aimed at Web-based usage, such as *Hot Potatoes.* The *Hot Potatoes* suite includes six applications, enabling you to create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises for the World Wide Web. *Hot Potatoes* is free of charge for those working for publicly funded, non-profit-making educational institutions, who make their pages available on the Web. Other users must pay for a licence. Check the licensing terms at the <u>Hot Potatoes</u> website.

The <u>MALTED</u> authoring tool allows the creation of complete courseware routines rather than discrete exercises. It is free to download and additions are constantly being made to it, primarily by the Spanish Ministry of Education and <u>University College London's Language Centre</u>. However, some training will be necessary in order to make full use of its considerable array of learning templates.

Prior to using an authoring tool, the teacher needs to gather or create a set of resources, e.g. texts, images, audio recordings and video recordings. Collectively, such resources are often referred to as **assets**. There are various tools available for creating and editing such assets, which are described in more detail in the following sections. See also Section 2.2.3 of Module 2.2 (*Introduction to multimedia CALL*) at the <u>ICT4LT website</u>.

Creating and editing texts

Most teachers and trainers will be familiar with programs for creating and editing texts, such as Microsoft *Word*. It should be noted that, although *Word* can be used as an authoring tool in its own right, text files might need to be saved in a specific format such as Rich Text File (RTF) when using it to create material for other authoring tools. More can be found on this topic in Module 1.3 (*Using text tools in the MFL classroom*) at the <u>ICT4LT website</u>.

Creating and editing images

The two main types of images involved here are **photographs** and **drawings**.

Photographs

The easiest way to build up a collection of photographs is to use a **digital camera**. These come equipped with software and a cable that enables photographs to be uploaded and stored on a computer via its USB (Universal Serial Bus) connection port – a socket usually found at the back of a computer but, increasingly (for convenience), at the front. Learners are often encouraged to use digital cameras themselves, e.g. on a school trip abroad, as part of the language acquisition process. Existing photographic prints can be digitised and stored on a computer by means of a **scanner**. Photographs can also be gathered from other resources, e.g. from CD-ROM collections or from the Web.

Once the photographs have been stored on the computer they will probably require editing. Adobe's <u>Photoshop</u> is considered to be the industry-standard application for

this, but it is costly and can be too complex for general usage. A cut-down version of the program, *Photoshop Elements*, or other simpler programs such as JASC's <u>Paint Shop Pro</u>, Serif's <u>PhotoPlus</u>, and <u>LView Pro</u> may be more suitable.

It is also necessary to understand the various standard image file formats such as **JPG** and **GIF**, how to change these formats and why. In addition, other basic techniques that these programs can offer, including resizing images, cropping parts of them, improving quality (brightness, contrast, colour casts, etc) need to be mastered. It is then possible to move on to look at special effects, should the teacher wish to experiment further.

Drawings

Adobe's <u>Illustrator</u> is the industry-standard package for producing artwork but, like *Photoshop*, it is costly, complex and offers much more than the average user needs. There are many other programs for creating and editing drawings, such as Corel's <u>Painter</u> and *Dabbler* (also by Corel, but it appears to be issued only as "bundled software").

Simple but effective images can be created by copying clipart from a wide range of sources such as CD-ROM collections or the Web. <u>Hemera</u> provides a useful collection including drawings plus a wide range of high-quality **photo objects**. An excellent search and transformation engine that makes them very easy to use is also available. The use of clipart is legal provided that the source's licence terms concerning distribution or re-selling are adhered to. For instance, incorporating clipart into classroom handouts or even multimedia applications is generally allowed, but using the images in such a way that others could copy them is generally not permitted. If in doubt, **check the licence.**

Another source could be the art and design department of your own educational institution. Staff there will probably be familiar with many of the facilities that you might need, and consultation with them could lead to valuable cross-curricular activities!

Creating and editing audio recordings

The creation and editing of audio recordings tends to be a neglected area of multimedia resource creation. Few non-specialists are familiar with the software needed for creating and editing digital audio recordings. However, every copy of *Windows* comes provided with *Sound Recorder*, and often some audio editing software may be "bundled in" with a new PC, depending on the soundcard provided. However, in many network configurations, teachers are not allowed administrator rights to access these tools.

Sound Recorder offers some editing possibilities but is severely limited in what it can do. The industry-standard program is <u>Adobe Audition</u> (formerly known as *Cool Edit Pro*). Simpler programs, such as <u>AudioSurgeon</u> or <u>GoldWave</u>, are less expensive, and <u>Audacity</u> is available as freeware.

All of these programs offer broadly similar features. They can digitise analogue sound inputs from sources such as audiocassette recorders and microphones. They also offer comprehensive, yet easy-to-use, editing facilities for these and for digital sources such as CD-ROMs. Some training may be needed for the non-specialist to familiarise him/herself with the techniques involved and the types of output files

required, such as **WAV** or **MP3**. However, the results that can be achieved after minimal training input are quite impressive. See <u>Frisby (2000)</u> and <u>Frisby (2004)</u>.

Creating and editing video recordings

Video can be used to great advantage in the classroom

- for creating learning materials,
- as a tool for assessment,
- for enabling students to enhance their learning experience, e.g. by making recordings of a school trip abroad or by creating and recording role-plays in the classroom. See <u>Hill (1999)</u>.

The easiest way to build up a collection of digital recordings is to use a **digital camcorder**. Nowadays these usually come equipped with software and a cable that enables recordings to be uploaded and stored on a computer via its USB port. An easy-to-use camcorder is included in Digital Blue's *Digital Movie Creator* package. The camcorder can record up to four minutes of video or a number of still photos, and uploading and editing software is included in the package. One useful feature is stop-frame animation, which means that movies along the lines of Nick Park's *Wallis and Grommit* can be produced. The camcorder and editing software are easy to use and ideal as an introduction to digital video for both teachers and learners. *Digital Movie Creator* is available from <u>Tag Learning</u>: search under "D" for "Digital Blue".

Video recordings nearly always require editing once they have been uploaded to a computer. Adobe's <u>Premiere</u> is the industry-standard software, but others are often "bundled in" with packages such as Roxio's <u>VideoWave</u> and <u>Pinnacle Studio</u>. *Windows XP* and later come provided with *Moviemaker*. Some training will be needed in order to make full use of these applications, and also to raise awareness of the types of output files required, such as **MPG** or **AVI**.

For efficient digitisation of video resources, the installation and set-up of a **video capture card** is advisable. This enables the efficient capture of video from a variety of sources and will speed up video capture from others. Conversion of videos from satellite and terrestrial TV, camcorder or VHS tape, to a suitable digital format is also easily accomplished. One example of such a card is a <u>Hauppauge</u> WinTV Personal Video Recorder (PVR) card. Note that some PCs and laptops have these facilities already installed, but they are not standard. Organisations such as <u>Oxford Digital Video</u> offer training and free resources for teachers in video capture and editing.

Many learning centres use **satellite radio and TV programmes** as a matter of course. Access to vast numbers of **Free to Air (FTA)** foreign language channels on satellite TV is easy and relatively cheap, though care has to be taken as to their use within the classroom. Once the material has been downloaded (either centrally onto videocassette, or directly into high-specification computers), the resulting videos will need to be edited in the same way as any others, with tools such as those described above – but **please check whether it is legal to do this**.

Finally, it should be noted that the use of videocassettes or digitised video clips on the computer is part of a rapidly converging technology moving towards increasing usage of DVDs.

Copyright: Teachers should be aware of copyright restrictions on using and manipulating texts, images, audio recordings and video recordings gathered from CD-ROMs, the Web and other sources – see <u>Copyright issues</u> below.

Storage and sharing of materials

Once learning materials and/or assets to be incorporated in them have been created, they will need to be **stored** in an organised and accessible way. Teachers should not underestimate the need for training in areas such as:

- using *Windows* for storing and retrieving files;
- maintaining careful records;
- learning how to name files correctly, especially when different versions become available;
- possible use of databases for storage.

There can be mutual benefits in **sharing** such materials with others, provided that this is done within the constraints of copyright legislation (dealt with below under <u>Copyright issues</u>). Teachers may also wish to consider **online collaboration**. Resources include the <u>Languages ICT Forum</u> and <u>Lingu@NET Forum</u>, both lively UK-based discussion lists for language teachers, and the <u>EUROCALL</u> website and discussion list. Also, the <u>MALTED</u> tool mentioned above will soon be incorporating an online database from which to download re-usable assets.

Accessibility

Disability legislation that came into place in October 2004 means that creators and providers of courseware are required to take into account the needs of disabled learners. Further information on this is available at the BECTA website, and in the BECTA publication, <u>Paving the way to excellence in e-learning</u>.

Teachers and other creators of learning materials should be aware of the need to create equivalent or alternative learning experiences for those with a range of disabilities including visual or auditory impairment, motor skill deficiencies, colour blindness, dyslexia, etc.

The management perspective

In this section digital labs and multimedia ICT suites are discussed from the point of view of:

- the Senior Management Team
- the MFL Head of Department
- the ICT Manager

Senior Management Team

The aim of this document is not to prescribe which of the many options to follow when considering the introduction or enhancement of ICT facilities for language learning. Rather, it aims to offer advice and information which could prove helpful in considering the specific needs of any particular MFL department.

Major issues requiring consideration are:

- Choice of hardware configuration – see above under <u>Dedicated digital labs</u> and <u>Other digital facilities</u>;
- Management of change;
- Provision of Continuing Professional Development (CPD) – see the section (below) on <u>Training</u>.

These three issues are closely interlinked. Implantation of technology at any level should always be seen as a pedagogical issue. If it is to play a significant role in improving teaching and learning, it must be compatible with the theory and practice developed in the classroom. If demand for MFL technology facilities originates in the department itself, staff needs are likely to be clearly articulated and should be considered carefully – see the following section. The specific needs of MFL teaching and learning in terms of provision of ICT hardware and software are very real, and – in the case of audio playback, recording facilities, and other media-rich facilities – have implications for configuration policies. Key questions to consider might be:

- Is the use of a generic ICT suite the best mode for MFL?
- Would a specific rather than a generic solution be more appropriate – in other words, a dedicated MFL suite?
- Can media-rich environments always be available – and does the bandwidth capacity available for Internet access match the potential demand?
- How can the equipment be supported, technically and pedagogically?
- If other solutions are requested, such as implanting PCs in the classroom, what might be the impact on CPD requirements for developing different methodological approaches?

If change is being achieved from outside rather than from within the MFL department, full consideration must be given to the alternatives available. If the MFL staff have not yet reached the stage of having a clear vision of their ICT requirements, they will not be satisfied with imposed solutions which may not be flexible enough to provide for their development of ideas. Further CPD will be the key factor here.

It is worth noting that the very nature of MFL learning implies exposure to as wide a range as possible of cultural, linguistic and educational resources. These are necessary in order to convey knowledge and aid the acquisition of the complex skills involved in learning a language. Thus teachers need the means to create, adapt or tailor multimedia resources for their learners. For this they may need to have access to dedicated computers, possibly with additional administrator rights and with enhanced facilities in terms of memory, storage capacity, video capture cards etc. They will also need to be able to install a range of software for authoring and resource creation. To make these facilities available over a school network may be unnecessarily expensive in terms of licences and difficult in terms of security, so some kind of dedicated facility may be particularly appropriate in the case of an MFL department.

MFL Head of Department

The MFL HoD's prime consideration in choosing any kind of technical equipment is to what it extent it enhances MFL teaching and learning: i.e. **pedagogy and methodology first, technology second**.

There is still a good deal of scepticism concerning the effectiveness of ICT in MFL teaching and learning, but there is growing evidence that ICT, when firmly embedded in the MFL curriculum, has a measurable positive effect. A number of different reports and studies confirm this view:

- BECTA's ImpaCT2 Study shows that there is a correlation between regular use of ICT in MFL and good GCSE examination results.

- BECTA's report, <u>What the research says about using ICT in Modern Foreign Languages</u>, is a source of information that presents good reasons for regular use of ICT in MFL classroom.
- Terry Atkinson's edited volume, <u>Reflections on ICT</u>, contains a number of research studies and case studies written by prominent practising teachers, advisers and researchers.
- Many <u>EUROCALL</u> conference papers presented and published in recent years have focused on action research into the use of ICT in the MFL classroom at all levels of education.
- At a European level, there is a comprehensive report commissioned by the EC Directorate General of Education and Culture entitled *The impact of Information and Communications Technologies on the teaching of foreign languages and on the role of teachers of foreign languages*: <u>Fitzpatrick & Davies (2003)</u>.
- The <u>Case studies</u> cited below also provide evidence that ICT has a positive effect.

When considering the installation of a digital lab or multimedia suite (both of which we shall refer to below simply as "lab"), the first question that the MFL teacher needs to ask is to what extent the equipment is capable of enhancing tried and tested pedagogies and methodologies. It is also necessary to enquire to what extent the equipment will enable the introduction of new approaches to teaching and learning that would not be possible without it.

In general, the main benefits of using ICT in MFL can be summarised as follows. ICT offers:

- a wider range of learning opportunities: interaction, collaboration and communication;
- possibilities of differentiation, according to pupils' individual needs and learning styles;
- more opportunities for practising MFL skills, especially listening and speaking;
- access to authentic resources on- and offline;
- contact with schools in other countries by email or videoconferencing.

Key questions that need to be addressed to the supplier of a dedicated lab include:

- How easy is it to use? How much training will teachers need in order to learn how to carry out essential operations? Is training included as part of the supplier's package?
- What is the level of ongoing technical support and how much does it cost? Are software upgrades included?
- Is it possible to continue to use existing audio and video resources in their current format in the lab, e.g. resources on audio- and videocassette?
- How easy is it to convert existing audio and video resources to digital format?
- Is there a good range of networkable, off-the-shelf CALL software packages available that can be used in the lab? Are any CALL software packages supplied with the lab?
- How easy is it to create new resources incorporating audio and video for use in the lab?
- Does the lab come with an authoring package? Is it possible to use other authoring packages to create materials for use in the lab?

- Does the lab offer the same functions as an analogue language lab, e.g. the ability for the teacher to talk to individual students, the possibility for students to record their own voice and work in pairs or groups?
- Does the lab allow "real time" conversation with each student and groups of students? (Some labs offer streamed conversation over a network where time delays can occur and thus throw conversations out of synch.)
- Is it possible for the teacher to take control of the mouse, keyboard and screen of individual students to see what they are doing?
- Does the lab offer the possibility of tracking students' activities and storing results achieved in exercises and tests?
- How easy is it for students and teachers to save files that they create?
- Which audio and video digital formats, e.g. WAV, MP3, AVI, MPG, are supported by the system?
- How easy is it to switch between a CALL program and the Internet, or a video clip and live satellite, etc?

The disadvantages of installing a digital lab should also be considered, for example:

- **Conversion of existing resources to digital format:** An audit of existing analogue resources is necessary in order to find out how easy it is to convert them to digital format. Ideally, all resources used in the new lab should be converted to digital format but, as well as needing to take into account the time and labour involved, there may be copyright restrictions on converting certain resources to digital format: see Copyright issues. For example, permission may need to be sought from publishers if commercially purchased audio and video materials are to be converted and stored in digital format.
- **Storage of digitised material:** Digital audio and video files are large, even when they are compressed to save space. Plenty of storage space on the server will be needed.
- **Speed of access:** Depending on how the system works, its speed, the number of students accessing the network at one time and various other factors, you may experience hiccups in the delivery of digital audio or video over a network.

These are just a few of the issues that need to be addressed. For further information on setting up and managing a digital lab or multimedia suite, see Module 3.1 (*Managing a multimedia language centre*) at the ICT4LT website. This module includes general advice and five case studies, three of which are summarised below: see Case studies.

ICT Manager

It is assumed that the ICT Manager in a school has a sound knowledge of the technical aspects of managing ICT facilities. The role of this document is to offer advice that is relevant in an MFL teaching and learning context, rather than to look at general technical issues.

General advice on managing ICT facilities is available on BECTA's FITS (Framework of ICT Technical Support) pages. The following information has been extracted from there:

The emphasis of FITS is on **proactive** tasks as well as **reactive** ones. It sees the main objective of technical support as preventing incidents from occurring rather than resolving problems.

FITS can be extremely useful in that:

- It gives ICT managers the benefit of experience gained over the last 20-plus years in the development of ICT technical support techniques.
- It contains tried and tested processes that have been adapted with the school environment in mind.
- It provides simplified and ready-to-use processes that can be used immediately.
- It contains templates, checklists and downloads that can be used as they are or personalised.
- It has a quick-start approach to help ICT managers make the best use of time and resources available and see quick results.
- It separates administrative tasks and technical tasks to help ICT managers assign the most appropriate resources.
- It helps keep costs to a minimum.
- It helps ICT managers to protect teachers from having to get too involved in technical support issues.

Regarding the special needs of MFL teachers, the key issues have already been covered in the preceding sections of this document. The most important are summarised here:

- MFL hardware and software needs are **different** from the needs of most other subject areas. MFL teachers make extensive use of audio playback and audio recording facilities. They also require CD-ROMs and DVD-ROMs containing audio and video recordings and need to be able to record off-air from terrestrial and from foreign-language satellite TV stations.
- Facilities for making audio and video recordings and transferring such recordings to CD-ROM or DVD-ROM are essential – subject to observation of copyright: see Copyright issues.
- Workstations need to be equipped with headphones and microphones. The integrated "pilot's headset" is recommended.
- Problems of multi-user access need to be considered when accessing CD-ROMs, DVD-ROMs and the Web.
- Many websites used by MFL teachers contain audio and video clips, which require essential plug-ins and CODECs to be installed.
- Audio and video resources require a large amount of storage space.
- Projection facilities are often used by language teachers. A computer linked to a projector and, if possible, to an interactive whiteboard is a useful addition to an MFL multimedia suite.

Training

Training is an area that is commonly neglected in the education sector. The failure of earlier technologies, such as the analogue language lab, to make a significant impact on teaching and learning can often be traced back to the lack of appropriate training for teachers in making the best use of them (Davies 1997:28). ICT training presents a particular problem, because computer technology changes daily, so training must be an ongoing process rather than a one-off.

As well as learning about the way in which the new lab operates – and this will be specific to the lab that is finally selected – teachers need to become familiar with the software that will be used in the lab and, above all, the pedagogical and

methodological implications of using a multimedia lab. It goes without saying that the content of such a training course must be subject-specific, i.e. it must address the needs of MFL teachers.

An introductory ICT course for MFL teachers could be narrowed down to four topics:

- Using generic software in language learning and teaching
- CALL pedagogy and methodology
- Exploiting the World Wide Web
- CALL authoring tools

These topics relate to technologies offering clear benefits to MFL teaching and learning if applied effectively, all of which can relatively easily be made available to teachers in a department. Modules focusing on all four topics are available free-of-charge at the ICT4LT website. Teachers will, of course, demonstrate a range of skills and ability, which needs to be taken into account by training provision. A useful package of "can do" lists in *Word* format for identifying individual training needs can be downloaded from http://www.ict4lt.org/en/ICT_Can_Do_Lists.doc.

The ICT4LT website contains a total of 16 training modules aimed at MFL teachers in all sectors of education, which is more than the average secondary school teacher needs. CILT, The National Centre for Languages offers a range of face-to-face ICT and MFL courses across the country, combining pedagogy and hands-on skills. Check your local Comenius Centre and the Managing ICT for Languages section of the Languages ICT website for further opportunities.

More detailed information on training MFL teachers in ICT skills can be found in the following published articles:

- "ICT and modern foreign languages: learning opportunities and training needs": Davies (2003a)

- "Perspectives on online training initiatives": Davies (2003b)

See also *Putting achievement first: managing and leading ICT in the MFL department*: Buckland (2000)

Funding for training

The New Opportunities Funding (NOF) ICT training initiative ran from 1999 to 2003 and offered free training to primary and secondary school teachers. The most important lesson learned from the NOF initiative is that ICT training works best if it is delivered by a competent subject-specific provider. As a follow-up to NOF, the DfES **Hands On Support (HOS)** funding initiative is a new element of the ICT in Schools Standards Fund package. The HOS initiative aims to provide:

- new or enhanced opportunities to share and spread good practice through a structured, locally driven programme;
- face-to-face support for teachers in the effective use of ICT in teaching and learning in their own classroom environment, on an individually focused, specialist to specialist basis.

The HOS initiative covers primary and secondary schools, including special schools, and, in the secondary sector, aims to support teachers in all subjects. LEAs, in

consultation with schools, may wish to prioritise the focus of support within each sector.

See: http://www.teachernet.gov.uk/wholeschool/ictis/ict_teaching/hos/

Copyright issues

The following should not be taken as an authoritative interpretation of copyright law. It is intended solely as a useful guide.

The question of Intellectual Property Rights (IPR) in general and copyright in particular cannot be ignored when dealing with the creation of learning materials. There are many myths and misconceptions about this issue, but in essence it is largely a question of **ownership**. It can be considered from two viewpoints:

- the rights of the creator as owner
- the rights of the creator as developer

The question of copyright needs to be considered when incorporating Web pages into learning materials as well as when considering the use of any other material which was not specifically created by the developer for that purpose.

Ownership

Once a resource has been created and published, provided that it has been created with regard to copyright law, it will possess its own copyright by its very existence as a published work. This is true for material of any sort, be it text, image, audio clip, video clip, or other, and wherever it is published, including on the Web. Currently, learning materials are treated in the same way as a book. Thus contrary to popular belief, there is no need to "protect", assert or announce the copyright in a work, either by use of the copyright symbol © or by a statement – though these can help by identifying the date and ownership of the work.

Copyright in a work lasts for a long time, e.g.

- Copyright in a literary, dramatic, musical or artistic work lasts for the life of the author and 70 years from the end of the year in which he/she died.
- Copyright in a film expires 70 years after the end of the year in which the death occurs of the last to survive of the principal director, the authors of the screenplay and dialogue, and the composer of any music specially created for the film.
- Copyright in an audio recording expires 50 years from the end of the year in which it was made.
- Copyright in a broadcast expires 50 years from the end of the year of making of the broadcast.

Source: IPR website

If a work has been created as part of the employment duties of the creator, the copyright will reside with the employer unless a contract specifically states otherwise. Under EU law, an employee has certain "moral rights", such as

- the right to be identified as the author of a work ("paternity right"),
- the right not to have work falsely attributed to him/her,
- the right not to have work subjected to derogatory treatment ("integrity right"),

- the right to ask for his/her name to be removed from unapproved versions and to request that a notice be attached stating that the work is being issued against their wishes.

It should be added, however, that the UK has opted to implement a restricted form of these moral rights for employees.

Developer

Certain concessions apply to using materials in education, but only where there is a specific licensing agreement, as in the case of arrangements with appointed agencies in the UK for photocopying and making off-air recordings of radio and TV broadcasts (see below). These agreements are subject to clear restrictions and penalties for misuse. In addition, the aspects of **fair use** or **fair dealing**, which are enshrined in a new Act in the USA but are not easily defined in the UK and Europe, need consideration.

Courseware developers and users should be aware that use of material in a classroom situation differs from the use of digital materials in a "virtual classroom" on a website accessible by a wider public. The only exceptions to this are when there is a nationally recognised system for allowing copying under certain, quite strict, conditions, controlled by a licensing system which ensures a return to copyright holders. In the UK this system covers: (i) photocopying through the Copyright Licensing Agency (CLA) and (ii) off-air recording through the Educational Recording Agency (ERA). This is subject to the provision that the appropriate fee has been paid to the relevant agency and that their terms and conditions are complied with. Recent amendments to the terms and conditions of the ERA allow for storage in digital formats, but only for use inside the ERA-licensed institution. This does not cover downloading from websites.

Unless the original material is clearly stated to be free of copyright or if copyright on the material has expired by virtue of its age (see above), it is illegal to download, scan or otherwise copy such material for onward distribution, even if no financial gain takes place. It is a common misconception to think that there is an exemption for educational usage. In most countries no such exemption applies, other than certain specific arrangements for research. Nor is it the case that because an item is **in the public domain** – which is often interpreted (wrongly) to apply to items published on the Web – it is free from protection. In fact all work is protected. A work is only in the public domain and free to use if it is specifically stated to be so.

The potential penalties for breach of copyright are draconian. A copyright owner may go to court to demand that all copies of all works in question are either destroyed or delivered to the copyright owner at the transgressor's expense, and there are huge financial compensations which may be asked for. Ignorance of the law is never considered as an excuse, and if it could be proven that the transgressor knew that the item was in copyright and that the laws of copyright did not allow for copying, a criminal prosecution could also ensue against the person who did the copying.

The situation applies equally to the illegal copying for multiple use of a piece of software purchased for one-off usage. In almost all cases, the purchase of software implies an agreement to a licence to use it under certain restrictions, one of which will undoubtedly be for single-machine use, unless otherwise specified. Copying software to use across more than one machine at a time, where it is stated specifically that the licence only covers one machine, constitutes an illegal act.

A word of warning about **adaptation**: Adapting a work without permission, with or without acknowledgement, when it comprises something other than a quotation of a small part, may well infringe the copyright and **moral rights** of the owner. Finally, care should be taken about cross-referencing to other works, such as a website address with a hyperlink. This may not always be legal without permission and in any case websites tend to change frequently and links may become broken.

Implications

There are obvious implications for the developers of courseware when taking copyright into consideration. Not only do they have to ensure that they themselves have complied with the law in all respects but, given that multimedia creation is very often a collaborative venture, they should also make arrangements so that all contributors to the work guarantee in writing that they own the rights to the work in question and indemnify against breach of copyright.

If a copyrighted work is really required to be incorporated in learning materials, then written permission must be sought. Experience shows that if this is done **in advance**, and it is made clear that without permission the item will **not** be copied and used, then reaction is very often positive and helpful, especially if it is seen as being used for educational and non-profit-making reasons. It is often remarked that, if a copyright owner fails to reply, all the copier has to do is to enter a statement that he/she has done his best to find the copyright owner. Legal opinions differ as to the wisdom of this approach, but the UK government's IPR website advises that it may be possible to do this if "pains have been taken" to find the owner. However, the advice also suggests that a sum of money should be put aside to provide for payment to a copyright owner should they come forward. This is clearly a high-risk strategy!

Further information

i. See ICT4LT *General guidelines on copyright*:
    http://www.ict4lt.org/en/en_copyright.htm

ii. See the Foreword to ICT4LT Module 3.1 (*Managing a multimedia language centre*), which focuses on copyright issues:
    http://www.ict4lt.org/en/en_mod3-1.htm

iii. The UK government website on Intellectual Property Rights (IPR), copyright and related matters:
    http://www.intellectual-property.gov.uk

iv. Casey J. (2004) *Intellectual Property Rights (IPR) in networked e-learning: a beginners guide for content developers*, JISC Legal Information Service:
    http://www.jisclegal.ac.uk/publications/johncasey_1.htm

Case studies

Three distinct and different case studies provided by UK schools are described in Module 3.1 (*Managing a multimedia language centre*) of the ICT4LT training resources and are summarised here:

- Cox Green School, Maidenhead, a standard comprehensive school
- St George's School, Sleaford, a school with Technology College status

- The Ashcombe School, Dorking, a school with Language College status

Visit the ICT4LT website to access the full and updated case studies, along with case studies provided by two European universities.

Cox Green School, Maidenhead

Cox Green Comprehensive School is a state school without any special status at present. It has, however, succeeded in attracting external funding from a local business in order to finance its multimedia language centre. The language centre at Cox Green School shows what can be done under energetic and enthusiastic leadership. Richard Hamilton, Head of the Modern Foreign Languages Department, is virtually a "one-man-band", a language teacher turned ICT expert. He has managed to convince less than enthusiastic staff of the advantages of using ICT as an integral part of their teaching.

The students at Cox Green School use the language centre both as part of their regular weekly class-contact hours and as a self-access centre. **Integration** is the watchword: the work carried out in the language centre is tied in closely with the work done in the "normal" MFL classroom. Richard Hamilton has opted for a battery of stand-alone computers as he lacks the time and expertise to manage a network, and technical support for a network is not forthcoming from other quarters. He also makes extensive use of his students' ICT skills, involving them in setting up new hardware and software and in the day-to-day management of the centre's resources. The software that is used in the centre cannot be classed as "leading edge". The emphasis is on **content** rather than the delivery medium: a large volume of materials has been developed in-house and slotted into a small number of authoring packages.

Richard Hamilton puts forward a very convincing argument for the use of ICT in MFL, namely: the school's A*-C GCSE results in MFL went up by 15% over a period of three years following the introduction of regular classes in the multimedia suite.

St George's Technology College, Sleacombe

St George's School is a state school with Technology College status, which means that (i) the school is committed to promoting technology as a subject discipline throughout the school, and (ii) it benefits from considerable technical expertise in-house and within the local education authority. It has had a prestigious language centre – the Brealey Centre – since 1985, thanks to a generous donation from a businessman who had been a student at the school. The Brealey Centre at St George's is an example of the "high-tech" approach to the use of ICT in MFL. In contrast to Cox Green's centre, networking within St George's and to the outside world is a significant feature of The Brealey Centre. The school enjoys fast connections to the outside world and makes extensive use of the Internet.

The Ashcombe School, Dorking

The Ashcombe School is a state school with Language College status, which means that it is committed to promoting languages as a subject discipline throughout the school. It also enjoys a high level of technical support. The Ashcombe School demonstrates that a strong commitment to ICT, tight management, technician support, and recognition of the need for staff training are the recipe for success. It

has a well-developed website, which enables it to share its knowledge and experience with other schools. Students have regular classes in its two MFL/ICT multimedia labs, so access is regular and integrated into the language teaching programmes as a whole.

The Ashcombe School focuses especially on the use of ICT to enhance speaking and listening skills and, to a lesser extent, reading and writing skills. It is felt that, although there are many text-based activities that can enhance the development of reading and writing skills, these do not exploit the power of the multimedia computer. Staff believe that the most efficient and effective use of the multimedia suites is to exploit the computer's capability to present and reinforce listening and speaking and can point to significant improvements in pupils' development of these skills.

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Townshend K. (1997) *Email: using electronic communications in foreign language teaching*, London: CILT.

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Web links

Suppliers of digital labs and digital lab software

Activa Solutions (formerly ASC Telecom): http://www.activa.co.uk/

Artec Electronics: http://www.artec-electronics.com/vacs22.htm

CAN-8 VirtuaLab: http://www.can8.com/

Keylink Computers: http://ds.dial.pipex.com/keylink

Melissi Multimedia: http://www.melissi.co.uk/

Sanako: http://www.sanako.com/ & (UK) http://www.tandberg.co.uk/

Sony: Marketed by SANS (Software And Network Solutions): http://www.sansinc.com/

Sun-Tech: http://www.suntechgroup.com/

Other links

Adobe: Image-, audio- and video-editing products: http://www.adobe.co.uk/

The Ashcombe School: MFL pages – free resources and software reviews: http://www.ashcombe.surrey.sch.uk/Curriculum/modlang/

Audacity: Audio editing software (freeware): http://audacity.sourceforge.net/

*AudioSurgeon***:** Audio editing software:
http://www.voyetra.com/site/products/audiosurgeon/

BECTA (British Educational Communications and Technology Agency):
http://www.becta.org.uk/. See also ICT Advice.

BECTA Framework of ICT Technical Support (FITS): Advice for ICT managers:
http://www.becta.org.uk/tsas

BECTA ImpaCT2 Study: General report on the impact of ICT in teaching and
learning**:** http://www.becta.org.uk/research/reports/impact2

BECTA: *Paving the way to excellence in e-learning*, publication relating to e-learning
materials commissioned for the National Learning Network (NLN), covering
pedagogy, accessibility, technical standards and quality assurance:
http://www.becta.org.uk/corporate/publications/

BECTA: *What the research says about using ICT in Modern Foreign Languages*:
http://www.becta.org.uk/page_documents/research/wtrs_mfl.pdf

Blackboard: A Virtual Learning Environment: http://www.blackboard.com/

Copyright Licensing Agency (CLA): http://www.cla.co.uk/

COREL: Image creation and editing software: http://www.corel.co.uk/

Curriculum Online: http://www.curriculumonline.gov.uk/

CyberPatrol: Internet filtering software: http://www.cyberpatrol.com/

CILT: The National Centre for Languages: http://www.cilt.org.uk/

CILT ICT Training: ICT training for MFL teachers available from The National
Centre for Languages: http://www.cilt.org.uk/cpd/ict.htm

Comenius Centre: one of a national network of centres developing and supporting
languages in their regions across all phases of education, co-ordinated by CILT:
http://www.cilt.org.uk/comenius/index.htm

Educational Recording Agency (ERA): http://www.era.org.uk/

E-valuate: Software evaluation service maintained by The Guardian newspaper:
http://www.learnevaluations.co.uk/

EUROCALL: A professional association, established in 1993, devoted to the
promotion of new technologies in language learning and teaching. EUROCALL
maintains a website containing useful information and resources, and an electronic
discussion list where both members and non-members can raise questions and
discuss topics of current interest. EUROCALL organises an annual international
conference: http://www.eurocall-languages.org/

Graham Davies's Favourite Websites: An annotated list of over 300 language-
related websites and links to similar lists. The list is updated every week at
http://www.camsoftpartners.co.uk/websites.htm

*Fun with Texts***:** Text-manipulation authoring package by Camsoft:
http://www.camsoftpartners.co.uk/fwt.htm

GoldWave: Audio editing software: http://www.goldwave.com/

Hauppauge: Video capture cards and other video tools: http://www.hauppauge.co.uk/

Hemera Clipart: http://www.hemera.com/

Hot Potatoes: Web-based authoring software: http://web.uvic.ca/hrd/halfbaked

ICT Advice: The BECTA website for teachers in UK schools, providing generic and subject-specific advice and materials on the use of ICT in teaching and learning: http://www.ictadvice.org.uk/

ICT4LT (ICT for Language Teachers): The ICT4LT website was initially created as a set of ICT training resources for language teachers with the aid of funding under the Socrates Programme of the Directorate for Education and Culture at the European Commission. The site currently consists of a total of 16 discrete modules at three different levels and has proved extremely popular both with practising language teachers and with teachers undergoing initial teacher training in university departments of education: http://www.ict4lt.org/

Intellectual Property Rights (IPR): UK government website, covering a wide variety of answers to questions relating to Intellectual Property Rights, Copyright, Designs, Patents and Trade Marks: http://www.intellectual-property.gov.uk/

JASC *Paint Shop Pro*: Image editing software: http://www.jasc.com/

LAMS (Learning Activity Management System): A Virtual Learning Environment (VLE): http://www.lamsinternational.com/

Languages ICT: A website from CILT, The National Centre for Languages and ALL, which provides information, support and guidance for teachers of languages in UK schools on using ICT in the classroom. As well as practical ideas for using particular technologies, teachers can find out about current UK initiatives and opportunities in the field of ICT and languages: http://www.languages-ict.org.uk/

Languages ICT Forum: A lively discussion list for language teachers, focusing on the use of ICT for language teaching and learning: http://www.mailbase.org.uk/lists/languagesict-forum/

Lingu@NET Forum: A lively discussion list for language teachers: http://www.mailbase.org.uk/lists/linguanet-forum/

LView Pro: Image editing software: http://www.lview.com/

Macromedia: Producer of a range of authoring tools: http://www.macromedia.com/

MALTED: Authoring tool (freeware): http://www.malted.com/ & http://malted.cnice.mecd.es/ (Spanish Ministry of Education website)

Moodle: A Virtual Learning Environment: http://moodle.org/

National Learning Network (NLN): Post-16 sector: http://www.nln.ac.uk/

Oxford Digital Video: Training courses and resources: http://www.oxdv.co.uk/

Pinnacle Studio: Video editing software: http://www.pinnaclesys.com/

REvIEW Project: (Research and Evaluation of Interactive Electronic Whiteboards), University of Hull: http://www.thereviewproject.org/

Roxio *VideoWave*: Video editing software: http://www.roxio.com/en/products/index.jhtml

SafeSurf: Internet filtering software: http://www.safesurf.com/

Schoolzone: Software evaluations and other services: http://www.schoolzone.co.uk/

Serif *PhotoPlus*: Image editing software: http://www.serif.com/

Success for All: A programme designed to transform quality and responsiveness across the learning and skills sector. *Success for All* has been developed by the Department for Education and Skills (DfES) and the Learning and Skills Council (LSC): http://www.successforall.gov.uk/

Tag Learning: Supplier of educational hardware and software: http://www.taglearning.com/

Tandem Learning: Website for finding tandem learning partners, maintained by the University of Bochum: http://www.slf.ruhr-uni-bochum.de/Tandem/

TaskMagic: Authoring software by mdlsoft: http://www.mdlsoft.co.uk/

TEEM: Software evaluations: http://www.teem.org.uk/

University College London, Language Centre: Partner in the MALTED project: http://www.ucl.ac.uk/language-centre/

WebCT: A Virtual Learning Environment: http://www.webct.com/

Wida Software: Producer of CALL software, notably *The Authoring Suite*, a popular authoring program: http://www.wida.co.uk/

All URLs were verified on 24 February 2005.