Content and language integrated learning: reflections on a pilot module

Jennifer Bruen

Dublin City University

Thomas Wagner
Bischöfliches Gymnasium Petrinum, Linz

Abstract

CLIL, or 'Content and Language Integrated Learning', is a term used to describe the practice of teaching content through a foreign language. It represents an educational approach which can embody a range of different methodologies and has, in recent years, been receiving increased attention in Europe, partially because efforts put into language teaching are not always reflected in the results achieved. This paper begins with a brief overview of developments in the field of foreign language acquisition and how these might relate to the notion of CLIL. It then goes on to describe the design, delivery, and evaluation of a module in German language for intermediate undergraduate students, which incorporates an element of CLIL.

Introduction

Foreign-language acquisition research now encompasses both those theories which argue that instruction is of lesser importance because natural language acquisition processes are all-powerful, and those focusing on the learning processes of instructed learners. This paper begins with an introduction to this development and considers the implications for the language classroom. It then introduces the concept of 'Content and Language Integrated Learning' (CLIL) and describes the piloting of a module containing an element of CLIL.

Theoretical background

Krashen (1985: 2), in his input hypothesis, argues that 'humans acquire language in only one way, by understanding

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messages or by receiving "comprehensible input" '. Thus, language is acquired by 'going for meaning' and, as a result, acquiring structure. This hypothesis also states that acquisition fails to occur when the learner is deprived of meaningful language. For example, classroom activities that focus on the forms of language rather than on meaning will, according to this hypothesis, not facilitate language acquisition.

Krashen qualifies this view with his theory that adult learners of a foreign language have at their disposal two means of developing competence in a foreign language, acquisition and learning, acquisition being a 'a subconscious process that results in linguistic knowledge being stored in the brain' (Krashen 1994: 45). This process results in the ability to actually use the foreign language. Learning, on the other hand, is 'a conscious process that results in "knowing about" language' (Krashen 1994: 45). Krashen accepts that other processes apart from the understanding of comprehensible input can result in learning. He denies, however, that the form such knowledge takes is capable of being the basis for normal use of language. In his view, it leads solely to the ability to 'monitor' output.

In support of these views, Krashen (1985) cites, for example, the fact that people often speak to children acquiring their first language in a particular way. This form of speech, which he calls 'motherese' or 'caretaker talk', is distinguished by syntactic simplicity. This gives it the qualities of comprehensible input and leads, he believes, to acquisition. Similarly, language learners often encounter language tailored to their level or a level just beyond it, as they are exposed to 'teacher talk'. Secondly, learners often go through an initial silent period. According to Krashen (1982: 27), during this time 'the child [or learner] is building up competence in the second language via listening, by understanding the language around them'. Some research (Cook 1986, Singleton 1989: 266) also suggests that older learners are better at short-term foreign language learning while younger learners are better at longterm foreign language learning. Krashen's explanation is that older learners are exposed to more comprehensible input because their knowledge of the world makes the input more meaningful than it would be for children. Fourthly, in several studies, the variable of length of residence (Carroll 1967, Stevens 1999) correlates with levels of proficiency. Finally, Krashen claims that teaching methods which rely almost completely on comprehensible input, such

as 'The Natural Approach', are superior (Krashen 1982: 30) and that immersion programmes are successful because they provide the learner with large quantities of comprehensible input.

However, many of the above claims are questionable (Cook 1993). For example, a counter-claim that failure by parents to address tailored speech to their children delays first language acquisition has not been empirically tested. Furthermore, the fact that learners are exposed to a special variety of language does not necessarily prove that this helps them to learn the language, i.e., there is no necessary cause-and-effect relationship. Similarly, the fact that learners may delay speaking may have as much to do with lack of confidence or personality traits as with the need to store comprehensible input. The arguments in regard to older and younger learners appear plausible, although the argument that younger learners are exposed to less comprehensible input than older learners and therefore do not perform as well in the short term appears to contradict the claim that younger learners are exposed to more 'caretaker' speech. Furthermore, many other explanations for the superiority of older learners are possible (McLaughlin 1984). These include their need to speak about more complex topics and their ability to profit from correction and training in grammar. Furthermore, the fact that a number of studies indicate that length of residence in the country in which the target language is spoken correlates with levels of proficiency in the language does not prove that exposure to comprehensible input alone resulted in acquisition. It could also be attributed to, for example, a greater number of opportunities to produce utterances in the target language. Krashen's claim that comprehension-based teaching methods tend to be superior is also a sweeping one. The vast majority of teaching approaches involve exposing the learner to some form of comprehensible input. The teaching situation is complex with many factors influencing the rate at which students acquire proficiency in a foreign language. Finally, as we will see later, a number of researchers disagree with Krashen's views on the value of immersion programmes.

In conclusion, the input hypothesis has been described as both 'stimulating' and 'frustrating' (Cook 1993: 65) and has given rise to much research and a number of alternative theories, developed partially in response to its claims. These include, for example, the output and interaction hypotheses and as well as issues

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surrounding grammar instruction and the contribution made by learners to the learning process.

The most influential of the output hypotheses was proposed by Merrill Swain in 1985 (Swain and Lapkin 1998). Swain is involved in a number of immersion programmes in Canada in which pupils receive all or part of their education through French. The teaching of the second language is, therefore, integrated with content teaching. As a result, students are exposed to a rich source of comprehensible input. Analysis of their proficiency level revealed that they score well on global tests of listening and reading by the end of secondary school (Swain and Lapkin 1995: 372). Many continue, however, to have problems speaking and writing in the target language. Although these students' language improves as they progress, Swain and Lapkin (1995: 373) comment that 'their interlanguage remains sufficiently "off-target" as to be a cause of concern'. Once they have reached a stage where they can make themselves understood their rate of acquisition slows down and many have problems with accuracy.

Swain concludes that, although input is invaluable in foreign language acquisition, it is insufficient for the mastery of a language. In her opinion, language learning occurs whenever learners produce the foreign language either in its written or spoken form and, in particular, when learners are pushed to make their output comprehensible. She suggests (1995: 386) that producing output causes learners to process language more deeply, i.e., with more mental effort than does being exposed to input. Furthermore, even a prospective need to produce output may cause learners to process input more deeply.

More specifically, according to Swain, output is capable of facilitating foreign language acquisition in four ways in particular. These are enhancing fluency, promoting noticing, facilitating hypothesis generation and testing, and allowing reflection on form to take place among students.

The interaction hypothesis echoes the output hypothesis in that it proposes that participation in interaction that entails negotiation for meaning can potentially alert learners to failures in making themselves understood. This failure may 'push' learners to reformulate what they say. As a result, they may analyse input and refine their own output in more conscious ways, thereby attaining greater awareness and control of the foreign language (Wesche 1994).

A further concern of applied linguists concerns whether and how to include grammar instruction in the classroom. Research findings indicate that input and interaction alone are insufficient and that a degree of focus on form is necessary in order to 'push learners beyond communicatively effective language towards target like second language ability' (Doughty and Williams 1998: 2). Long (1991) proposed that such a focus may be of two types, i.e. 'focus on form' and 'focus on forms', the former term referring to the drawing of student's attention to linguistic elements as they arise during classes whose focus is on meaning or communication. In other words, focus on form consists of occasional shifts of attention to linguistic code features triggered by perceived problems with comprehension or production (Long and Robinson 1998: 23). The notion of forms, on the other hand, involves isolation of linguistic features from context or from communicative activity. This approach can take many forms, for example, 'presentation, practice and production' (Skehan 1998), where the first stage involves presentation of a single grammar point, the second requires learner practice within a controlled framework, and the final stage is learner production of the form more spontaneously in messagebased or meaning-focused tasks. Many researchers and teachers see this approach as 'promoting awareness', or 'consciousness raising' (Ellis 2002: 32), even where learners are not immediately successful in acquiring the ability to use the linguistic feature in output and interaction.

Finally, recent studies attempt to move beyond explanations of the processes and variables involved in foreign-language acquisition towards attempts to understand how learners actively control some of these processes and variables in order to better facilitate proficiency development. This brings us into the realm of learning strategy theory. Research in this field has focused on defining, classifying, and measuring language learning strategies as well as identifying those factors which influence a learner's strategic behaviour. It also attempts to identify the learning strategies most likely to enhance learning outcomes, as well as developing effective approaches to the training of learners in the use of language learning strategies (Chamot 2001: 25).

Definitions of learning strategies include 'the specific behaviours or actions, often conscious, used by students to improve or enhance their learning process' (Oxford 1992: 440) as well as 'conscious or unconscious mental or behavioural activities related

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directly or indirectly to specific stages in the overall process of second language acquisition' (Purpura 1997: 293).

As yet, there is no consensus as to the specific types of strategies that exist. However, O'Malley and Chamot (1993) distinguish three major types of strategy. Cognitive strategies refer to operations that require direct analysis, transformation or synthesis of the material. They include repetition, resourcing, grouping, note taking, substitution, translation, inferencing, and elaboration. Metacognitive strategies represent an attempt to regulate language learning by means of planning, monitoring, and evaluating. Examples include directed attention, selective attention, planning, selfmonitoring, self-evaluation, and self-management. Social-affective strategies concern the ways in which learners interact with other learners, teachers, and native speakers. Examples include cooperation, questioning, and requests for clarification. A second classification was compiled by Rebecca Oxford (1990, 1992). This scheme covers listening, speaking, reading, and writing and classifies strategies into six groups: cognitive, metacognitive, social, affective, memory-related, and compensatory strategies.

Studies based on these and other definitions and classifications reveal that a network of bidirectional relationships exists between strategy use, learning outcomes, and the factors affecting strategy use. Earlier, more qualitative studies have, for example, discovered that certain strategies characterize successful language learners. For example, Rubin's (1975) findings indicate that the good language learner is a willing and accurate guesser, has a strong, persevering drive to communicate, is often uninhibited and willing to make mistakes in order to learn or communicate, focuses on form by looking for patterns, takes advantage of all practice opportunities, monitors his or her own speech as well as that of others, and pays attention to meaning. Rubin (1987) also identifies strategies contributing to language-learning success either directly (e.g. inductive inferencing, practice, memorization) or indirectly (e.g. creating practice opportunities and using production tricks). Ellis (1994: 546), in his review of several 'good language learner' studies, further identifies five characteristics of these learners, some of which overlap with those of Rubin. In his opinion, they possess a concern for language form, a concern for communication, an active task approach, an awareness of the learning process, and a capacity to use strategies flexibly in accordance with task requirements.

Further studies of a more quantitative nature indicate that 'successful language learners generally use more learning strategies' (Oxford 1990: 37). For example, Oxford and Crookall (1989: 407), reporting on a study conducted by Chamot in 1989, comment that, 'the major apparent difference between successful and less able students was that the former used a greater number of language learning strategies more often than did the latter'. Similarly, Park (1997) concludes that the number of language-learning strategies employed correlated positively with the level of proficiency achieved by a sample of Korean students of English. Furthermore, his results indicate that a positive significant correlation exists with the total number of strategies employed in each of the S.I.L.L. categories (i.e. cognitive, metacognitive, social, affective, memory-related, and compensatory strategies) and proficiency, with the association particularly strong between levels of proficiency and the total number of social and cognitive strategies employed. Similarly, a study among Irish students of German indicates that more proficient students use more language-learning strategies more frequently and, in particular, more cognitive and metacognitive strategies (Bruen 2001). The results also suggest that more proficient students use these strategies in a more structured and purposeful manner and apply them to a wider range of situations and tasks.

Thus, while considerable controversy and need for research remains, it appears that exposure to comprehensible input can have a significantly positive impact on foreign language acquisition. It is likely, however, to be most effective if presented as part of an educational approach embodying a range of different learner-centred methodologies and classroom activities, some of which involve oral and written production combined with grammatical instruction and guidance in the use of language learning strategies.

Content and Language Integrated Learning

CLIL is the practice of teaching one or more subjects through a foreign language either individually or as part of a full bilingual section of a school or institution (CLIL Compendium). It represents an educational approach embodying a range of different methodologies according to which language knowledge is not the ultimate aim but instead a medium of instruction. While the

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acronym is a synonym of 'Content-based Language Teaching', the change in terminology reflects a shift in emphasis from teaching to learning in the field of education in general.

CLIL has recently been receiving increased attention in Europe. This is partially because efforts put into language teaching are not always reflected in the results achieved. Incorporating an element of CLIL into language programmes could fulfil the need, discussed above, for exposure of the language learner to meaningful input in the foreign language. This approach is in line with European aspirations to educate citizens capable of speaking their mother tongue as well as two additional foreign languages.

A milestone in this respect was the Commission's Memorandum on Higher Education in the European Community (1991) which 'focused ... on languages for the generality of students and on the necessity for comprehensive institutional policies with regard to language provision'. Among the measures proposed in this document was the teaching of portions of courses through the medium of Community foreign languages. Publications by both the European Commission and the Council of Europe have, since 1991, continued to emphasize the value of teaching content through a foreign language in the development of foreign language competency among citizens of the EU (White Paper 1995, Förderung des Sprachenlernens und der Sprachenvielfalt: ein Aktionsplan 2004-2006). Indeed, a recently launched EU-funded project, 'The European Network for the Promotion of Language Learning Among all Undergraduates' (see <www.fu-berlin.de/enlu>) has as one of its key objectives a revisiting of issues surrounding the medium of instruction in undergraduate studies in European universities.

There are many different types of CLIL, ranging from the teaching of a subject unrelated to the foreign language (e.g. physics) to the teaching of the history and culture of one or more of the countries in which the foreign language is spoken. The German language module under discussion in this article falls into the latter category.

The pilot module: an outline

The module in question, German Language 5, is offered to secondyear students in the School of Applied Language and Intercultural Studies at Dublin City University. It is a core module for those enrolled on the German strand of the BA in Applied Languages/ Languages for International Communication, the BA in European Studies, and the BA in International Business/Marketing and Languages. These students spend their third year at a university abroad, with the exception of students enrolled on the BA in European Studies, who spend their third and fourth year at the Fachhochschule Reutlingen.

The primary objective of this module is to improve the overall target language competence of the students involved in preparation for their spending a year at a German-speaking university where they will be required to complete modules in both language and business as well as to function successfully within the society. Secondary objectives include providing students with a deeper understanding of recent German and Austrian history and contemporary social and political issues, learner motivation, and facilitation of the development of the students' personal language learning strategies.

In light of the benefit of exposure to meaningful input demonstrated by many of the studies discussed in the theoretical overview, it was felt that the introduction of an element of CLIL into this module might help to achieve these objectives. Therefore, a weekly lecture given by a native speaker of German was introduced into the module on a pilot basis. The topics covered include the history of Germany since the Second World War, German society and politics, Austrian society and politics, multicultural Germany, and, finally, the arts, culture, and entertainment in Germany. Thus the students registered for this module were exposed to a rich source of meaningful input albeit for one hour per week. The attention of the students was not drawn to linguistic features during the lecture.

Research findings (Clegg 1999) further suggest that considerable learning demands are placed on learners in situations where they are acquiring subject-matter knowledge and at the same time mastering the language which is the vehicle for that knowledge. In order to reduce these demands, material which contained several new concepts was handled in familiar language; visuals and summaries were used; and the students were provided, in advance of the lectures, with the lecture notes and lists of relevant vocabulary on shared staff—student computer drives. Attempts were also made, where possible, to reduce the complexity of the content without resorting to oversimplification.

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Given the evidence from the field of foreign language acquisition that exposure to meaningful input alone is not a sufficient condition for successful foreign language acquisition, each student was also required to participate in two one-hour, small-group seminars per week. These were included in the course design in order to ensure that learners also received the opportunity to interact with the material in order to internalize and process it more effectively. Therefore, one of the seminars involved analysis and discussion of a text related to the lecture theme of the week. The focus during this hour was on the content of the text and how it related to the content presented during the lecture. Students were encouraged to produce output in the form of comments, debate, and discussion based on the text. They also completed short written pieces using the text as a basis. However, the grammatical instruction during this hour was limited to what has been described above as 'Focus on Form'. In other words, direct reference to grammatical and linguistic items was made only when this appeared necessary for understanding and communication.

The second hour was devoted explicitly to the study of German grammar. While this approach approximates to some extent what is defined above as 'Focus on Forms', the grammar items were presented in a meaningful manner in a context relevant to the students. For example, the conditional tense was presented in the context of what they would like to do when on their year abroad or on completion of their degree course. An inductive approach was employed initially with materials or activities designed to result in 'noticing' of the structure in question, the objective being to determine what the group in question already understood of the grammatical point under discussion. This was followed, where necessary, by a presentation of rules (deductive approach) and an engagement in creative tasks or activities designed to promote the contextualized application of the structure. Both of the seminars were conducted through German.

Finally, as discussed above, the development of strategic behaviours among language learners appears to support the development of proficiency. Therefore the first hour of the lecture series was devoted to introducing students to language-learning strategies likely to enable them to benefit as fully as possible from the attendance at a lecture given through German. These strategies included, in particular, active reading and listening strategies combined with approaches to note-taking such as the use of mind-

maps, key words, visuals, etc. The strategies were presented and discussed and opportunities for practice and feedback provided. An introduction to reading and writing strategies was also provided during the first text seminar, with demonstrations and opportunities for practice provided.

Evaluation of the pilot module

Formative assessment took place in the form of written assignments submitted every three weeks on topics related to the lectures. These were designed to promote meaning-focused written output that nonetheless required attention to specific grammatical forms. They were returned to the students with an indication of the types of linguistic errors and were then corrected by the students and returned once again to the lecturers. Errors in content were also indicated.

Summative assessment took the form of a written exam. Students were required to complete an integrated cloze test and to write short, factual pieces on key concepts addressed by the lectures and seminars and one longer discursive piece on some of the broader issues raised. The evaluation criteria for these examinations included content (30%), accuracy (50%), and appropriacy (20%), with appropriacy incorporating range of vocabulary, register and genre, cohesion, and coherence. Student evaluation of the course also took place in the final week of the semester in the form of questionnaires.

Conclusions

The student evaluations indicated unanimous support for the inclusion of a lecture through the target language in the course design. This was for a number of reasons, including in particular the improvement of comprehension levels and aural skills, and the expansion of vocabulary.

Students also perceived the inclusion of the one-hour lecture per week as being useful preparation for study at a Germanspeaking university in the third (and in some cases fourth) year of their degree. While some found it daunting to begin with, they described how, over the course of the semester, they became more comfortable with the language and 'less panicked about going to Germany'.

Those surveyed were also in favour of the small-group seminars. In general, the hour devoted to the study of grammar was found to be useful, although some called for the more difficult areas to be taught through English. Feedback on the text-based seminar dealing with the lecture topic was also positive. It provided a forum for discussion on the topics raised in the lecture and allowed for oral and vocabulary work in particular. There was a general call, however, for a third small-group contact hour per week in order to allow material to be covered in more detail and to provide time for more oral work.

The module design also appeared to assist students in developing their approach to language learning. Many described the sequence of listening to a lecture, discussing the material in class, studying the material at home, and the preparation of written assignments as useful for the retention of material, particularly vocabulary. In other words, repeated exposure to material in different formats and media aided the learning process. Some students also commented that hearing 'grammar in use' during the lecture helped to place many of the rules presented in the grammar seminar in context.

The content of the module was described as 'motivating', 'stimulating', 'interesting', and 'relevant'. Students liked the fact that they were not studying German 'purely for the sake of the language' but were instead using it as a medium for learning about another country and its people. A number commented, for example, that they were more inclined to complete their written assignments, and indeed to research them in more detail, because they found the material interesting. There was disagreement, however, as to whether the historical elements played a useful role, with a minority of students calling for coverage of contemporary issues exclusively.

The summative assessment, or examination scripts, indicated a broad understanding of the course content among the majority of candidates. The lecturers involved in assessment felt that the material produced was also of a high quality with the breakdown of results as follows: first class honours: 22%, second class honours grade one: 15%, second class honours grade two: 23%, pass: 38%, and fail: 2%.

In the views of the lecturers involved in delivering this module, incorporating an element of CLIL into the course design constituted an effective approach. There was a high level of attendance, participation, and submission of required work by the students involved. The challenging nature of the material did not seem to deter the students but appeared instead to motivate and interest them.

As a result of the success of this initial experiment, the German language module in Semester Two (German Language 6) has been redesigned to incorporate one lecture per week on a commercial German topic combined with two small-group seminars. The language classes deal with an economic topic of relevance to Ireland and Germany or Austria and studying in a German-speaking country respectively. The success or otherwise of such an approach will continue to be monitored and evaluated, as well as being considered in the light of findings emerging in the field of foreign language acquisition research.

Note

1. According to this approach, 40 constitutes a pass mark and 70 a first class honours mark. A pass is defined as 'adequate' and a first class honours as 'excellent'. In more general terms, a student receiving an overall pass mark (40-54) is capable of writing comprehensibly on the question given. The language is, however, inaccurate with a relatively large number of basic grammatical errors. The student possesses only the basic vocabulary required to make themselves understood and uses very few, if any idioms. Students receiving grades between 70 and 100, on the other hand, have a wide range of vocabulary and use idiomatic language frequently. They are capable of dealing with and presenting complex material and arguments. Students in this category make very few grammatical errors. Students receiving a 2.2 (55-62) and a 2.1 (63-69) are located at intervals along a continuum between these two polar extremes. Any student failing (0-39) has not demonstrated an ability to present and discuss material in a comprehensible and reasonably accurate manner.

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