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Content and Language Integrated Learning (CLIL)

It is quite surprising to note how quickly *Content and Language Integrated Learning* (CLIL) has entered European educational systems over the last ten years. This approach, which is also known as *Bilingualer Sachfachunterricht* (*Bilingual Content Teaching*) in Germany, is built on the principle of teaching content subjects in a language other than that which is traditionally used at school. Almost all European countries have incorporated CLIL into their school systems: some provide CLIL-type provision on a voluntary basis; others have made it an obligatory part of education. The latest example is Italy where CLIL-type education in one content subject has become mandatory in secondary education in 2011/2012. It is interesting to note that CLIL, in those countries where it has been introduced, is beginning to influence institutionalised education positively. The approach seems to confirm innovative methodological claims and to lead to new pedagogical insights. CLIL teachers, for example, have pointed to a number of exciting methodological options which can be realised more easily in a CLIL environment; researchers claim that CLIL has an added value both for language and content learning.

CLIL has become such an important topic in recent educational debate that it cannot be called simply a new trend in language and/or content learning. It should rather be seen as a more general pedagogical concept through which we are able to bring about change in our educational systems. It is this perspective on CLIL as an agent of change in education that will play an important role in my contribution. In section one I will introduce CLIL, define the concept and discuss some variants which have developed in the European context. In the second section I will illustrate the added value of CLIL with respect to both language and content proficiency. The third section deals with the integration of content and language from a methodological perspective. Section four covers three different topics: materials, assessment and evaluation and CLIL teacher training. Section five focuses on CLIL and the teaching of English and in section six I will take up the idea of CLIL as an agent of change in education and show where its potential lies.

1. Defining CLIL

The term *Content and Language Integrated Learning* was introduced some 15 years ago. It has replaced a number of other terms, for example: *Bilingual Content Teaching*, *Bilingual Subject Teaching* or *Content-Based Language Teaching*. The current definition of the term was provided by the authors of the *European Framework for CLIL Teacher Education*, published in 2010 (cf. Marsh, Mehisto, Wolff and Frigols Martin 2010). It has enhanced and rendered more precise other earlier definitions:

CLIL is a dual-focused educational approach in which an additional language is used for the learning and teaching of content and language with the objective of promoting both content and language mastery to pre-defined levels. (Marsh et al. 2010, 2)

The fairly abstract nature of this now generally accepted definition needs to be further substantiated:

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- (1) CLIL is not a new method to teach/learn foreign languages; neither does it profess to be a new approach to the teaching and learning of content subjects. It is an integrated approach to foreign language and subject learning. In some European countries the language learning aspect is highlighted; in others it is content learning which is given more weight.
- (2) CLIL is not restricted to particular content subjects or languages, although subjects belonging to the Humanities (History, Geography, and the Social Sciences) are chosen more frequently. Although the most often used CLIL language is English, other official languages, regional languages and minority languages are also used as classroom languages.
- (3) CLIL approaches can be found in primary, secondary and tertiary education. In general, the content aspect is more important in tertiary education than in primary and secondary education where the foreign language is also focussed upon.
- (4) Neither in foreign language nor in content learning is CLIL committed to any specific methodological approach. CLIL is like an open shell: any methodology can be introduced and applied. We will see in section three, however, that *Language-Sensitive Content Teaching* has generally been adopted as a methodology by practicing teachers.
- (5) In some countries, for example in Germany, CLIL is also regarded as a way to promote "bilingual" education. This includes the notion that CLIL can serve as a means to develop linguistic competences in the learner's mother tongue as well. And it is here that part of the potential of CLIL to act as an agent of change resides as I will show in section six.

When looking at CLIL in the European context a surprisingly large number of different variants of CLIL-type education can be distinguished, which are all shaped by the differing school systems in Europe (cf. Eurydice 2005; Wolff 2007). I cannot deal with any of these in detail here but will instead propose a kind of overview which looks at CLIL variants from two perspectives: one focused on school types and the other on the duration of CLIL-type provision.

As already mentioned, CLIL-type provision can be found in primary, secondary and tertiary education. If we assume, however, that primary education starts at the age of six (as is the case in most European countries) we can even distinguish a fourth variant: pre-primary CLIL education. Pre-primary CLIL can be found in bilingual kindergartens and similar institutions; it is CLIL only to a limited extent, of course, because no content subjects are taught at this stage. The new language is used naturally in group communication while the children are playing games, singing songs, or are listening to and talking about stories. It is important to bear in mind that the new language is not explicitly learned but simply used in the interactions between teachers and learners, or learners and learners. In primary CLIL schools the situation is slightly different. To begin with, there are specific subjects or rather areas of learning (natural sciences, social sciences, arts, music or sports), some of which are taught in the additional language. In pre-primary CLIL education the languages used in the classroom are mainly the more important world languages like English, French, German, Spanish, Italian, Chinese and Japanese; in primary education, however, heritage languages can also be found, such as (in Germany) Turkish and Greek or (in France) Arabic and Portuguese. Heritage language CLIL education is not uncommon in secondary education either.

Secondary schools have the longest practical experience with CLIL. In Europe, CLIL was first implemented in secondary schools, and in Germany as early as in 1969. Today CLIL in secondary education is strongly rooted in European school systems: in many countries there is a specific CLIL legislation, and some have even developed curricula for different combinations of subjects and languages (cf. Ministerium für Schule und Weiterbildung, Wissenschaft und Forschung NRW 1994).

Secondary CLIL can be characterised by the following parameters (I take the German model here as an example):

- Learners usually begin studying a CLIL subject in the 7th grade .
- At that stage they have usually been exposed to the CLIL language for two years. In general, students intending to enrol in a CLIL course have followed a special language pre-course which includes seven to eight language lessons per week as opposed to the usual three to four lessons in the ordinary language classroom.
- Traditionally in Germany, the first CLIL subject is Geography which is studied for four years in the additional language. In the 9th form a second content subject is introduced, in general History. The two subjects are taught in the CLIL language until the end of the 10th form.
- Students who continue school after the 10th grade can, if possible in the school, continue studying their CLIL subjects up to the *Abitur* (A Levels). They can even ask to be examined in the CLIL language in the *Abitur*.

In tertiary education, universities, polytechnics, colleges of higher education and also vocational schools offer a large array of programmes which can be studied in an additional language. The content subjects range from Information Technology to Economics and Business Studies, from Agriculture to Mechanics, from Arts and Music to Biochemistry and Physics. In general, the CLIL language is English, although in some smaller European countries like the Netherlands or Finland, German or French programmes can be found as well.

My second perspective on CLIL variants is related to the duration of CLIL-type provision. Normally, CLIL programmes, especially in secondary education, are continuous programmes; they last from one to a maximum of seven years. Students are usually taught a content subject from two to a maximum of three hours a week while enrolled in such a programme. Implementing CLIL in school, however, is a costly affair: additional teachers are needed and learner groups need to be smaller than in traditional classrooms. This is the reason why in many countries a second CLIL variant, the so-called *modular CLIL*, is becoming increasingly popular. Modular CLIL can be defined as an approach to teaching content in a foreign language non-continuously over shorter periods of time. A geography teacher decides to teach part of his/her curriculum in the school language and part of it in the additional language; for example, he teaches the geography of the English-speaking countries in the CLIL language if the latter is English and the rest of the curriculum in the school language. The content elements which the teacher chooses are called modules; they could also be called projects or thematic units. Modules can last from two weeks to several months. Naturally, the learning/teaching aims of modular CLIL are different from those of "normal" CLIL: the approach should be seen as an incentive to make learners understand how important another language can be in comprehending content. It is, of course, the language-for-specific-purposes aspect which is particularly attractive as well, although learners will never be as competent as regular CLIL students.

2. The Added Value of CLIL

In order to judge the potential of CLIL in institutionalised learning and teaching it is necessary to define its added value compared to traditional foreign language learning on one hand and content subject learning in the learner's school language on the other. Only if such an added value can be identified can implementing CLIL in the regular school system be justified. Many foreign language and content subject teachers have argued that the added value of CLIL is high. Their arguments are backed by numerous research results with respect to language learning but until now, unfortunately, only by a rather small number with respect to content learning.

Not only teachers of international schools (European schools, French, Italian or German schools abroad) know about the language learning potential of CLIL. Children of the nobility and later of the bourgeoisie were taught content subjects in another language by their private teacher or governess. The justification for this was that these students learn the foreign language (not the content subject) much better that way than in pure language-learning contexts. The research available from international schools (Baetens-Beardsmore 2007) or from regular CLIL classes (Wode 1999) makes it clear that the foreign language competence of students in such classrooms is higher than in ordinary foreign language classrooms. This competence is highly communicative: students speak fluently and idiomatically correctly; they are also able to discuss complex academic content. They learn the foreign language in integration with a content subject, i.e. their discursive competence is not general but domain-specific, and they know how to use the technical registers of the content subject adequately.

What are the reasons for this higher linguistic competence of CLIL students? In general, it is argued that it is the so-called exposure factor which is responsible. CLIL students are exposed to the foreign language for longer periods of time (six to seven hours a week when adding the CLIL lessons to the regular foreign language lessons). This explanation is certainly correct but too general, for it should not be forgotten that in CLIL learners deal with real-life content as opposed to the fictional contents of traditional foreign language textbooks. It is only natural that these contents are more interesting, more motivating and often more important to learners than traditional foreign language materials; due to their high motivation, learners focus on content while processing language and hence learn both content and language.

In the early years the added value of CLIL for the content subject was not a significant topic either in research or amongst teachers; only during the last decade did a number of empirical research projects focus on this question (cf. Zydati 2006; Lamsfu-Schenk 2007). Triggered by controversial discussions among content subject teachers and parents on the question of whether students' content subject accomplishments suffered from being taught in another language, research projects were carried out in which results in traditional content subject and CLIL classrooms were compared. In a study undertaken by Lamsfu-Schenk (2007) the researcher compared two learner groups, one in which she taught a 9th form History programme in German (the school language of the students) and one parallel group in which she taught the same programme in French (the additional language). The analysis of the data clearly showed that the students who had learned content in French were more successful in their achievements than the parallel group. This became especially clear

by the ease with which they denoted and handled complex concepts and by their higher familiarity with the topic. The researcher argues that this result is not really surprising: learners who process content through another language need to process it more deeply and they have to deal more accurately and more precisely with the elaborate content presented to them in the foreign language. While native speakers denote a content subject concept using a shallow and often colloquial term, CLIL learners often choose a more precise term for the concept, perhaps because they lack the colloquial term or because they have understood the complexity of the concept and prefer to use the technical term. This result is corroborated by CLIL teachers who point out that content teaching in the native language leads to shallow processing and thus to fairly low content subject knowledge whereas CLIL assures deep processing and also a more consolidated knowledge.

3. CLIL Methodology

Earlier in this paper it was argued that CLIL is an open shell with respect to methodology. Any methodological approach from the most traditional to the most advanced is theoretically possible, and this diversity is exactly what can be found in CLIL practice. Unfortunately, very traditional transactional approaches, in which the teacher simply transmits knowledge to the students and does not tolerate any interruption, still exist. While these are found mainly at the tertiary level, they are not uncommon in secondary schools either. The transactional approach belongs to an old-fashioned content subject methodology which content subject teachers who do not know much about language teaching and learning make use of. Interactional approaches are probably the most common in all teaching/learning contexts nowadays. An example is the so-called teacher-controlled interaction where both linguistic and content subject knowledge is constructed by teachers and learners in interaction but where the teacher is fully in control of the interaction. They are very frequent in CLIL, and language teachers who can rely on their foreign language proficiency feel more at ease than content teachers. The third approach views the teaching/learning process in a more innovative way: concepts like project work, group work, task-orientation, and self-evaluation play an important role here.

Another aspect which needs to be discussed at least briefly from a methodological angle is the integration of language and content in CLIL. The term integration, which is a key term in all CLIL methodology, has been examined mainly from a discourse perspective in recent years (Dalton-Puffer 2006; Gajo 2007; Smit 2010; Dalton-Puffer, Nikula and Smit 2010). It is classroom interaction both in secondary and tertiary education which is the focus of most of the analyses. Gajo is able to show in his research that classroom interaction in bilingual education is the link between language and content:

Through interaction and discourse analysis we get a better grasp of the processes underlying bilingual education, integration being seen as a complex interactional and discursive process relevant to both the language(s) and the subject. (Gajo 2007, 564).

According to Gajo integration takes place through the negotiation of both linguistic and content knowledge; for him, classroom interaction should focus both on language and content. The starting point should be the content, but language should never be excluded. It is not wrong to call this language awareness, or more precisely

"content subject language awareness," i.e. awareness which includes not only lexical and grammatical but also discourse awareness. For in CLIL a fairly specialised technical discourse (*Fachsprache*) has to be developed in order to negotiate content. Related to this is the more general idea that all learning is language learning, an idea which was brought forward in the early days of the language awareness movement in Britain.

Methodologically speaking, a really integrated approach starts out from content but also includes language. "Language outcomes are driven by content" (Mehisto, Marsh and Frigols 2008, 103). The teaching/learning process is structured through the content; the language of teaching is focused upon when necessary. There is no real language curriculum – the contents of the content curriculum decide on the learner's language needs. CLIL is therefore often called *language-sensitive content teaching*. It is the teacher's sensitivity with respect to the linguistic complexity of the classroom interaction which controls the focus on specific linguistic topics and not a predefined sequence and progression of grammatical rules and lexical terms. At the end of my paper I will show that it is worthwhile to explore the concept of *language-sensitive content teaching* more deeply in the general school context.

As a methodological approach *language-sensitive content teaching* is based on a set of different scientific concepts derived from second language acquisition research, cognitive psychology and constructivism. Empirical research in second language acquisition has shown that languages are learnt while they are used; cognitive and constructivist psychologists have made it clear that language learning takes place when learners are involved in the content they are dealing with. These findings provide a sound theoretical basis for a CLIL approach which is content- and not language-oriented.

4. Materials, Assessment, Evaluation and CLIL Teacher Training

In this section I will briefly deal with three important topics in CLIL: materials, assessment and evaluation, and CLIL teacher training.

All materials used in institutionalised teaching and learning are subject to a number of general quality criteria which cannot be discussed here in any detail. Suffice it to remind the reader that the choice of materials is dependent on the teaching and learning aims, the contents to be taught and the methodology to be adopted. In addition, CLIL materials need to be suitable for promoting both content and language. Even nowadays most of the materials used in classrooms are still textbook materials; they are produced by a small number of large publishing houses which divide the school book market amongst them. In the beginning of CLIL, textbook publishers were interested in this new market; in Germany, publishers like Cornelsen or Klett released some CLIL materials.¹ Nowadays, however, publishers have more or less pulled out of the market, mainly because it is not profitable enough and many different materials need to be developed because of the sheer number of the language and content subject combinations. Although the lack of published materials can put the CLIL teacher under extreme pressure, it also has a positive impact: teachers are free

¹ Cf. for example *Reihe Bilingualer Unterricht* (Klett Verlag Stuttgart). The titles include *Polar Regions*, *Hot Deserts*, *Tropical Rain Forests*, *California* (1994), *Population Growth and Distribution* (1992) and *Sorry, No Jobs* (1994).

to choose the materials they want to work with; they can make this choice in accordance with their individual methodological approach (they might, for example, want to use the internet, DVDs or CDs); they can choose to work with authentic materials or rely on content subject textbooks published in the CLIL language country etc. In general, the lack of published textbook materials is beneficial for modern pedagogical approaches like learner-oriented or task-based learning. One last aspect needs to be mentioned: CLIL teachers have begun to put together databanks for materials in all languages and in all content subjects. Most of them consist of all kinds of materials, lesson drafts as well as internet addresses, thematic text collections as well as video or audio materials.² CLIL specialists believe that in the future these materials will be the main source.

Assessment and evaluation are topics which have been on the pedagogical agenda since CLIL came into existence. For a long time teachers believed that it was possible to assess students' accomplishments simply by focussing on their results in content learning. Although this was in line with the administrative decrees which stipulated that CLIL achievements, as in all other non-language subjects taught in the student's regular school language, should be assessed only with respect to content, it soon became clear that assessment should be doubly focussed, relating to content and language at the same time. Similar to other subjects, teachers in the CLIL classroom nowadays rely on three assessment procedures: summative evaluation, formative evaluation and self-evaluation. Summative evaluation is still the most common form: most of it is discrete point testing of both content and language. Formative evaluation is regarded as more difficult and time-consuming for the teachers, who are expected to observe the learning processes of their students while these are engaged in different types of learning activities. Formative evaluation can be accomplished more easily in task-based and project-oriented learning environments common in modern classroom settings. Self-evaluation is still uncommon in CLIL, probably because CLIL-type portfolios³ do not really exist yet. However, in quite a number of CLIL classrooms learners are asked to reflect on their learning processes and accomplishments while engaged in CLIL work (Wolff and Quartapelle 2011).

CLIL teacher training has become an important topic in recent years since a large number of European countries have implemented CLIL into their school systems. In some countries, such as Germany, Austria or Norway, teacher training remains a less important issue: the teachers normally have a double qualification and thus are often both content and language teachers. Although these teachers need to have some additional CLIL training, the situation in other European countries is more dramatic. Usually future teachers study one academic subject; they are either qualified language or qualified content teachers. An additional training in the other subject is therefore necessary. For the time being many countries try to overcome the problem by offering in-service training courses for those teachers who choose to teach in CLIL classrooms. But this is not a convincing solution. It has therefore been suggested on the European level to provide regular CLIL teacher training programmes at universities and teacher training colleges. At the European Centre for Modern Languages (ECML) in Graz a *European Framework for CLIL Teacher Education* was recently published

2 The CLIL Cascade Network, a project sponsored by the European Union, is an interesting example of such a database. Cf. <http://www.ccn-clil.eu/>.

3 Portfolios based on the Common European Framework of Reference for Languages.

which attempts to provide "a set of principles and ideas for designing CLIL professional development curricula" (Marsh, Mehisto, Wolff and Frigols Martin 2010, 2). The framework consists of two main parts: a description of all the qualifications a CLIL teacher should have and a detailed account of a modular programme to attain these qualifications. The programme is flexible; it can be adapted to the situation in a specific country.

5. CLIL and the Teaching of English

There can be no doubt that the advent of CLIL has changed or will change foreign language education in the European context. It will also have an impact on the role of English in language teaching. At present English is the most widely taught foreign language in Europe. In most European countries English is introduced at primary level, often already at the age of six. Most students in Europe learn English for at least ten years; those who finish school at the age of 18 or 19 might have studied 12 to 13 years of English.

English is also the CLIL language most often selected by European schools. In more than 70 per cent of CLIL classrooms English is used as the language of instruction. This has certainly something to do with the importance of English as the major language of inter-European communication, but it is also due to the fact that learners' proficiency in English is high enough at a fairly early age to begin studying a content subject.

Introducing the teaching of a content subjects in a foreign language as an obligatory part of secondary school education, as it has been accomplished in some and planned by many other European countries, will make it necessary to reflect on the future role of English. At present I can see the following scenarios:

- (1) English continues to be taught as the first foreign language from primary to upper secondary school. In addition, English is used as a CLIL language when a foreign language content subject is introduced in the 7th or 9th grade. This is at present the most common situation in schools which have made CLIL obligatory. Although in such a context learning and teaching of content through English is very effective, the question of whether the English language is highlighted too much within the whole spectrum of school subjects arises.
- (2) English is taught as the first foreign language from primary to the end of lower secondary school. In upper secondary school English as a foreign language is replaced by a two to three hours a week content subject provision in English. Thus, English changes its role and becomes a tool to learn and teach a content subject. In a way, this already takes place in upper secondary schools where topics of general interest (literature, film, intercultural aspects) are dealt with in the foreign language. Teaching a content subject through English, however, would put the focus on one specific subject and would make the learners more competent with respect to this subject.
- (3) English is taught as the first foreign language from primary to the end of lower secondary school. Contrary to the other two scenarios the teaching and learning of English would end at this stage, i.e. it would not be a school subject in upper secondary school any more. Such a scenario would have the advantage that another foreign language could be highlighted more than now; learners would

achieve a higher proficiency in the second foreign language, be it French, Spanish or Italian, if they start learning it at the beginning of lower secondary school and take up a CLIL subject in the 7th or 9th grade. Of course, it would also be possible to teach one content subject through English and another one through French or Spanish at the upper secondary level. There can be no doubt that the third scenario best matches the strategic objectives of the European Commission, namely that each European citizen should be proficient – apart from his first language – in two other European languages.

6. CLIL as an Agent of Change in Education

In the course of this contribution I have mentioned several times that CLIL should not simply be seen as a new trend in language or content teaching/learning; its potential to act as an agent of change in education should not be underestimated. At the end of this paper I would like to discuss three issues which should make this clear:

- (1) CLIL can provide a learning environment which makes it possible to implement approaches to learning which are regarded as highly significant in modern cognitive and constructivist learning theories. There can be no doubt that CLIL lends itself to group and project work, to learner orientation and to task-based learning. The complexity of CLIL as a subject matter necessitates – one could almost say enforces – the use of such approaches which allow learners to jointly construct and thus learn new knowledge, strategies and skills. In this way CLIL can serve as a catalyst to implement these approaches in the classroom where they are currently used only occasionally.
- (2) CLIL can bridge the gap between school and the real world. Although students are highly motivated when they begin to learn a foreign language, their motivation quickly decreases often due to the lack of adequate content. CLIL provides interesting content and attracts the students even more because the content is provided in another language. Research on learning Geography or History in another language (Müller-Schneck 2006) shows that students find learning a content subject through a foreign language more attractive than learning it in their mother tongue. It is this attractiveness which improves the students' achievements both in the foreign language and in the content subject. CLIL learning is seen by students as "real world learning" – that is, they become aware of why they are learning and for what purpose. As a consequence CLIL is a good preparation for the students' future professional life.
- (3) CLIL can change our views towards teaching and teacher training. As an integrated subject CLIL puts new emphasis on the pedagogical principle that all teaching is language teaching. If all teaching is language teaching, then teaching methodologies in all subjects (and not only in the students' school language) should provide some kind of language education. *Language-sensitive content teaching* as a CLIL methodology is geared towards content and language learning. If all teachers adopt this methodological approach in their classrooms, it would be possible to promote the students' school language as well. For the time being the deficits in the students' school language are the most important cause of failure in school. If all teachers were trained to use language-sensitive methods in their teaching, school failure rates could be reduced considerably (cf. Leisen 2010).

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