

Developing bilingual communication skills through Content and Language Integrated Learning

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Introduction

In September 2011, a Foundation Degree in applied computing was introduced at the Dolgellau campus of Coleg Meirion-Dwyfor in conjunction with Glyndŵr University. The course was offered bilingually, allowing a choice of study through the medium of English or Welsh. This article describes practitioner research (Hall, 2014) to determine the most suitable linguistic approach to use with the first group of six students, who completed the course successfully and graduated in the summer of 2013.

Bilingualism at work

It is estimated that over 90% of the population of the United Kingdom are monolingual English speakers. Nevertheless, there are areas of the country where a substantial section of the population have another language as their mother tongue. An ability to communicate bilingually can be of great benefit when working professionally with a minority language group, particularly in stressful situations or when supporting vulnerable children or adults.

Metropolitan Police commissioner Sir Bernard Hogan-Howe has said:

'We know that almost 300 languages are spoken in London. We need to recruit and deploy officers with second languages in areas where those languages are spoken. I believe it will help boost confidence, help to solve crime more effectively and support victims and witnesses.'

(People Management, 2015)

An example of bilingualism in social work is the *Respekt* Project set up by the Children and Families Department of City of Edinburgh Council. This aims to support Polish families in cases of domestic violence. The service is provided by Polish speaking social workers who are able to deliver the service in the users' first language.

(With Scotland, 2015)

Ability to communicate in another language can be very important when travelling abroad to attend meetings or work on projects. As an example, each year a study visit to Germany is arranged for engineering students from Coleg Meirion-Dwyfor, to observe computer aided manufacturing and robotics systems in use in car factories. In preparation for the visits, the college organises German language classes. Video interviews recorded with car plant employees during previous visits provide a teaching resource. The students participate enthusiastically in the language sessions, and find these have been helpful when they arrive in Germany.

Celtic languages are becoming increasingly important in western areas of Britain. The *Welsh Language Act* specifies that Welsh and English have equivalent official status, and requires

that services are made available to the public in Wales through their preferred language. The Act applies to a wide range of organisations including: schools, hospitals, transport providers and shops. An ability to communicate in both English and Welsh gives an advantage to candidates applying for work in these sectors. Our Foundation Degree in applied computing is therefore offered bilingually as a means of developing students' language skills and improving their employment opportunities within Wales.

Approaches to developing bilingualism

For the first presentation of the computing degree course in 2011, a team of four lecturers was assembled. The team consisted of two first-language Welsh speakers and two acceptably fluent second-language speakers. The first intake of six students had all attended schools in Wales where classes were delivered bilingually, but the extent of their current use of Welsh varied considerably. At one extreme, several students spoke and wrote in Welsh every day, whilst several others rarely used the language.

As a course team, we decided from the outset that we wished to integrate Welsh language with the delivery of our computing modules in ways that realistically reflect language usage in the workplace. This approach is termed 'Content and Language Integrated Learning' (Hillyard, 2011). It was apparent that different methodologies were possible, and it was decided to evaluate the effectiveness of four approaches: *optional bilingualism*, *BICS/CALP model*, *extended CLIL*, and *necessity bilingualism*. These are described below:

Optional bilingualism

Resources such as PowerPoint presentations and work sheets are produced bilingually (fig.1). The teacher tries to conduct all discussion bilingually, repeating or developing points in the two languages, so that each student can follow the lesson in the language of their choice.

Figure 1: An example of a PowerPoint slide in which captions are provided in both English and Welsh

Examples of real time systems for booking aircraft seats and hotel rooms...

Check your itinerary details					
	From / To	Flight Number	Cabin	Departing	Arriving
Outbound	Heathrow (London), United Kingdom to Newark (New York), USA	BA0239	Economy (Traveller)	Sat 22 November 2003, 14:35	Sat 22 November 2003, 17:40
Inbound	John F. Kennedy (New York), USA to Heathrow (London), United Kingdom	BA0176	Economy (Traveller)	Thu 11 December 2003, 20:00	Fri 12 December 2003, 08:05

Engbreiffiau yw systemau archebu sedd awyren ac archebu ystafell gwesty...

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The advantages of optional bilingualism are that: it makes Welsh speakers feel included socially; it satisfies the statutory requirements to provide a bilingual course; and if done well, it can produce an interest and respect for the minority language.

The disadvantages are: a large amount of work is required from the teacher in producing

materials bilingually; the pace of the lesson can be slow, which can be frustrating for both the monolingual and bilingual students; and there is probably little likelihood of students developing their language skills.

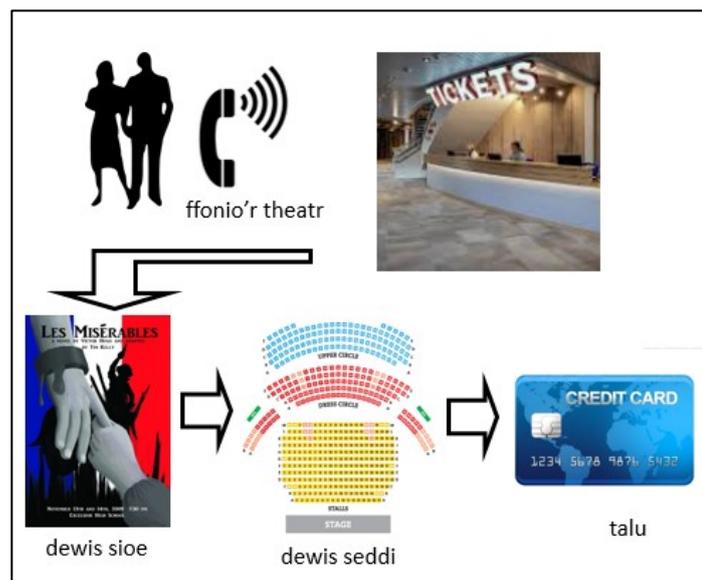
BICS CALP Model

This approach is based on the theory (Roessingh, 2005) that language can be divided into everyday conversational language (Basic Interpersonal Communication Skills: BICS), and technical and specialist language (Cognitive Academic Language Proficiency: CALP).

Welsh is used to communicate in everyday language, such as outlining the objectives of tasks. General resources are provided only in Welsh (fig.2), with translations available on request. English is used for technical tasks such as programming.

Figure 2: A PowerPoint slide in which only Welsh captions are provided when outlining the requirements for a task to produce theatre booking system software.

The concepts of telephoning, choosing theatre seats, and paying by credit card involve only everyday language and would be understood in Welsh by all of the students.



The advantages of a BICS/CALP approach are that: students can improve their understanding of everyday conversational Welsh, and benefit from teaching each other; there is no requirement to learn parallel sets of technical terms in two languages; and there is less requirement to repeat concepts in both languages, so the pace of the class is faster.

Disadvantages of the BICS/CALP approach are: non-Welsh speakers may feel that they are under pressure to develop their language skills; and we are assuming that there will be no requirement for the use of specialist Welsh technical language in the workplace.

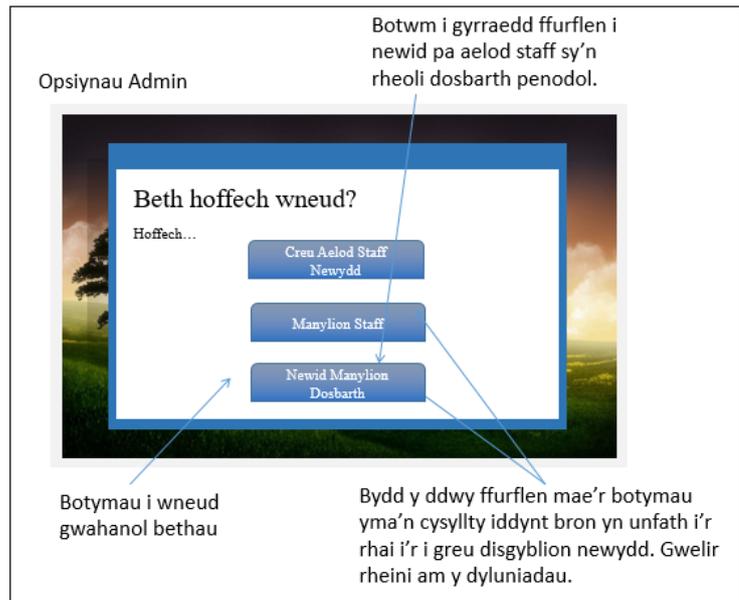
Extended CLIL

A deliberate effort is made to teach Welsh language through providing specialist technical vocabulary. It is expected that students who are not first language Welsh speakers will discuss and write in Welsh on occasions (fig.3). Welsh language is corrected as necessary.

The advantage of the extended CLIL approach is that students actively improve their spoken and written language skills, which can have both social and employment advantages.

The disadvantages are: an additional workload on students; and some students may have no interest in developing their Welsh language skills and resent this requirement.

Figure 3: A page from a student's software design assignment, where it was specified by the tutor that all notes should be submitted in Welsh.



Necessity bilingualism

Students use Welsh where this is required by an outside institution, for example: in producing bilingual web pages (fig.4) or database user screens. Help is provided by tutors on an individual basis with translation. Other course activities are carried out optionally in English or Welsh, as preferred by the student.

Figure 4: A section of a web page produced bilingually by a student for a town council in North Wales.



The advantages of the necessity bilingualism approach are that: students are able to provide products which meet the needs of clients, and develop an appreciation of the value of the minority language; students gain some language skills within in a personally motivating

project environment; and students gain software skills related to the presentation of bilingual materials.

Disadvantages are: a limited development of language skills; and students remain dependent on translation services when they enter employment.

The characteristics of the four linguistic approaches are summarised below:

	Tutor speaking	Tutor writing	Student speaking	Student writing
Optional bilingualism	Both languages		optional	
BICS CALP model	Welsh for general discussion English for technical work			
Extended CLIL	Welsh specified for some course activities Additional language support if required by students			
Necessity bilingualism	optional			Welsh when required by a client

Figure 5: Summary of the verbal and written language requirements of the different approaches to bilingual course delivery for tutors and students.

Observations were made during teaching sessions and interviews were carried out with students at different times over a period of an academic year. It became apparent that this particular student group had a strong preference for learning through the BICS/CALP model, appreciating the advantages of this approach and identifying the disadvantages of the alternative methods.

Discussion

Whilst an acceptable Content and Language Integrated Learning strategy was identified for one particular group of students, we would not suggest that the same strategy is always appropriate. Much depends on the current linguistic skills of the student group, the nature of the course, and the underlying objectives in promoting and developing bilingualism. Each of the approaches may be suitable in specific circumstances:

Optional bilingualism, in which presentations are made in a combination of both languages, can be very effective for delivering short training courses in the workplace or conducting public meetings, particularly where the audience has a mixture of linguistic backgrounds.

The *BICS CALP model* can be particularly effective when training specialist professional groups who will have contact with a minority language group within the community. Examples might be medical staff, who would undertake most of their specialist training through the medium of English, but might also carry out some activities in a second language such as Urdu or Spanish as preparation for work in the community.

Extended CLIL is most appropriate for training staff who will predominantly work in a bilingual environment. An example might be teaching in schools in some areas of Wales

where an ability to communicate in both languages is an essential requirement.

Necessity bilingualism provides a relatively easy way for students to prepare for work in a bilingual environment. Social workers or police may work predominantly through the medium of English on a day-to-day basis, but may sometimes need to produce information leaflets or send on-line messages in other languages in order to reach a wider group in the community.

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