Study on the Impact of ICT and New Media on Language Learning

Studie zu den Auswirkungen von IKT und neuen Medien auf den Fremdsprachenerwerb

EACEA 2007/09

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Study identity

- **http://www.ea.gr/ep/study/**

- Carried out between June 2008 and May 2009

- An international research team assembled by Ellinogermaniki Agogi, Greece

- Research mainly in eight EU Member States but also beyond, by surveying expert opinions across Europe and the world.

This study was awarded to Ellinogermaniki Agogi, Greece, following a call for tenders by the Education and Culture Executive Agency (EACEA 2007/09). It was carried out between June 2008 and May 2009 by an international research team assembled by Ellinogermaniki Agogi. The research was mainly conducted in eight EU Member States but also beyond, by surveying expert opinions across Europe and the world.
The study countries

- Cyprus
- Finland
- France
- Germany
- Greece
- Hungary
- Spain
- United Kingdom

The eight EU Member States on which the study mainly focused are Cyprus, Finland, France, Germany, Greece, Hungary, Spain, United Kingdom. The eight sample countries represent around 56% of the total population of the EU-27 and exemplify different economic, social and cultural contexts.
Objectives and focus

• Main objectives
  – To investigate the possibilities of the use of ICT and new media for language learning
  – To assess the current situation and cast light on future developments in this sector.

• Particular focus points:
  – Language learning beyond school and university, in working life and personal life
  – Formal, non-formal AND informal language learning
  – Behaviours, motivation, attitudes, outreach, demand and supply, opportunities, challenges, and trends.

The main objectives of the study were to:

• Investigate the possibilities of the use of ICT and new media for language learning as a complement to traditional teaching and learning methods, within but also beyond the traditional framework of formal education systems.

• Assess the current situation concerning the use of ICT and new media for language learning and to cast light over future developments in this sector.

The study particularly focused on:

• Language learning beyond school and university, in working life and personal life

• Formal, non-formal and informal language learning

• Effects of the use of ICT and new media for language learning on learner and teacher behaviours, motivation and attitudes, language learning outreach, demand and supply in the markets connected with language learning, and more generally opportunities, challenges, and trends.

The outcomes of this study, including findings and recommendations, are presented in a Final Report. The Final report is accompanied by four Annexes which provide the details of the underlying research.
Outcome

• A final report of findings and recommendations, accompanied by four Annexes

• Publicised by the EC last January, through their web portal dedicated to multilingualism:

The final outcome of this study was a final report of findings and recommendations, accompanied by four Annexes. The Final Report and the Executive summary are available in English, French and German.

It was made public by the EC last January, and promoted through their web portal dedicated to multilingualism. As we can see in the next slide, you can find it either through the news section of the multilingualism website, or by visiting directly the Executive Agency’s website, where it is stored.
The study followed a four-stage plan of development, which is reflected in the four Annexes of the Final Report:

• A comparative study on the potential for the use of ICT and new media for language learning in eight European countries (Annexe I). The comparative study describes the context and background on which field findings can be projected, based on previously available data and information.

• A quantitative survey of the use of ICT and new media for language learning purposes (Annexe II). The quantitative survey identifies behaviour patterns and attitudes based on input from the field via an online questionnaire.

• A qualitative survey on current trends in ICT-supported language learning and possible developments in Europe and beyond (Annexe III). The qualitative survey informs and enriches the findings of the quantitative survey, by identifying challenges, opportunities and trends based on interviews with users, as well as expert input via literature reviews and interviews with experts.

• A set of case studies that serve as examples of good practice of the positive impact ICT and new media on language learning, illustrating the identified opportunities and trends (Annexe IV).
Key findings

The study 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.
Some patterns emerging from the online survey

http://www.ea.gr/ep/survey/

To illustrate some of the current patterns in the use of ICT and new media in everyday life in general, and in language learning in particular, here is a small selection of quantitative results from the online survey. The full set of the online results and their discussion can be found in the Final Report and in its second Annex.

The online questionnaire was completed by a sizable sample of adults, namely 2195 individuals of all ages, from many parts of Europe and beyond. A word of caution, though: the sample of online respondents is self-selected, and consists of people strongly interested in language learning and/or in the use of ICT and new media. Therefore, the results of the online survey alone do not reflect behaviours and stances in the general population. They do not support safe comparisons between countries, either. However, the online survey does provide useful insights into some patterns of behaviour and attitudes in the part of the population which features a strong or potential interest and involvement in the use of ICT and new media for language learning. Tendencies observed may reflect beliefs and practices characterising those who nowadays form the main active or or potential user base and audience of ICT and new media in the context of language learning. This information, combined with the trends emerging from the extensive qualitative research and literature reviews, helps towards a better understanding of the present situation and provides hints about what may follow in the near future.
Patterns of ICT and new media use

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialising / keeping in touch</td>
<td>88%</td>
</tr>
<tr>
<td>Work (at workplace/home)</td>
<td>85%</td>
</tr>
<tr>
<td>To follow news / keep updated</td>
<td>76%</td>
</tr>
<tr>
<td>To check facts</td>
<td>76%</td>
</tr>
<tr>
<td>To find new information</td>
<td>70%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>68%</td>
</tr>
<tr>
<td>Study / learn</td>
<td>64%</td>
</tr>
<tr>
<td>Online facilities / contact officials</td>
<td>50%</td>
</tr>
<tr>
<td>Online shopping</td>
<td>23%</td>
</tr>
</tbody>
</table>

By far, most commonly respondents use ICT to socialise, keep in touch with others, and do work. The next most common activities reported are related to getting informed. Using ICT for entertainment is also very common, and the younger the respondents, the more likely it is for them to use technologies for entertainment. Although the vast majority of respondents have at some point studied or learned using computers or other technologies, using ICT for learning or study is not one of their most common activities in everyday life. Its frequency compares with that of using online facilities for banking or contacting officials. However, learning or studying with the use of ICT is far more frequent than online shopping. It is interesting to note that the younger the respondent, the more likely it is for them to use ICT and new media for studies or learning.
Patterns of ICT and new media use

In my language learning courses computers and new technologies were:

- the main medium: 8%
- a regular component: 31%
- an occasional addition: 41%
- non-existent: 20%

Have communicated in a foreign language online:
- 92%
- ... in environments where communication was in more than one language: 66%

Even in this self-selected sample of respondents, the use of ICT for formal language learning and assessment is not that widespread. On the other hand, informal language learning through exposure to the target language via ICT and the new media is much more common. Nearly all respondents had communicated in a foreign language online, and two out of three in online environments where participants in the communication used more than one language.
Patterns of ICT and new media use

According to technologies that have helped respondents improve their language skills, nine in ten respondents recognise the usefulness of computer and TV. On the other hand, even in this sample of active and motivated users, only one in five respondents state that the use of mobile phones or other handheld devices has helped them to improve their language skills.

The use of entertainment media such as films on DVD and music on digital media is recognised by most respondents as useful for language learning, even more than ICT language courses and materials. At the other end, less than a quarter of the respondents mention social networking and virtual worlds as an ICT application that has helped them improve their language skills. However, there are clear generational differences, as the younger the respondent, the more likely it is for them to mention new media (e.g. social networking and virtual worlds) as helpful for improving language skills.

All online results and their discussion can be found in the Final Report and in its second Annexe.
Attitudes to the use of ICT for language learning

Let’s examine some selected responses to questionnaire item D3:
   – Do you think that you could maintain good knowledge of a language, or keep improving in it, thanks to using new technologies?

Let’s now turn to respondents’ attitudes towards the use of ICT for language learning.

Item D3 in the online questionnaire, an open-ended question, yielded very rich results and provided us with useful insights into people’s opinions about the use of ICT in their own language learning context. The question reads:

Do you think that you could maintain good knowledge of a language, or keep improving in it, thanks to using new technologies?
Examples of positive attitudes

• “new technologies lower the barriers: financially as well as psychologically”

• “The best way to learn a language is with total immersion courses in a country where the language is spoken and no other student speaks your mother tongue. The new technologies are the second best method especially for maintaining and improving the knowledge of a language”

Expectedly, given the characteristics of the sample, many where those who answered positively. Here are just two examples. I am quoting our informants’ own words:
Examples of negative attitudes

• “If you find relevant sources then yes, you can improve your skills (but it is not so easy to find the sufficient ones though...)

• “Leider ist das Angebot -vor allem im Bereich der weniger bekannten Sprachen- immer noch sehr bescheiden in allen Medienarten“

But maybe it is more interesting to focus on the expressed opinions that sound a bit more reluctant, or even negative, towards the use of ICT and new media in language learning. Let’s see what their concerns are:
Examples of negative attitudes

• “Nicht ausschliesslich mit Hilfe der neuen Technologien. Das genuegt nicht!”

• “If and only if they allow to communicate with native speakers”

• “New technologies could play a role, but face-to-face communication should also be involved”

• “Not really - I think it is crucial for language-learning to learn face-to-face or in the country itself”
Examples of negative attitudes

• “No, in my case, the use of new technologies (with a few exceptions) has very little to do with maintaining and improving language skills. What has maintained and/or improved my skills has always been reading books and newspapers, communicating with real live people, and writing (albeit nowadays in electronic form). The only really major exception to the above I would consider film (whether TV, DVD or cinema)”
Examples of negative attitudes

• “Nothing like travelling and face-to-face contact. As the language demands on my profession are very high, new technologies cannot satisfy them. Too vicarious”
Examples of negative attitudes

• “Of course it can help but I, personally, prefer attending face-to-face courses. For me studying languages is also a social matter, where I can meet new people, make friends... Moreover I work with a computer the whole day in the office and don’t want to spend my free time in this way.”
A ‘balanced’ opinion

• “Not only using new technologies but together with other study methods. I think the most important thing is to stay in contact with the language you are studying, no matter by what means you achieve it.”
Summary of key findings from all areas of the study

In the following slides, the main key findings are presented, as they emerged from all areas of the study.
Extent of ICT and new media use for language learning

- Growing use, positive attitudes developing
- Impact of cultural, social and economic contexts
  - E.g.: in countries with high technology penetration, people more open to innovative applications.

Evidence from the field suggests that the use of ICT and new media for language learning is growing, and that positive attitudes towards that use are generally developing among Europe’s populations. However, 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.
Language pedagogy vs. technological innovation and change: not always in pace

Language teachers:

• resistant to technologies not reflecting what they consider as pedagogical best practice

• daunted by the speed of technological development - learners may be more skilled than them

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. Teachers often feel daunted by the speed of technological development which may threaten their relationship with learners who may be more skilled.
Language teachers inadequately trained and informed

Professional training and development programmes:
• not always encompassing current technological developments
• not always addressing the fundamental changes for the role of the teacher due to the application of new technologies in learning.
• Lack of information:
  – Practitioners often not aware of existing resources and support streams
  – Professional networks not tasked with seeking funding for relevant plans.

Programmes of professional development for teachers do not always encompass current technological developments. 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.
The commercial world and informal language learning via ICT/new media

- Telecom and broadcast media recognise the potential value.

- Several applications are being developed, but with no pedagogical basis.

- Lack of symbiosis between these sectors and educators

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.
Language training in the workplace

- New technologies supporting language learning rarely used in company language training

- Technological innovation mainly delivered in other fields of training

- Overall, cost-cutting in times of economic constraint strongly affects language training

- The advantages of language learning and the use of technologies for this are generally not understood.

Company language training rarely uses 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.
Language learning in the emerging technological landscape

- Increased learner control
- Development of personalised learning environments (PLEs)

But - prerequisites for individuals taking control of their learning:

- Resources, learning management systems, infrastructures
- Generally these are still not in place.

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.
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.
Four areas of recommendations

• Communication

• Professional Development

• Pedagogical Innovation

• Cross-sectoral Work

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

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

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. Routes to funding, support for better communication, resources to support practitioners on the ground are under-reported. It is therefore necessary to strengthen the awareness of existing programmes, sources of funding and the dissemination of successful initiatives, identified best practice and collaborative ventures relating to the use of ICT and new media for language learning. Effective communication links should be a priority. 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.
Recommendations: Professional development programmes (I)

- 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.

How?
- Prioritise teacher training and career development
- Identify resources for funding training
- Encourage training with formal recognition.

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. Therefore, it is necessary to 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.

This could be achieved by:
- Prioritising training and career development as a prime need for teachers
- Identifying funding routes at a national level to resource teachers for training programmes, including resources to cover cost of releasing teachers to attend and participate in training sessions
- Encouraging the support of training and development with formal recognition.
Recommendations: Professional development programmes (II)

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

How?
• Create opportunities for experimentation, rehearsal and practice with new technologies

• Enable teachers to learn via experience in a personal, confidential, non-threatening environment

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.

This could be achieved by:

• Creating 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.

• Enabling 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.
Recommendations: Pedagogical Innovation (I)

- Support research into and development of Personal Learning Environments (PLEs)

Directions:
- Supporting the use of user created content
- Access to real time web-based information
- Use of “everyday tools” available to individual users
- Informal learning models and environments
- Division between social and educational environments.

Some trends in the use of ICT and new media for language learning became apparent during the study. One major area is Web 2.0 and Personal Learning Environments. These are currently only perceived trends and require further investigation. Therefore it is necessary to support research into and development of Personal Learning Environments (PLEs) for language learning.

Proposed directions of action in the emerging field of Personal Learning Environments include:
- Promoting PLEs to support the use of user-created content, access to real time, web-based information, and the use of “everyday tools” available to individual users.
- Developing informal learning models and environments based on user behaviours and best practice.
- Ensuring that the strong warning about maintaining the division between social and educational environments is observed.
Recommendations:
Pedagogical Innovation (II)

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

How?
- Exploit the emerging new media to attract a wider audience to language learning
- Offer real purposes for use, and small, easy to use chunks of information in many languages
- Share experiences of use for language learning purposes

Some further trends in the use of ICT and new media for language learning that became apparent during the study are connected to the areas of social networking, broadcast-linked online content, virtual worlds and gaming. These are currently only perceived trends and require further investigation. 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 also 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. At the same time, the rise of commercial virtual worlds such as Second Life has already fostered greater interest, and support for communities of language learners.

Proposed directions of action in these emerging fields include establishing robust networking on a national level and link to existing European networks to create:
- Well structured opportunities to exploit the emerging new media in order to aim to attract a wider audience to language learning
- Opportunities to offer real purpose for use, and small but numerous chunks of information, easily used and accessed in many languages
- Opportunities to share experience of using gaming, virtual worlds, social networking and other new media for language learning purposes.
Recommendations: Pedagogical Innovation (III)

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

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. Therefore, popular communications should be used to address the dominance of English among young users, giving priority to linking to access routes likely to be employed among younger users for e.g. travel or social use.
Recommendations: Cross-sectoral initiatives (I)

- 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.

How?
- Engage existing links
- Exploit funding opportunities from the areas of broadcast and other media
- Target specific informal learning aims.

The study identified some examples of areas of cross-sectoral activity linking the worlds of language learning and broadcast media. 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. Therefore, it is necessary to create effective and pro-active links to public service broadcast media with the specific aims of reaching new audiences, raising awareness, improving dissemination, and encouraging collaborative learning ventures.

This could be achieved by:
- Ensuring that existing links with media and broadcasting providers via networks such as the EBU are fully engaged and aware.
- Exploiting funding opportunities for learning via action programmes related to broadcast and other media.
- Targeting funding opportunities to meet specific informal learning aims.
Recommendations: Cross-sectoral initiatives (II)

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

How?
• Build on success by evaluating actions via specific critical factors
• Design actions against defined needs and ambitions of specific target groups
• Motivate new players to collaborate and provide dynamic structures of development
• Exploit links with commercial partners to create measures of effectiveness.

Evidence from the study suggests that where success is achieved it is rarely evaluated against mutually valuable criteria. Therefore a systematic process for evaluation, feedback and measurement of outcomes should be created. 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.

This could be achieved by:
• Building 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.
• Using communication routes to design actions against defined needs and ambitions of specific target groups.
• Motivating new players to collaborate and provide dynamic structures of development.
• Exploiting links with commercial partners to create measures of effectiveness reflecting the dynamics of use and demand.