1 A window on CLIL

1.1 What is CLIL?

Content and Language Integrated Learning (CLIL) is a dual-focused educational approach in which an **additional language** is used for the learning and teaching of both content *and* language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even if the emphasis is greater on one or the other at a given time. CLIL is not a new form of language education. It is not a new form of subject education. It is an innovative fusion of both. CLIL is closely related to and shares some elements of a range of educational practices. Some of these practices – such as bilingual education and immersion – have been in operation for decades in specific countries and contexts; others, such as content-based language teaching or English as an Additional Language (EAL), may share some basic theories and practice but are not synonymous with CLIL since there are some fundamental differences. CLIL is content-driven, and this is where it both extends the experience of learning a language, and where it becomes different to existing language-teaching approaches. Throughout this book, we will clarify the evolving CLIL phenomenon by exploring core principles which permeate different applications. Whilst CLIL is flexible and can be adapted to different contexts, nonetheless, for the approach to be justifiable and sustainable, its theoretical basis must be rigorous and transparent in practice. The term CLIL is inclusive in that it binds together the essence of good practice found in the different environments where its principles have been adopted. It involves a range of models which can be applied in a variety of ways with diverse types of learner. Good CLIL practice is realized through methods which provide a more holistic educational experience for the learner than may otherwise be commonly achievable.

> An **additional language** is often a learner's 'foreign language', but it may also be a second language or some form of heritage or community language. Throughout the book we will use an inclusive term 'CLIL vehicular language' to refer to the language(s) used in CLIL settings.

The operational success of CLIL has been in transferability, not only across countries and continents, but also across types of school. The educational success of CLIL is in the content- and language-learning outcomes realized in classrooms. CLIL provides pathways

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to learning which complement insights now emerging from interdisciplinary research within the neurosciences and education (see, for example, CERI, 2007). Because of its potential, CLIL is gaining momentum and extending as an educational approach across continents (see, for example, Eurydice, 2006, or Graddol, 2006). It is also one of the reasons why this book has been written for a broad readership including subject and language specialists, and those responsible for educational planning and implementation.

1.2 The development of CLIL

Links with the past and demands of the present

Education in a language which is not the first language of the learner is as old as education itself. As individuals from different language groups have lived together, some have been educated in an additional language. This is as true of Ancient Rome as it is of the increasingly multilingual societies being created through mobility and globalization in the 21st century.

Two thousand years ago, provision of an educational curriculum in an additional language happened as the Roman Empire expanded and absorbed Greek territory, language and culture. Families in Rome educated their children in Greek to ensure that they would have access to not only the language, but also the social and professional opportunities it would provide for them in their future lives, including living in Greek-speaking educational communities. This historical experience has been replicated across the world through the centuries, and is now particularly true of the global uptake of English language learning. What is significant here is the way in which language learning, particularly when integrated with content learning or knowledge construction, has now been opened up for a broad range of learners, not only those from privileged or otherwise elite backgrounds. In the distant past, learning content through an additional language was either limited to very specific social groups, or forced upon school populations for whom the language of instruction was a foreign language.

The recent growing interest in CLIL can be understood by examining best practice in education which suits the demands of the present day. Globalization and the forces of economic and social convergence have had a significant impact on who learns which language, at what stage in their development, and in which way. The driving forces for language learning differ according to country and region, but they share the objective of wanting to achieve the best possible results in the shortest time. This need has often dovetailed with the need to adapt content-teaching methodologies so as to raise overall levels of proficiency, particularly since the introduction of global comparative measures ranking individual countries through the Programme for International Student Assessment (PISA) of the Organisation for Economic Cooperation and Development (OECD).

This need to be more adaptable and effective has led to attention being given back to cognitive processing and how learning successfully occurs. Discussion started in earnest in the 1950s with the advent of what was termed the 'cognitive revolution' (Broadbent,

1958). Although this was largely a response to behaviourism, focus on cognition and communication became ever more significant as technologies required insight into the development of artificial intelligence. Currently, there is increasing recognition that the exploration of learning by cognitive neurosciences provides alternative insights by which to improve overall efficiency.

Correspondingly, landmark work by Bruner (b. 1915), Piaget (1896–1980), and Vygotsky (1896–1934) led to the development of socio-cultural, constructivist perspectives on learning. These perspectives have had an immense impact on educational theory and practice. Related areas such as multiple intelligences (Gardner, 1983), integration (Ackerman, 1996), learner autonomy (Holec, 1981; Gredler, 1997; Wertsch, 1997; Kukla, 2000), language awareness (Hawkins, 1984) and language-learning strategies (Oxford, 1990) all played a key role in examining ways to raise levels of curricular relevance, motivation and involvement of learners in their education. Moreover, the balance between the individual and the social learning environment has led to alternative means by which to teach and learn both content subjects and languages. Since CLIL straddles these two different but complementary aspects of learning, parallels between general learning theories and second language acquisition (SLA) theories have to be harmonized in practice if both content learning and language learning are to be successfully achieved. In addition, over the last few years, education has been reaching new thresholds as a result of the ability not only to study behaviour and performance, but also to see inside the 'learning brain' (CERI, 2007). As these different elements of learning come together, a new wave of knowledge is consolidating the position of CLIL as an educational approach in its own right (see, for example, Doidge, 2007; Tokuhama-Espinosa, 2008; Marsh, 2009).

Defining Content and Language Integrated Learning

The term 'Content and Language Integrated Learning' (CLIL) was adopted in 1994 (Marsh, Maljers and Hartiala, 2001) within the European context to describe and further design good practice as achieved in different types of school environment where teaching and learning take place in an additional language. Schools in very different contexts across the world had been finding their own ways to enrich learning, sometimes for many years. CLIL set out to capture and articulate that not only was there a high degree of similarity in educational methodologies, but also an equally high degree of educational success. Identifying this success was one major driver within the education professions; mainstreaming the experience for a wider general public was the other.

CLIL is an educational approach in which various language-supportive methodologies are used which lead to a dual-focused form of instruction where attention is given both to the language and the content:

> . . . [A]chieving this twofold aim calls for the development of a special approach to teaching in that the non-language subject is not taught *in* a foreign language but *with* and *through* a foreign language.
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> (Eurydice, 2006: 8)

This opens up doors on an educational experience which can be very hard to achieve in a language-learning classroom. There are various reasons for this which are explored in Chapter 3. CLIL is an approach which is neither language learning nor subject learning, but an amalgam of both and is linked to the processes of convergence. Convergence involves the fusion of elements which may have been previously fragmented, such as subjects in the curriculum. This is where CLIL breaks new ground.

CLIL as a form of convergence

To give a parallel example common in recent times, we can take studies on the environment. In the 1960s, Richard Buckminster Fuller (1895–1983) warned of climate change in the publication *Operating Manual for Spaceship Earth* (1963), and through his work on what was then called 'synergetics'. As a visionary and author, his articulated rationale and concerns only entered the public consciousness very much later.

Some 50 years on, world opinion on climate change remained divided, often because of socio-economic reasons. However, in some countries, recognition that human activity was leading to a degradation of the environment led to a need to educate young people in schools so as to both inform and, perhaps more crucially, influence behaviour. Topics relating to the environment could already be found in chemistry, economics, geography, physics, and even psychology. Yet, as climate change became increasingly worrying, education responded to the need to influence change.

This happened during the 1980s and 1990s through the introduction of a new subject, or set of modules, which focused on the environment. 'Environmental studies' is an example of a newly emerged 'integrated' subject which can be found in schools throughout the world. In order to structure this new subject, teachers of different disciplines would have needed to climb out of their respective mindsets grounded in physics, chemistry, geography, psychology and so on, to explore ways of building an integrated curriculum, and to develop alternative methodologies by which to implement it.

Such a process involves developing professional interconnectedness so as to activate forms of innovation. Pooling skills and knowledge to change existing practice can lead to alternative approaches. Climate change is a global and local phenomenon, so the increasing availability in some countries of information and communication technologies during the 1990s provided tools by which to make some of these methodologies operational.

If we return to languages and CLIL, we have a similar situation. The late 1990s meant that educational insight was firmly set on achieving a high degree of language awareness. Appropriate methodologies were to be used to attain the best possible results in a way which accommodated diverse learning styles. The impact of globalization, like climate change, was being increasingly felt in some parts of the world, especially in Europe during the period of rapid integration from 1990 to 2007. This impact highlighted the need for better language and communication educational outcomes.

In order to respond, it was necessary to examine how more appropriate language teaching and learning could be achieved, and which approach might be most suitable for

respective age groups. For instance, the view that the hours allocated for language teaching within the curriculum were often insufficient to produce satisfactory outcomes was one issue under frequent discussion. Interest in looking at how some language teaching could be done whilst students were learning other subjects, thus providing more exposure to the language overall, was then considered. But this was only one of the issues. Others concerned the need for better linguistic and communicative competence, more relevant methodologies, and higher levels of authenticity to increase learner motivation. This attention given to the need for improved learning results was also found in other subject areas within the curriculum.

CLIL in the Knowledge Age

As with Fuller's vision and the development of environmental sciences, CLIL developed as an innovative form of education in response to the demands and expectations of the modern age. Input from different academic fields has contributed to the recognition of this approach to educational practice. In an age characterized by 'quick fix' solutions, however, which may or may not lead to any form of sustainable outcomes, it is important to contextualise CLIL historically. CLIL is not merely a convenient response to the challenges posed by rapid globalization; rather, it is a solution which is timely, which is in harmony with broader social perspectives, and which has proved effective.

Fragmentation was very much a characteristic of the Industrial Age. Power blocks such as countries, societies and even educational systems operated according to territory, borders and boundaries. The Industrial Age was marked by strategies of position and physically based resources. But globalization and the emergence of the new technologies have moved us into a new era, the Knowledge Age. This has resulted in sweeping changes in how societies, and the educational systems that serve them, operate. In the Knowledge Age, the two main strategies are of movement and unlimited resources, because of the significance of ideas, creativity and intelligence. It is hardly surprising that such a seismic change in global culture pressurizes change within educational systems. Integration, convergence and participative learning are three key characteristics of Knowledge Age organizations which are influencing decisions on what, and how, we teach young people.

The key performance drivers of the Knowledge Age society are commonly cited as the 'Knowledge Triangle' (EURAB, 2007). This triangle integrates education, research and innovation, which are the core features for managing successful change and adaptation. These are also core issues influencing how we can reshape the ways in which we teach languages. When Graddol (2006: 86) describes CLIL as the 'ultimate communicative methodology', he points to one of the major differences between the communicative language teaching movement in the 1980s and the emergence of CLIL in the 1990s. Communicative language teaching was one step towards providing a more holistic way of teaching and learning languages, but for various reasons, especially relating to authenticity, has been insufficient in realizing the high level of authenticity of purpose which can be achieved through CLIL. Much CLIL classroom practice involves the learners being active participants in developing their potential for acquiring knowledge and skills (education) through

a process of inquiry (research) and by using complex cognitive processes and means for problem solving (innovation). When the teacher pulls back from being the donor of knowledge and becomes the facilitator, as is often found in CLIL practice, forces are unleashed which empower learners to acquire knowledge whilst actively engaging their own and peer-group powers of perception, communication and reasoning.

As CLIL practice often preceded research (although some fundamentally important research was available through the 1980s and 1990s, drawing on the experience of Canadian immersion) it was some time before scientific validation of the approach could be made. But as research results became available (see Chapter 7), those involved with forms of CLIL increasingly came to the view that variants of this approach could be seen as providing education which goes beyond language learning. So, whereas in one situation the language may be the dominant focus, in another it may be the content, but in each there is a fusion resulting from the methodologies which can lead to positive educational outcomes. What separates CLIL from some established approaches such as content-based language learning, or forms of bilingual education, is the planned pedagogic integration of contextualized content, cognition, communication and culture into teaching and learning practice (Coyle, 2002: 45). This is explored in detail in Chapters 3 and 4.

1.3 What are the driving forces behind CLIL?

There are two major reasons which underpin the interest in CLIL within a specific country or region. These involve reactive (responding to situations) and proactive (creating situations) responses to challenges or problems.

Reactive reasons

There are countries in the world where the language of instruction is foreign to the majority of the learners in schools and colleges. An official language may be adopted as the medium of instruction for some part of schooling, often at secondary level, which acts as a language of national unity.

This is typical in some countries in sub-Saharan Africa. For example, Mozambique, which has some 20 distinct first languages, has adopted Portuguese, as has Angola. Tanzania and Ethiopia, likewise having a mosaic of languages amongst their populations, have adopted English. In the past, both South Africa and Namibia adopted Afrikaans, before widely switching to English. Even though there are some 2,000 languages in Africa, three languages are commonplace as medium of instruction: English, French and Portuguese.

In Mozambique, about six per cent of citizens view Portuguese as their first language, and it is estimated that some 27 per cent can speak or otherwise understand the language (Benson, 2002). Figures like these invite the question of how children and young people manage in their school years when the language of instruction may be far removed from their life experience. An educational language policy, as found in Mozambique, may be one reason why school wastage is sometimes huge. In South Africa alone it is estimated that

some 75 per cent of children fail school (Heugh, 2000), and part of the reason for this is widely attributed to language issues and not adapting classroom methodologies to the demands of learning through an additional language.

Considering that human competence-building is critical for the social and economic development of any country, such figures make alarming reading. In terms of language policy, the issue is whether the medium of instruction is instrumental in weakening educational development. Language policy needs to be implemented with language pragmatism and CLIL emerges as one solution for achieving this in different countries.

Language problems are by no means exclusive to some continents. The sub-Saharan cases here are extreme examples, but there are many challenges found elsewhere in relation to nurturing minority or threatened languages, or accommodating the needs of migrant children who have low fluency in the major language of instruction. Recent changes in European classroom demographics resulting from migration is one example.

If a country is to convert a language problem into language potential then solutions have to be identified which are workable in the classroom. Regardless of policy decisions, it is the social microcosm of the classroom, and learning practice, which reflect the successes or failures of the community as a whole.

CLIL plays a role in providing a pragmatic response towards overcoming linguistic shortcomings, and in promoting equal access to education for all school-aged students, including those with additional support needs. In the reactive scenario, the problem of medium of instruction is recognised, and followed by methodological and curricula adjustment. Methodologies, sometimes called language-supportive, or language-sensitive, can be introduced for the teaching of subjects across the curriculum. This means that all teachers need to take responsibility for language development through a dual focus when teaching other subjects. The type of approach may differ, but any language burden on children or students can be alleviated if CLIL methodologies are embedded in teaching and learning.

Proactive reasons

Proactively identifying solutions by which to enhance language learning, or some other aspect of educational, social or personal development, is the other major reason why attention is given to forms of CLIL.

For example, French immersion in Canada was developed to strengthen bilingualism in the country. Accounts differ as to why it became so popular so quickly, but it is reasonable to assume that this was due to a simultaneous grassroots and top-down pressure. At the grassroots, there was frustration at the failure of traditional French language teaching, which led parents to support the 1965 introduction of immersion in a school (St Lambert) in Quebec.

However, at a higher socio-political level, Canadian society was experiencing pressure for change. In July 1967, Charles de Gaulle made his infamous statement 'Vive le Québec libre', which resulted in heated political debate throughout the country. This was followed, in 1968, by the appointment of Pierre Trudeau as Prime Minister. He sought to preserve national unity, especially between French and English speakers. This led to the Official Languages Act which resulted in Canada having two official languages and the right for

anyone to use either of these languages anywhere in the country. One single overarching reason that immersion received so much support and attention was a proactive need to strengthen national unity. Thus immersion in schools served as a pragmatic response to a linguistic and cultural problem. By 2006, the number of young people undertaking immersion education in Canada was in excess of 300,000.

Another example is Europe, where discussion on economic unity during the 1950s included focus on language policies, and the need for greater levels of multilingualism. In 1958, a European Economic Community regulation (EEC, 1958) determined which languages would be official within the newly forming union of separate countries. From this point it was clear that the new Europe would be a plurilingual entity, and that educational systems would need to make greater efforts to provide language education for more young people. In 1976, the European Education Council (EC, 1976) listed language-learning objectives and argued for the promotion of language teaching outside the traditional school systems. Then, in 1978, the European Commission made a proposal to the member states (EC, 1978) that encouraged teaching in schools through the medium of more than one language. This was a landmark point which acted as a catalyst for the development of CLIL across the continent.

In 1984, the European Parliament questioned weaknesses in languages education, and this was followed in the same year by the Education Council, which accepted that there was a need to give greater impetus to the teaching and learning of foreign languages (EP, 1984). From that year on, there were a range of declarations and statements made about the need to explore alternative paths in languages education. In addition, as with Canadian immersion, finance was invested in projects which led to the development of practical educational solutions such as CLIL. From 1990 onwards, CLIL became increasingly prioritised within the European Union as a major educational initiative (Eurydice, 2006), culminating in the 2005 European Council recommendations that CLIL should be adopted throughout the entire European Union (EC, 2005).

In 2006, the first statistical study on where and how CLIL was being implemented in Europe was published (Eurydice, 2006). It was now clear that, since the launch of the term in 1994, there had been exponential uptake of CLIL across countries. This was due to four simultaneous major proactive forces: families wanting their children to have some competence in at least one foreign language; governments wanting to improve languages education for socio-economic advantage; at the supranational level, the European Commission wanting to lay the foundation for greater inclusion and economic strength; and finally, at the educational level, language experts seeing the potential of further integrating languages education with that of other subjects.

Looking beyond Europe, changes in the world economy mean that several large countries (Brazil, Russia, India and China) have encountered rapid growth as their economies have become interconnected with others around the world. This is one aspect of globalization which results in a reconfiguration of territory so that enterprises become increasingly networked and dependent on others which may be physically distant. These major countries and their increasingly borderless economic global dependency means

that communication and the ability to use a lingua franca is becoming a prerequisite for individual success. There are also other countries such as Malaysia, Singapore and Thailand, which are in the outer economic circles of substantial change, but which also wish to attract various forms of work which is outsourced and which often requires an English-language-proficient workforce.

Whilst it must be stressed that CLIL is not synonymous with English language learning and teaching, the potentially huge global demand for learning English means that it is a popular vehicular language in non-Anglophone areas. Projections are that some one-third of the world's population will be actively learning the language by 2010 (Graddol, 2006: 101). This correspondingly means considerable interest in 'learning content subjects through English' being shown in those countries where it is a vehicular language. It is likely, but not yet sufficiently documented, that such countries will explore which methodologies best suit education where children learn through English as a foreign or second language. Thus CLIL may be increasingly adopted as a proactive means by which to maximize the potential for success. However, whilst for many countries English is the targeted medium, there are other countries, including Anglophone countries, where the vehicular language is not English. Obvious examples include the Canadian immersion movement in French, Basque trilingual programmes involving a heritage language, and CLIL in the UK, where French, German and Spanish are promoted.

1.4 Why is CLIL relevant to contemporary education?

The forces of global change, converging technologies and adaptability to the subsequent Knowledge Age present challenges for education. And within education as a whole, they present challenges for the teaching and learning of additional languages. This is true for the learning of English globally, and for the learning of regional, minority and heritage languages in different parts of the world. As we have previously pointed out, CLIL is not exclusive to the promotion of English as a world language but is embedded in the socio-economic, political and cultural traditions of different nations. For example, some parts of the world such as Australia promote LOTE (Languages Other Than English), where CLIL vehicular languages include Asian, European and heritage languages. In border areas such as between France and Germany, the CLIL language might focus on mutual sharing of both languages. However, we believe that CLIL as a promoter of LOTE has yet to reach its potential in the global arena and may not do so until after the 'saturation' of English as the CLIL medium. Pioneering work using a wide range of languages is gaining momentum and making a crucial contribution to developing CLIL pedagogies – especially in Anglophone countries (Chapter 7 presents one such example).

One change brought about by the new technologies and lifestyle change concerns the learners' mindset. Generation Y (1980–1995) and Generation C (also known as Generation Z, 1995–2015) have been and are being increasingly exposed to advanced technology at a very young age in the form of game consoles, mobile communication and entertainment devices, personal computers, the Internet and so on. Such technology may be harder for

older generations to adapt to, they having been brought up with different thinking conventions; but young people growing up with this technology are prone to developing a mindset to which educators need to respond. This has been described as a desire to 'learn as you use, use as you learn' and differs from the older experience of 'learn now for use later'.

Much education is still locked into the second of these adages, which may well continue to be necessary in certain respects. But educational practice always needs to adapt to the cultural demands of those involved – learners, teachers and communities. Integration has become a key concept in the modern age, alongside immediacy of purpose. Both of these reflect the experience of increasing numbers of young people, and are accommodated within the CLIL educational approach.

Socio-economic change is happening now at a faster pace overall than may have been experienced in the past. Although some countries have undergone very rapid change because of forms of specific pressure, new technologies are also bringing about transformations throughout the world. This means that educational systems also need to adapt even more swiftly than they have done in the past. Some would argue that education tends to adapt slowly, and that, for instance, to change educational practice in the classroom can take some 15–20 years to achieve. If we put this into the context of technological and subsequent lifestyle change, we can see how this is too long a period in a world undergoing rapid transition. It took 40 years for the radio to reach an audience of 50 million, 20 years for the fax machine to reach some ten million customers, under ten years for the mobile phone, and some five years for the Internet. The acceleration of new technologies is having an impact on the lives and aspirations of many people now on an unprecedented scale. 'Globalisation is not incidental to our lives today. It is a shift in our very life circumstances' (Giddens, 1999), and this means that better access to language learning, and learning methods for accelerating performance, are now crucial in many communities.

1.5   Why is CLIL relevant to the teaching profession?

Putting aside the often-cited advantages which a CLIL approach offers – such as enabling learners to access subject-specific vehicular language terminology, or otherwise preparing them for future studies and/or working life – there is the issue of advancing a learner's cognitive development. The ability to think in different languages, even if to a modest extent, can have a positive impact on content learning (Marsh, 2009). The need to regenerate content teaching so that it closely fits the requirements of the modern age has been closely linked to the 'learning brain' (CERI, 2007). To achieve this, the content teacher will need to adapt subject-specific methods so as to accommodate the additional language focus. This does not mean adopting the role of a language teacher. What it does is to open doors on alternative ways of using methodologies which can be rewarding for both the teacher and learners.

From this perspective, CLIL not only promotes linguistic competence, it also serves to stimulate cognitive flexibility. Different thinking horizons and pathways which result from CLIL, and the effective constructivist educational practice it promotes, can also have an