

# **Study on the Impact of Information and Communications Technology (ICT) and New Media on Language Learning**

**EACEA 2007/09**

## **EXECUTIVE SUMMARY**

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This is the executive summary of the Final Report of the study regarding the impact of information and communications technology (ICT) and new media on language learning which was commissioned by the Education and Culture Executive Agency (call for tenders EACEA 2007/09) and carried out by Ellinogermaniki Agogi through an international team of experts.

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## ***EXECUTIVE SUMMARY***

This report presents the results of the *Study on the Impact of ICT and New Media on Language Learning*, which was initiated by the European Commission through its Education and Culture Executive Agency, and carried out between June 2008 and May 2009.

It is accompanied by four annexes, which report on the steps in the process of the study. They comprise:

- A comparative study on the potential for the use of ICT and new media for language learning in eight European countries (Annexe I)
- A quantitative survey of the use of ICT and new media for language learning purposes (Annexe II)
- A qualitative survey on current trends in ICT-supported language learning and possible developments in Europe and beyond (Annexe III)
- A set of case studies that serve as examples of good practice of the positive impact ICT and new media on language learning (Annexe IV).

### **Aim**

The aim of the study was to investigate the impact on language learning of ICT and new media, as a complement to 'traditional', face-to-face learning and teaching within – and beyond – the framework of formal education systems.

### **Objectives**

- To assess the potential use of ICT and new media for language learning, and the 'impact' in relation to the interplay of technologies, their applicability to and perception of value for language learning purposes.
- To define the use and application of new technologies for language learning across a sample of eight European countries in order to establish common practices.
- To identify trends and practices beyond schools and universities, in working and personal life, including the use of ICT and new media in formal, non-formal, and informal language learning.
- To help to determine future potential in improving outreach to new learners and indicate the opportunities for exploiting the learning potential of new technologies.

## **Context and methodology**

The study team identified three over-arching sources of data for the study via a three-part investigation:

- evidence from desk research – via a comparative study and two literature searches
- quantitative data – via an open online survey
- qualitative data – via semi-structured interviews in each of the eight countries of the study.

The focus of the study was on language learner behaviours, motivation and attitudes and possibilities for increased language learning outreach, as well as opportunities and challenges and demand and supply factors in relevant markets.

From the evidence gathered, expert study team members identified examples of interesting or emerging practice which they believed offered significant models or new ways of working which are replicable and scaleable. These examples are detailed in Annexe IV.

The study identified key sources of expert information across the eight countries of the survey. Taken together, these informed an in-depth examination of current and emerging practice.

The potential for affecting shifts in behaviour among a wider, more disparate and harder-to-reach cohort of users was examined. Most critically, the study focused on changing technologies and their uptake among the wider public. From this basis, the actual and potential exploitation for language learning of these technologies was assessed.

The qualitative data sources included a range of sets of agreed groups of key stakeholders. The outcomes from sets of interviews were correlated by study team members with evidence from the online survey to identify major themes as they emerged by country.

This multi-sourced approach to developing a body of evidence is critical as outcomes derive from:

- an overview of current use and perceived values of ICT
- an in-depth analysis of varying contexts and cultures to identify commonalities
- identified current and developing trends and areas of potentially fertile development.

The study identified critical factors affecting user behaviours in engaging with informal learning. A number of key contributing influences are:

- infrastructure development (determining ease and availability of access)
- national social, economic and cultural contexts (influencing attitudes to use, personal costs)

- social use of new technologies in everyday life (encouraging familiarity and user confidence).

A number of key questions was established as a basis for a common assessment across countries:

- Can new media be more effectively exploited to reach new target groups for language learning?
- Can existing/past experience positively influence language learning via ICT and new media?
- Have new approaches to delivering language learning encouraged/improved take-up?
- Can the use of ICT-supported learning and new media improve motivation to learn?
- Can broadcast and audiovisual media be more efficiently used to support language learning?
- What are the factors driving demand and supply in the sector?

## **Findings**

The research presents an overview of formal and, particularly, informal language learning in the eight countries of the study. It identifies commonalities and differences between these eight countries in terms of take up and application of new technologies. The main findings can be summarised as follows.

Cultural, social and economic contexts of the countries all impact upon the take up of new technologies for language learning and attitudes to its use. In countries with a high penetration of technology, the population is more open to innovative applications of new media for language learning.

Pedagogical applications do not keep pace with and are not integrated into technological innovation and change. Educators are often resistant to using technologies which do not reflect what they consider to be current pedagogical best practice. Programmes of professional development for teachers do not always encompass current technological developments. Teachers often feel daunted by the speed of technological development which may threaten their relationship with learners who may be more skilled.

The application of new technologies in learning implies fundamental changes for the role of the teacher. These changes are often not addressed in professional training programmes or in continuing professional development.

Practitioners on the ground, even at national level, are often not aware of existing resources and support streams. Professional formal and informal networks are not tasked with seeking funding for plans to incorporate ICT and new media to support language learning.

Commercial players in the fields of telecommunications and broadcast media recognise the potential value of informal language learning. They are developing a number of applications

which in the main have no pedagogical basis. There is a lack of symbiosis between these sectors and educators.

Company language training rarely uses new technologies to support language learning training. The advantages of ICT and new media in this context are generally not understood and any technological training innovation tends to be delivered in other fields of operation. Such development tends to remain unconnected to any language training undertaken. Corporate and commercial organisations of all sizes tend to cut costs and especially training and updating programmes in times of economic constraint. In the main they are unaware of the benefits for language learning and the potential cost-effectiveness in terms of time and financial investment of implementing technologies.

New technologies allow for increased learner control leading to the development of personalised learning environments (PLEs). The provision of appropriate resources, learning management systems and infrastructures to allow individuals to take control of their learning are generally not in place.

## **Recommendations**

The following recommendations are based on information, perspectives and insights gathered during the course of the study, and are framed in the context of feedback from the study. They reflect the conclusions from the analysis and the ambitions expressed by experts, practitioners and professionals.

The recommendations address issues at a European, national and sometimes local level. They may have funding implications. Where this is the case, appropriate available funding sources might be approached. Some existing action programmes at national or European levels encompass appropriate fields of action, in which case they could be approached in the first instance.

The recommendations are presented in four sections: Communication, Professional Development, Pedagogical Innovation, and Cross-sectoral Initiatives.

## Communication

***Strengthen the awareness of existing programmes, sources of funding and the dissemination of successful initiatives, identified best practice and collaborative ventures in connection with the use of ICT and new media for language learning. Effective communication links should be a priority.***

- At a national level contact networks reaching into communities, representing cross-sectoral working, directly involved as well as related areas of activity should be included. They should be regularly and actively engaged to promote collaborative ventures.
- National Agencies should keep constituent stakeholders regularly updated on language learning related issues. They should create action plans formulated to exploit existing resources applicable to language learning and funding. They should lobby for new funding routes where necessary.
- National Agencies should consistently and regularly inform relevant players about developments in ICT and new media and enable improved training and development for practitioners. They should work to identify available resources to target national, regional and local actions that address specific issues. Support and information distributed through existing formal networks should be strengthened and co-ordinated in order to identify potential funding sources.
- Existing formal networks, relevant to identified stakeholders at national, regional and local levels should take responsibility for creating better information flows and ensuring that the needs of such practitioners are met.
- Outreach and communication with companies and organisations should be instigated at national, regional and local levels via relevant networks.
- National and regional level links should be created between different sectors to promote language learning with the support of ICT and new media. It would work across existing networks such as the EBU, professional teaching groups, career development bodies etc. to promote informal language learning, publicise opportunities and facilitate participation. The aim would be to ensure that information flows are created among funding authorities that reflect new practices, changes and emerging opportunities across different sectors.

### Justification

Evidence from the qualitative survey suggests that practitioners are often uninformed about progress, developments and actions in promoting language learning.

Key players are all too often unaware of existing initiatives, funding sources and good practice.

Links are generally sporadic and informal. Offering such a structure would help to ensure that actions included learners, teachers, commercial entrepreneurs and employers to maximize the use of resources and best practice.

Routes to funding, support for better communication, resources to support practitioners on the ground are under-reported.

## Professional development

***Strengthen the use of professional networks, via national communication bases better to inform practitioners about developments, existing sources of funding and to raise awareness of potential and best practice of ICT and new media for language learning.***

- Prioritise training and career development as a prime need for teachers.
- Identify funding routes at a national level to resource teachers for training programmes.
- Encourage the support of training and development with formal recognition
- Identify resources to cover cost of releasing teachers to attend and participate in training sessions.

### **Justification**

A key message that emerged from both the qualitative and quantitative surveys in the study was the importance of ensuring that teachers have access to appropriate training, development and support in using ICT and new media.

All too often they are unaware of developments and unable or unwilling as a result to implement changes.

***Create opportunities for teachers to learn, practise and develop confidence in new systems.***

- Create opportunities for experimentation, rehearsal and practice with new technologies by creating virtual learning environments which are structured and supported to reflect the learning promulgated in best practice for learners.
- Enable teachers to learn via experiential tasks within a personal and confidential and non-threatening environment. Once confidence is developed, and structures in place, systems can expand and extend to others via a cascaded model of training.

### **Justification**

Evidence from the study showed that little if any attention is paid to affective factors in embedding changes to teaching practice or the uptake of new media and ICT.

In general teachers feel threatened by such changes –in terms of their reputations, professionalism and standing - and also by a lack of confidence in relation to their increasingly highly-skilled learners.

Priority should be given to encouraging greater use of ICT and new media, integrating such resources in language learning programmes and inculcating confidence among professional language educators in their use and application.

## Pedagogical innovation

### ***Support research into and development of Personal Learning Environments (PLEs.)***

- Promote PLEs to support the use of user created content, access to real time, web-based information and their use of “everyday tools” available to individual users.
- Develop informal learning models and environments based on user behaviours and best practice.
- Ensure that the strong warning about maintaining the division between social and educational environments is observed.

### **Justification**

Some trends in the use of ICT and new media for language learning became apparent during the study. These seem to fall into three major, but interrelated areas:

- Web 2.0 and Personal Learning Environments
- Gaming
- Virtual worlds.

These are currently only perceived trends and require further investigation.

### ***Investigate the use of models of social networking, broadcast-linked online content and gaming tools for language learning***

- Establish robust networking on a national level and link to existing European networks to create:
  - well structured opportunities to exploit gaming in order to aim to attract a wider audience to language learning. Offer a real purpose for use
  - opportunities to share experience of using virtual worlds for language learning purposes.
  - small but numerous chunks of information, easily used and accessed in many languages.

### **Justification**

Gaming is a widespread phenomenon and is an area that is worthy of further investigation as, in the main, massive multiplayer role playing games (MMRPG) operate in English but provide a learning opportunity to create greater diversity by encouraging the use of different languages. With some notable exceptions, neither popular offline games nor the phenomenon of MMRPG have been exploited for language learning. Games producers are interested in collaborative ventures.

The rise of commercial virtual worlds such as Second Life has already fostered greater interest, and support for communities of language learners.

***Use popular communications to address the dominance of English among young users.***

- Give priority to linking to access routes likely to be employed among younger users for e.g. travel or social use.

**Justification**

Evidence from all areas of the study suggests that the use of English is growing in informal use and across social networking sites. It creates a threat to the learning of other languages, of more formal English and even to learners' first languages where these are minority languages.

**Cross-sectoral initiatives*****Create effective and pro-active links to public service broadcast media with the specific aims of reaching new audiences, raising awareness, improving dissemination, encouraging collaborative learning ventures.***

- Ensure that existing links with media and broadcasting providers via networks such as the EBU are fully engaged and aware.
- Exploit funding opportunities for learning via action programmes related to broadcast and other media.
- Target funding opportunities to meet specific informal learning aims.

**Justification**

The study identified some examples of areas of cross-sectoral activity. These are occasionally national but mainly small scale and often local or regional.

Professional networks are under-exploited in terms of information dissemination and as an opportunity base for cross-sectoral information exchanges with a view to collaboration.

***Create a systematic process for evaluation, feedback and measurement of outcomes.***

- Build on success by evaluating actions via critical factors such as: return on investment funds, value for money, attainment of targets and outcomes and effective dissemination.
- Use communication routes to design actions against defined needs and ambitions of specific target groups.
- Motivate new players to collaborate and provide dynamic structure of development.
- Exploit links with commercial partners to create measures of effectiveness reflecting the dynamics of use and demand.

### **Justification**

Where success is achieved it is rarely evaluated against mutually valuable criteria. Such a process would build on existing good practice elsewhere, allow robust feedback to identified stakeholder partners and create a more meaningful and persuasive base to promulgate further joint actions.