

Institution: University of Ulster

Unit of Assessment: 28B Modern Languages and Linguistics - Modern Languages and

Linguistics

Title of case study: Embedding computer-assisted language learning (CALL) in Modern Foreign Languages curricula, in industry and in the community

1. Summary of the impact

The impact of research in computer-assisted language learning (CALL) at Ulster is evidenced by the changes it has driven regarding the delivery of language teaching using ICT and multimedia language learning tools in a variety of environments. The production of internationally-recognised research to demonstrate effective motors for change led to the establishment of a key infrastructure, the Centre for Excellence in Multimedia Language Learning (CEMLL), funded by a CETL (Centre for Excellence in Teaching and Learning) grant of £825,000 from Department of Education and Learning (DEL). This has informed developments in language teaching in higher and secondary education and has provided language learning opportunities beyond traditional educational sectors into industrial and community settings.

2. Underpinning research

Research in the area of CALL has, since its inception, argued the pedagogical benefits for using technology in language learning. The work of researchers at Ulster has been key in assessing and evaluating the impact of this technology on the language learning process and in establishing guidelines and examples of effective practice for its adoption. The investigation by Gillespie & Barr (2002) into HE staff attitudes towards the use of ICT suggested that most of them are pragmatic adopters of technology; in other words, they will use the technology when it makes a difference to their teaching. A wider view of this suggests that if new technologies are to be adopted effectively, training in their use is key as it will provide valuable insights into how to use the technology appropriately.

To build on this principle, Barr (2004) established a model for institutions interested in integrating computer technology in their language learning environment. That work established a series of recommendations for embedding technology and these have been adopted by a variety of HEIs, including Aston University and the University of Toronto.

In view of continual changes in the use of technology, more recent research by staff at Ulster has been undertaken to test the principles previously established. Barr (2008) confirmed that, while the benefits for integrating computer technology into language learning environments are not always quantifiable in terms of academic performance, using ICT in language learning among an increasingly technologically-discerning population continues to make a qualitative impact on the perception of student learning. This work was extended by that of Leakey, who established a clear method for evaluating the quantifiable effectiveness of CALL.

The above research has been consolidated by staff at Ulster through the development of a bank of training resources, running workshops nationally and encouraging innovation supported by a development fund from the CEMLL, established in 2005.

In order to contextualize the work that the CEMLL sought to undertake, researchers in Modern Languages at Ulster, in collaboration with the Subject Centre for Languages, Linguistics and Area Studies (LLAS), conducted a UK-wide survey to establish a baseline of training need. (Toner, Barr, Carvalho, Martins and Wright, 2008)

In an interim report on the activities of CEMLL, Toner identified the potential for rolling out research findings beyond the HEI, stating 'One of the most striking unintended outcomes of the CETL



initiative has been the degree to which it has fostered close relationships with industry and knowledge transfer.' (Toner 2007, p.18)

http://cemll.ulster.ac.uk/downloads/Interim%20Report%202007%20Public.pdf

Findings of researchers in Modern Languages were core to the development of the Northern Ireland Languages Strategy (NILS), *Languages for the Future*, commissioned by government and co-directed by Gillespie.

The key researchers on this impact were: John Gillespie, Professor of French, University of Ulster (1974-present); David Barr, Lecturer, University of Ulster (2003-present); Jonathan Leakey, Lecturer, University of Ulster (2002-present).

3. References to the research

Two of the outputs below are monographs which were subjected to a thorough review process, as was the paper by Gillespie and Barr published in ReCALL, the major journal in CALL research. This is clear evidence of the high quality of this body of research.

- 1) Gillespie, J. H. & Barr, J. D. (2002) "Reluctance, Resistance and Radicalism: A study of staff reaction towards the adoption of CALL/C&IT in modern languages departments". In: *ReCALL* 14 (1): 120 132
- 2) Barr, D. (2004) *ICT Integrating computers in teaching*, creating a computer-based language-learning environment. Bern: Peter Lang.
- 3) Barr, D (2008) Computer-enhanced grammar teaching. In F Zhang and B Barber (eds) Handbook of Computer-Enhanced Language Acquisition and Learning (New York: Information Science Reference, 2008), pp. 101 113
- 4) Toner, G., Barr, D., Carvalho Martins, S and Wright, V (2008) *Multimedia Language Learning in Higher Education in the UK*, University of Ulster. http://www.cemll.ulster.ac.uk/downloads/survey%20report.pdf
- 5) Leakey, J. (2011). Evaluating Computer-Assisted Language Learning: An Integrated Approach to Effectiveness Research in CALL, Bern: Peter Lang. 6) Gillespie, J., D. Johnston and A. Ó Corráin, (2012) Languages for the Future: Northern Ireland Languages Strategy, Department of Education for Northern Ireland, Belfast, 90 pp.

(All publications are available from HEI on request)

4. Details of the impact

The impact of Modern Languages research can be broadly defined in four categories:

(i) Influencing practice in secondary schools and other HEIs:

The impact of work of Ulster researchers in the area of **secondary education** is evident in LASER (Languages as a Social Enrichment Resource), an outreach project that took place in February and March 2013 with six secondary schools where traditionally modern languages are not considered popular subjects. As part of this project, the Ulster team advised teachers in these schools in the development of multimedia resources and lessons to assist them in promotion of the study of languages in an interesting and engaging way, also providing software and hardware for the activities. One school teacher highlighted 'increased interest in studying languages to GCSE and beyond' as a result of the project. (See Source 1)

http://news.ulster.ac.uk/releases/2013/6990.html

CEMLL has been a driver for developing language pedagogy in HE through research into both theory and practice. Leakey's research on task-based learning has led to the delivery of training



workshops at the Universities of Nottingham, Ulster, Limerick and Bordeaux, attracting over 200 attendees.

Barr and Gillespie's research on staff and student reactions to and perceptions of ICT in language learning has led to invitations to deliver consultancy on strategic planning in universities such as Aston, Hertfordshire and Salford as they embed multimedia technologies in the delivery of language teaching.

One academic at Aston University reported in December 2009 that they had made significant progress in the design and management of lab use and attributed 25% of developments within six months to the CEMLL site visit. (See Source 2)

CEMLL set up a national awards scheme to support excellence and innovation and to develop resources in multimedia language teaching to which researchers in other UK HEIs could apply. Award winners included individuals and teams from Queen Mary, University of London, Portsmouth, and UWE.

http://cemll.ulster.ac.uk/site/centre%20research/evaluation

(ii) Contributing to innovation and economic prosperity through engagement with the private sector:

Ulster's research expertise in the area of multimedia language pedagogy has fed into improving private sector support for tourism. In 2013, Ulster staff developed a series of multimedia resources for a local tourist company, *SegwayNI*, for a multilingual tourist guide app for the Titanic Quarter in Belfast. Ulster's work on this has been praised by the company owner as it has rendered accessible a key aspect of Northern Irish heritage to an international audience. The app developed with Ulster's expertise is being used by tourists from all over the world while visiting Belfast. (See Source 3)

Online multimedia resources derived from the CEMLL models have provided the foundation for the design and delivery by Ulster researchers of language courses for international businesses such as Michelin, Bombardier, Wrightbus and Moypark. Over 100 employees of these companies have taken these courses, delivered in collaboration with the Confucius Institute at Ulster. (See Source 4)

http://news.ulster.ac.uk/releases/2012/6662.html

http://news.ulster.ac.uk/releases/2012/6587.html

In June 2013 Invest NI commissioned researchers at Ulster, in a partnership with *Interlingua NI*, to develop a virtual learning environment for the teaching of Arabic to business groups. (See Source 5)

(iii) Contributing to continuing personal and professional development:

Internationally, Ulster has been recognised as a leading centre in multimedia language research. The decision of the WorldCALL Steering Group to award the hosting of its 2013 conference to Ulster (the first time the event has been held in Europe) was based on the reputation of Ulster researchers (who were named in the Steering group feedback after the award was made). As part of its organisation of the WorldCALL conference, Ulster enabled modern language teachers in higher education from countries where CALL and multimedia technologies and pedagogies are very limited to engage with established CALL developers and practitioners to help to inform their pedagogical approaches. 14 language teachers from Argentina, Belarus, Brazil, Colombia, Egypt, Ethiopia, India, Indonesia, Iran, Russia, Rwanda, Sri Lanka, Turkey and Venezuela attended WorldCALL and received training in key language software and on how best to embed technology in their teaching practice. (See Source 6)



(iv) Influencing public policy

The use of multimedia language learning methods, pioneered at Ulster, is specifically cited as a clear example of good practice in NILS: Languages for the Future, the strategy document codirected by Gillespie and adopted by NI Education Minister O'Dowd in 2012. (Gillespie *et al.* 2012: 34) (See Source 7 and 8)

A number of recommendations from NILS have been implemented for example Recommendation 3.3 is addressed by the launch in April 2012, with support from the NI and Chinese governments, of the Confucius Institute at Ulster with Ó Dochartaigh as Dean. As part of this initiative, Chinese language courses have been devised by Ulster researchers using technology-based pedagogical approaches. (See Source 9)

The provision of language courses for businesses reflects the implementation of NILS Recommendation 2.7. (See Source 7 and 8)

In summary, Ulster's engagement with digital multimedia learning has had a significant impact on public policy and across the secondary and tertiary education sectors, as well as business, industry and tourism, enhancing both language acquisition and commercial exploitation in a multilingual environment.

5. Sources to corroborate the impact

(Source 1) Testimonial from teacher at North Coast Integrated School, Coleraine, about the LASER project.

(Source 2) Academic at Aston University quoted on p.13 of Toner CEMLL evaluation report to DEL delivered in 2010.

(Source 3) Testimonial from Owner of Segway NI

(Source 4) Training Manager, Michelin Tyre Public Limited Company

(Source 5) Innovation voucher from Invest NI for partnership with Interlingua NI

(Source 6) Testimonial from WorldCall participant

(Source 7) http://www.deni.gov.uk/languages_for_the_future.pdf

(Source 8)

http://www.northernireland.gov.uk/index/media-centre/news-departments/news-de/news-de-190912-odowd-presented-with.htm

(Source 9)

http://www.ulster.ac.uk/confucius/