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Summary

The following key benefits have been identified from the research evidence about the use of ICT in Modern Foreign Languages (MFL):

- Increase in pupils' motivation, enthusiasm and confidence
- Positive association with attainment
- Learning possibilities expanded via collaboration, interaction and communication in the target language
- Potential for differentiation according to individual pupil need.

Teachers can maximise the impact of ICT in MFL teaching by:

- maximising access to ICT resources
- using the advantages of multimedia to engage learners' interest and develop their key skills
- using ICT to interact with native speakers and authentic materials.

What the research says about using ICT in modern foreign languages

This report is based on an analysis of available research about how primary and secondary teachers are using ICT in the teaching of Modern Foreign Languages. It summarises the key findings and suggests resources for further reading.

Applications of ICT in the MFL curriculum

ICT can contribute to the key Modern Foreign Languages (MFL) skills of listening, speaking, reading and writing through a variety of ways:

- Digital resources such as those on the internet, CD-Roms, vocabulary databases and video clips give access to a vast range of information and learning opportunities
- Pupils can work at their own pace as digital resources can be slowed and replayed repeatedly according to individual need
- Access to authentic materials, and communication with schools abroad via video conferencing, email and discussion forums in the target language facilitate cultural awareness
- Multimedia presentation software enables a range of MFL skills to be practised and supports a range of learning styles
- Word-processing applications allow pupils to plan, draft and edit their work and develop skimming and scanning techniques
- Digital video can offer feedback on pupils' language performance for self-critique, teacher or peer evaluation
- Personal interest in MFL can be encouraged by watching films in DVD format with subtitles and multiple audio tracks in different languages.

This report considers not just the technologies themselves but also the pedagogical implications and the support necessary to enhance learning and teaching of MFL.



Key research evidence about ICT in Modern Foreign Languages

On the basis of Becta's analysis, ICT can have positive effects in the teaching and learning of MFL, as outlined below. There are references for further reading supplied alongside some of the findings.

About Becta's 'What the Research Says...' series

This series of briefing papers is designed in particular for teachers, ICT co-ordinators and school managers, in order to provide an initial idea of the available research evidence for the use of Information and Communications Technology (ICT) in schools and colleges. We welcome feedback and suggestions for further titles in the series (contact details can be found at the end of this briefing).

Benefits for pupils

- Digital resources enable pupils to practise individually at their own pace (Passey et al., 2004)
- Digital resources can be slowed down for greater understanding
- Communication worldwide via video conferencing with native speakers can bring a rich and real experience (Teachernet, undated)
- Pupils can be assisted by word processing applications to effectively review, edit and summarise texts
- Email correspondence with 'e-pals' can have a positive impact on grammar, vocabulary and tenses (Blyth, 2001)

Benefits for teachers

- There is a positive association of the use of ICT in MFL with attainment (Harrison et al., 2002)
- Interactive whiteboards enable improved delivery and pacing, whole-class teaching, interaction and discussion, and relate to increased motivation for both teachers and pupils (Passey et al., 2004)
- Individual learners' needs can be supported (Passey *et al.*, 2004)

- A variety of resources can be utilised to meet specific needs and demands
- Practicable access to native speakers and culture is made more feasible (Harris and Kington, 2002)
- Multimedia resources enable teachers to utilise a variety of visual, audio and text experiences in the target language, providing MFL teaching and learning through a range of learning styles

Factors for effective use

- Teachers need regular access to ICT resources in order to embed it in their MFL teaching
- Video conferencing with a school abroad works best when thoroughly planned and when pupils have time to familiarise themselves with the equipment
- Training and ongoing professional development for teachers encourages innovative and effective use of ICT in MFL teaching (ICC, 2003)

Use of ICT in MFL - a Case Study

Montgomery Combined School is a large urban school catering for children from the ages of 4 to 12. In 2000, the school established video-conferencing links with Ecole Sanguer, a school in Brittany. A series of projects were involved in the link:

Daily conversation

Thanks to the video-conferencing system, young pupils in both schools communicated every day in the foreign language. Every conference was different, and all were highly beneficial. After years of disembodied voices emerging from cassette recorders, devoid of interest, context and any of the para-linguistic clues which aid understanding, pupils now had 'real' children to talk to. Suddenly there was a reason to communicate.

The Virtual Tour

Each class made a videotaped tour of their school, complete with commentary. These were shown through the video-conferencing link and were followed by a question and answer session.

Eurovision Karaoke

The French link teacher emailed two songs, one in French and one in English, which the classes then sang together. The children had pronunciation modelled, and used new vocabulary.

Summary

Trina Ferguson, a teacher at Montgomery Combined School, commented, "The change that we have seen in many of our less motivated children has been astonishing. Irrespective of the improvement in their French, we have seen an increase in their confidence and motivation across the board."

The French Perspective

Philippe Le Bian, Headteacher at Ecole Sanquer, was also very positive about the use of ICT in this work: "... when children use video conferencing they discover language. It suddenly makes sense! They can see for themselves that what they have learned has meaning. Communication is direct and spontaneous. It was very interesting for both pupil and teacher to compare learning styles and in particular to see the audio, visual and kinaesthetic methods being used in the English classroom. We are not used to so much moving about."

The full version of this case study can be found in *Video Conferencing in the Classroom: Communications Technology across the Curriculum* (Arnold *et al.*, 2002) and can be viewed at http://www.becta.org.uk/page_documents/technology/vc/vc_classroom/case5.pdf.

Explanation of findings

Compared to other subjects, the research specifically looking at ICT usage in relation to MFL is not extensive. Furthermore, the degree of ICT take-up by MFL teachers is widely varied between individuals and also affected by differing levels of ICT resources and access across schools (QCA, 2004). Despite this, the research shows that when ICT is used in MFL teaching and learning, there are a range of positive benefits.

Any positive impacts depend on the ways in which ICT is used. Improvements in attainment and motivation will inevitably be reliant on the capacity of teachers and students to use ICT as an effective pedagogical tool in the pursuit of particular learning objectives.

Key skills

A report on ICT in Foreign Language Technologies (ICC, 2003), which looked at current developments across Europe, notes that MFL is different from many other subjects in that it is both knowledge based and skills based.

ICT can be used to support and develop all the key curriculum MFL skills of listening, speaking, reading and writing; often with overlapping benefits across them (TOP, 2001). Digital video can provide a particularly effective means to support language acquisition in the classroom (Tschirner, 2001). Video conferencing has shown benefits in listening and speaking skills (Harris and Kington, 2002), with non-verbal communication also contributing to understanding. The key skills required for MFL can all be facilitated by multimedia applications, from interactive animated software, video clips, CD-Rom dictionaries, to digital voice recordings.

Attainment

The ImpaCT2 project (2002) found that where ICT was used in teaching and learning in MFL it had a positive association with pupil attainment at Key Stage 4. When compared to other subjects, the degree of use of ICT showed the greatest mean difference in relative gains. Even though the overall use of ICT in MFL was quite low, when it was used, the extent of use made the greatest difference. Similarly, various case studies (Blow, 2001; TOP, 2001) also demonstrate the positive effect of ICT upon pupils' motivation and attainment. Interactive video conferencing has been linked to improvements in use and understanding of language, confidence, and examination performance (Superhighways Initiative, 1997). ICT can help pupils become more confident and effective in their learning; boys in particular appear to be positively affected (Passey et al., 2004; TOP, 2001).

Cultural experience

The use of digital media enables the characteristics of a culture to be brought into the classroom (Tschirner, 2001). ICT can provide contact with native speakers and their

culture, either through digital resources or direct interaction via video conferencing. Email correspondence, used to support collaborative projects with schools abroad, can encourage language learning (Usher, 2001), and encourages pupils to aspire to greater accuracy and achievement. These are useful for pupils, both in language acquisition and in developing cultural awareness. It has been argued that it is the potential benefits of interactivity with native speakers which may be of the greatest importance (Milton, 2002). Authenticity is brought into the learning situation and the use of ICT in MFL facilitates pupils' experience of other cultures, enabling them to appreciate differences and similarities.

Communication with native speakers, and information from authentic sources such as internet sites and satellite TV broadcasts, all contribute to language learning. Case studies and teacher interviews during the ImpaCT2 project (Harrison et al., 2002) indicated the value of establishing a link with a school abroad, ranging from basic emailing to video conferencing. In particular, contact with native speakers and the culture of the target language, were highly thought of. Cultural insights and experience of less formalised forms of the target language can be gained by the use of ICT (Harris and Kington, 2002).

The integration of ICT into classroom activities is invaluable, allowing the conditions to become close to those of the target culture, and recognises that MFL learning is a social as well as a psychological process (Tschirner, 2001).

Differentiated learning

Digital resources for MFL can permit differentiation in the classroom, allowing pupils to progress at an appropriate and individual pace, receive personalised feedback, and an independence of learning. Teachers are able to monitor individual progress and offer formative as well as summative evaluation. Passey et al. (2004) write that ICT also enables a multi-sensory approach to be exploited, potentially engaging pupils who would otherwise not explore their full potential. In one of the case studies (ibid.), increased independence was attributed to ICT, enabling pupils to study languages in more depth and developing their thinking processes.

About the research literature The extent of research looking specific spec

The extent of research looking specifically at the role of ICT in MFL teaching and learning is limited, compared to that for other subjects. Much of the research available draws upon case studies from time limited projects, perhaps using new content and equipment, and giving examples from a specific learning situation. These do provide useful models of teachers using ICT in their MFL practice, and highlight many positive outcomes, but further long-term academic studies are needed in order to obtain a clearer picture of the uses and benefits of ICT in the teaching and learning of MFL.

Twenty per cent of MFL teachers still make little or no use of ICT to support their teaching, although this figure is declining (DfES, 2003). The extent of potential access to digital resources for MFL is increasing; 30 per cent of secondary schools (which have a school network) have all their classrooms networked (ibid.).

Key areas for further research

Further areas for future enquiry could examine:

- developing and evaluating an ICT in MFL school strategy
- the potential to embed ICT use in MFL teaching
- the impact of ICT on MFL pedagogical practice
- the use of ICT to engage primary pupils in MFL.

Key questions for teachers and schools

- Is there adequate access to ICT facilities and resources?
- Are ICT resources resources being used to develop key skills in MFL?
- To what extent is ICT use embedded in MFL teaching?
- How can the effectiveness of ICT use in MFL be monitored?

Bibliography and further reading

The research referred to in this briefing represents a selection from the growing field of ICT research related to MFL, and should not be regarded as a definitive list of the 'most important' research in this area.

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This briefing and others in the 'What the Research Says' series can be found on the Becta Research website at www.becta.org.uk/research.

Becta's ICT Advice site provides further information, services and tools for those who use, implement and manage ICT in schools: www.ictadvice.org.uk

Becta's ICT Research Network

If you're interested in research on the use of ICT in education, you can join Becta's ICT Research Network.

The ICT Research Network seeks to encourage the exchange of information in order to inform the national agenda and professional practice.

Membership is free and is open to:

- teachers
- ICT co-ordinators
- ICT advisors
- school managers
- researchers
- policy makers
- research sponsors
- industry.

The Network provides them with an opportunity to:

- exchange information on current research
- develop partnerships
- discuss priorities for further investigation
- focus research on issues of importance to practitioners and policy makers.

They can do this via:

- an email discussion list
- publications
- conferences and events.

More information on Becta's ICT Research Network can be found at

www.becta.org.uk/research/ictrn

Alternatively, send an email to ictrn@becta.org.uk or write to Michael Harris, ICT Research Network, Becta, Millburn Hill Road, Science Park, Coventry CV4 7JJ.

www.becta.org.uk/research

About Becta

Becta is the Government's lead agency for information and communications technology (ICT) in education and supports UK Government, national organisations, schools and colleges in the use and development of ICT in education to raise standards, widen access, improve skills and encourage effective management.

About the ICT in Schools Programme

The ICT in Schools Programme is the Government's key initiative to stimulate and support the use of information and communications technology (ICT) to improve standards and to encourage new ways of teaching and learning. The enormous potential of ICT means that for the first time it is becoming possible for each child to be educated in a way and at a pace which suits them, recognising that each is different, with different abilities, interests and needs. The challenge over the next four years will be to successfully embed ICT in every facet of teaching and learning where it can directly impact on raising standards of attainment. A vision for the future of ICT in schools can be found in the paper Fulfilling the Potential – Transforming Teaching and Learning through ICT in Schools, available on the DfES ICT in Schools website [http://www.dfes.gov.uk/ictinschools/publications/].

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British Educational Communications and Technology Agency (Becta)

Millburn Hill Road, Science Park, Coventry CV4 7JJ Tel: 024 7641 6994 Fax: 024 7641 1418

Research email: research@becta.org.uk Becta main email: becta@becta.org.uk URL: www.becta.org.uk