



Stephan Breidbach **Britta Viebrock** (eds.)

CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) IN EUROPE

Research Perspectives on Policy and Practice



Content and Language Integrated Learning (CLIL) in Europe

MEHRSPRACHIGKEIT IN SCHULE UND UNTERRICHT

Herausgegeben von Stephan Breidbach, Gerhard Bach, Dieter Wolff

Band 14



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Mehrsprachigkeit in Schule und Unterricht (MSU)

Mehrsprachigkeit

Mehrsprachigkeit ist Teil der Lebenswelt eines jeden Menschen. Mehrsprachigkeit ist individuell und gesellschaftlich. Sie ist ein Alltagsphänomen.

Mehrsprachigkeit ist neben der Fähigkeit, sprachkompetent handeln zu können, eine wichtige Bewusstseinshaltung. Zu ihr gehört die Bereitschaft, die Welt als eine mehrsprachige anzunehmen, in ihr zu leben und an ihr teilzuhaben. Der Begriff 'mehrsprachige Bildung' gewinnt hierdurch unzweifelhaft eine gesellschaftspolitische, pädagogische und didaktische Dimension.

Schule

Eine primäre Aufgabe von Schule ist, jungen Menschen zu ermöglichen, Handlungsfähigkeit in einer und für eine mehrsprachig verfasste Welt zu erwerben. Schule muss die mehrsprachige Welt erlebbar machen, sie ins Zentrum ihrer Kommunikation stellen und in die Formulierung ihrer Ziele einbinden.

Unterricht

Es gibt viele Möglichkeiten, im Unterricht auf Mehrsprachigkeit zu stoßen. Zunächst sind Schülerinnen und Schüler als Individuen mehrsprachig, ebenso die Schülerschaft als Kollektiv. Hinzu kommen die Inszenierungsformen von Mehrsprachigkeit im Unterricht, vom 'klassischen' Fremdsprachenunterricht bis zum gegenstandsbezogene Lernen in einer fremden Sprache. Aus semiotischer Sicht ist nicht zuletzt auch jeder Fachunterricht mehrsprachig, der auf die Begegnung mit Fachkulturen und ihren Sprachen zielt.

Im Spannungsfeld von mehrsprachiger Welt, mehrsprachigen Menschen und Gesellschaften und ihrer Schule ist die Schriftenreihe MSU angesiedelt. Sie spiegelt das thematische und methodische Spektrum der Erforschung von Mehrsprachigkeit in Bildungs- und Erziehungsprozessen wider. Die Reihe ist offen für Beiträge aus allen Disziplinen, die ihren Blick – theoretisch oder empirisch – auf Mehrsprachigkeit, Schule und Unterricht richten.

Stephan Breidbach (geschäftsführender Herausgeber) Gerhard Bach Dieter Wolff

Multi- and plurilingualism in teaching and learning (MSU)

Multi- and plurilingualism

Multilingualism today is a widespread social reality; plurilingualism is a part of many if not all people's lives. Multi- and plurilingualism thus are an everyday experience.

Furthermore, being plurilingual also describes a personal attitude: Aside from the ability to communicate competently in languages, plurilingualism comprises the awareness of the world as multilingual and the willingness to live and participate in multilingual contexts. Against this backdrop, multi- and plurilingual education clearly has a political as much as a pedagogical dimension.

Schools

One of the primary responsibilities of schools is to enable young people to act competently in a multilingual world. Therefore, schools need to make multilingualism come alive through valuing it as a pedagogical aim and ethos alike.

Teaching and learning

There are numerous ways to experience multi- and plurilingualism in teaching and learning. Learners may be or become plurilingual individuals. Schools are situated in multilingual communities. Even in classroom teaching multilingual settings abound on a continuum from 'traditional' foreign language teaching to content and language integrated learning. Seen from a semiotic perspective, even subject-matter teaching can be multilingual in placing other symbolic systems alongside language and in teaching subject-related discourse through language.

Multi- and plurilingualism in teaching and learning (MSU) addresses the complexity of a multilingual world, multilingual societies and plurilingual individuals. MSU provides a forum for research representing the full spectrum of scientific enquiry into multilingual education. Contributions are welcome from all disciplines and methodological backgrounds.

Stephan Breidbach (managing editor) Gerhard Bach Dieter Wolff

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About the Authors

CLIL: Complementing or Compromising Foreign Language Teaching? Effects and Perspectives of Education Policy Plans

Stephan Breidbach / Britta Viebrock

This chapter serves as an introduction to this volume as well as a contextualisation of the other contributions. The main focus is on current developments in education policy to introduce CLIL to a wider range of learners. By and large, the political discourse is characterised by tremendous optimism concerning the potential of CLIL. Either CLIL is understood as a better way of foreign language learning or it is considered to cover two topical areas (language *and* subject matter competence) for "the price of one". Scientific research considers CLIL as a more complex endeavour and affords a more critical stance also hinting at possible risks for all groups of stakeholders. The papers in this compilation show that first and foremost CLIL needs to be done properly, i.e. theory-driven, informed by empirical evidence and sensitive to specific learning contexts to become a success story.

1 Introduction

Content and Language Integrated Learning has received a strong tailwind over the past decades. CLIL programmes have become a well-established option in different educational settings across Europe; they are on the verge to becoming a mainstream phenomenon in education. Research on CLIL has increased accordingly. Education authorities have readily accepted these developments. In national and European education policy, CLIL has been appreciated in particular for its assumed capacity to promote foreign language learning and multilingualism as well as cognitive flexibility, all of which ideally result in international cooperation, transnational mobility and European integration (e.g. Eurydice 2006). In this respect, CLIL seems to be a powerful tool, if not *the* prototypical approach for achieving central educational objectives of European concern. Judging by the mainstream discourse alone, CLIL could be understood as a more effective approach to foreign language learning than any more traditional programme, and quite a number of stakeholders in the field of language education have readily adopted this perspective.

Taking a first glance at the considerable amount of research results available, education authorities would not have to go far in order to claim the success of CLIL-type provision and to underpin proliferation policies aiming at main-streaming CLIL. However, a closer inspection of such policies and their concomitant official political documents reveals that these are not necessarily based on differentiated discussions of empirical evidence. We may, of course, grant that political documents issued by education authorities aim at sparking educa-

tional innovations and convincing possible stakeholders in the process of implementation. Thus, a rhetoric that priorises positive assumptions over critical considerations can be expected to be a typical attribute of such official documents. As Bonnet cogently observes:

The powerful metaphors of 'two for the price of one' and the 'added value of CLIL' which seem to have become an accepted truth rather than hypotheses to be checked are currently creating a powerful atmosphere of optimism and almost limitless belief into the magic of this approach. (Bonnet 2012: 66)

CLIL has been annexed politically to promote educational aims at European and national levels. However, a similar phenomenon can be observed in language pedagogy where CLIL has long since been adopted as a kind of panacea for the shortcomings not only of grammar-based teaching methods but also of the communicative approach itself (Breidbach 2007). Here, CLIL has been associated with notions such as authenticity with respect to both content and communication as opposed to classrooms falling short of topics relevant to learners and producing badly orchestrated mock-communication of no real concern to anyone. At the same time, schools have discovered CLIL as a distinguishing feature to attract the more able learners.

When looking at CLIL in its specifically European version, i.e. teaching a non-linguisite subject through a foreign language to mainstream learners, we cannot but state that CLIL is undergoing a phase of commodification. There are two imminent problems arising from this situation. First, the success of CLIL may eventually defeat its own purpose through bringing CLIL to the mainstream classroom on the assumption that CLIL for all will work as well as it apparently does for a chosen few at the moment (for a more in depth-discussion see Breidbach/Viebrock 2012). Secondly, CLIL may also have a problematic washback effect to foreign language teaching. Such doubts have been raised more than a decade ago by Decke-Cornill. While CLIL may no longer be as heavily "undertheorised" (Decke-Cornill 1999: 165) as she perceived the situation in the late 1990s, other issues remain which we paraphrase here (cf. 165ff.):

- To what extent does the implementation of CLIL compromise the autonomy of the language subjects in the long run?
- Will we see a return of teacher-centred classrooms through CLIL and the gradual disappearance of learner-centred pedagogies?
- Will CLIL boost the trend towards English as a *lingua franca* at the cost of pedagogies for plurilingualism?

This brings us back to the observation that even though CLIL is seen by many as a powerful approach to language learning, it may have undesired side-effects counteracting other purposes concerning classroom pedagogies or long-term goals in European integration policies. Against this backdrop, the central aim of

this book is to link empirical CLIL research results with the relevance and positioning of CLIL in the education policy discourse. On the one hand, the articles collected here contribute to a more systematic evidence base of CLIL that has been called for on a European level. On the other hand, they reflect research outcomes in the light of developments in education policy. The individual chapters focus on the reconstruction of learning processes as well as learner achievement. They also critically reflect the current "CLIL boom" and provide theory-driven analyses on a conceptual level.

Technically, this volume is a compilation of selected papers presented at the 4th International Langscape Conference held at the Goethe University of Frankfurt/Main and in the CLIL section of the 24th Congress of *Deutsche Gesellschaft für Fremdsprachenforschung* (German Society for Foreign and Second Language Research) held at the University of Hamburg in 2011. It is a bilingual volume with both English and German contributions. The articles are arranged in five topical areas, which will be explained in the following chapters: conceptual reflections, CLIL teachers and teacher education, learning processes and learner achievement, aspects of motivation and – coming full circle – education policy and critical reflections.

2 Conceptual Reflections

Conceptual reflections concerning CLIL prove to be diverse. Depending on individual expertise and perspectives, they are inspired by various schools of thought. In general, it is probably safe to say that they are motivated by reflections on educational settings in general, i.e. the organisation of institutional learning and any kind of stakeholder influence, on the position and developments of education authorities, i.e. influential policy documents, and on the demands and needs of classroom interaction. In this context, a distinction between CLIL as programme and CLIL as subject proves to be helpful. Reflections on CLIL as programme are usually concerned with more comprehensive structures and questions of implementation whereas CLIL as subject considerations often focus on the organisation of lessons and content. The contributions to this part mirror the diversity of conceptual reflections.

The opening move in this book is taken by Peeter Mehisto's attempt at *Integrating CLIL with other mainstream discourses*. In a broad approach he examines ideas from disciplines beyond the usual scope of CLIL and analyses their contribution to CLIL programme development. Drawing on concepts such as professional learning communities, stakeholder influences and decision-making,

¹ We wish to thank Annika Kreft for her dedication and accurate work on the manuscripts as well as Mariella Veneziano-Osterrath for her meticulous proofreading.

distributed leadership, cognition and cooperation, Mehisto moves to a more abstract level, which does not understand the issues of CLIL research and implementation merely on the subject-level and which does not define its peculiarities in the fact that instruction and learning take place in a foreign language. On the contrary, Mehisto argues that CLIL is an educational endeavour that cannot be understood independent of the complexities of education in general and hence needs to be informed just as much by educational research from primarily monolingual contexts as by original CLIL research.

Bettina Deutsch takes a different point of departure by comparatively analysing official documents on multi-/plurilingualism and CLIL endorsed by the European Commission, the European Parliament, or the Council of Europe for their conceptual overlay. She shows that the European concepts of societal multilingualism and individual plurilingualism have undergone a significant shift in meaning towards a greater awareness of the general value attached to particular languages as well as individual language learning profiles for the benefit of multilingual societies. However, Deutsch points out that while CLIL's contribution to foreign language learning had been proposed early in the *White Paper on Education and Training* (European Commission 1995), the shift towards individualised language learning profiles including the significance of heritage languages is not substantially mirrored in the subsequent European documents on CLIL. In effect, CLIL is still understood as a more efficient way of learning European foreign languages and remains largely unconnected to the conceptual developments concerning multi-/plurilingualism.

Henriette Dausend, Daniela Elsner and Jörg-U. Keßler report on a longitudinal case study at a primary school in Hamburg, Germany, where CLIL is offered in self-directed settings. One question that arises is how learners who are only just learning to read and write are able to work in a self-directed manner in a foreign language. Based on pre- and post-test results as well as interview data from teachers, learners and parents, the authors suggest a model for primary CLIL in self-directed learning situations. This model resembles a lock with four gates (forms of organisation, method, content, language/communication), which — metaphorically speaking — must never be opened at the same time, otherwise learners will be submerged in the complexity of the learning environment. Dausend, Elsner and Keßler conclude that primary CLIL and foreign language learning will be impossible without some structural support/scaffolding.

3 CLIL Teachers and Teacher Education

The navigation and balancing of stakeholder influence on different levels has been identified as one of the key factors in the success of CLIL programmes. Teachers are often considered as important stakeholder figures since they are located at the intersection of theory and practice, of policy and implementation, of abstract planning and actual classroom practice. Bearing this in mind, it comes as a surprise that, at present, structured CLIL teacher education programmes are offered only at a limited number of institutions. With the European Language Teacher a model was initiated that highlighted the need for CLIL-specific elements in teacher education across Europe (see Grenfell et al. 2003). At the same time, this model does not consider CLIL elements as a part of the initial training phase, but rather places CLIL training within the context of further education. Thus, CLIL-specific teacher education and research will be an additional focus of this volume with contributions looking at teacher education programmes in different European countries as well as the impact of CLIL practitioner research on teacher education in general and the implementation of CLIL programmes in particular.

Özlem Etus places CLIL within a discussion of worldwide mobility and integration, but also within the context of competitive international labour markets. She argues that the increase of "transnational flows" requires new paradigms in education as well as teacher training. CLIL programmes seem to offer a good way of meeting the challenges present-day learners are confronted with, as the author shows by discussing theoretical, ideological, socio-political and economic aspects of CLIL implementation in Turkey. After having sketched a historical survey of CLIL approaches at various levels in the Turkish educational system, Özlem Etus turns to current reforms in language education in order to examine future possibilities of CLIL and CLIL teacher development in preservice language teacher education programmes. One of the problems she identifies is a rather uniform curriculum with little flexibility as opposed to the diversity of requirements to be met by contemporary education and the need for a more individualised teacher training.

The CLIL teacher's identity is in focus of the research by Lauretta D'Angelo. From a sample of teachers who have received special training in either language teaching or content matter teaching, she examines teachers' responses to the particular demands CLIL poses on them. D'Angelo's interview study reveals that these challenges perceived by the teachers trigger positive effects concerning their attitude and motivation: The teachers report to have re-discovered the "pleasures" of their profession which are accompanied by a positive self-perception and a sense of expertise based personal experiences. Hence, the introduction of innovative programmes such as CLIL challenging established teaching routines may serve as a catalyst for a personal pedagogical and methodological recreation.

Based on a similar design, Francesca Costa examines content lecturers' views on CLIL at tertiary level. In her article she reflects on case studies of and interviews with four university CLIL teachers focusing on their attention to language

as well as input presentation techniques. Apart from discrepancies between the content lecturers' views and their teaching practices, Costa shows that the teachers' sense of professional identity is that of a content expert who does not feel obliged to focus on explicit language work. In conclusion, Costa states a need for a different training of CLIL teachers which includes linguistic aspects and reflections on the nature of all learning as language-based. She suggests to work with the teachers' mindsets as a starting point for awareness-raising.

Mehisto's view that stakeholders exert a decisive influence on the implementation of any educational innovation, thus also the development of large-scale CLIL programmes, is echoed in Julia Hüttner and Christiane Dalton-Puffer's chapter. They distinguish between indirectly involved stakeholders such as policy makers or education authorities and directly involved stakeholders such as classroom agents. Their main interest lies on the influences exerted by teachers' mindsets on language acquisition/learning in the process of CLIL programme implementation. Teachers' mindsets have been identified as influential factors on teachers' actions of any kind. Hüttner and Dalton-Puffer argue that the success story of CLIL welcomed by the education authorities is closely intertwined with the orientation of teachers' mindsets, which in turn contain similar beliefs on the language learning potential and other assumed capacities of CLIL.

The focal point in the contribution by Petra Burmeister, Michael Ewig, Evelyn Frey and Marisa Rimmele are student teachers' actions and planning processes. The paper reports on a Biology-TEFL class at the Polytechnic of Teacher Education (PH Weingarten), which was offered to provide CLIL-specific teacher training at university level. The authors hypothesise that the students' major subjects (either languages or a non-linguistic subject) have a significant influence on lesson planning and lead to teaching scenarios that emphasise either explicit language work or have a strong focus on content matter. The data obtained by means of group discussion and guided interviews confirms this hypothesis and supports the conclusion that the "culture" of each subject/discipline (cf. Bonnet 2000) as well as the function of language for the construction and communication of content matter (cf. Leisen 2010) need to be reflected in the planning process. As a conclusion, Burmeister et al. suggest to establish interdisciplinary planning teams to integrate the norms/approaches of different scientific communities.

4 Learning Processes and Achievement

It is commonly accepted that the quality of the learning outcome depends to a large extent on the quality of the learning process. Because of the complex methodological implications, it is rare to find research investigating both perspectives in a single study. This section of this book brings together research

from both perspectives precisely to highlight these implications and to illustrate what each approach can contribute to the understanding of the mechanics of learning in CLIL and their specific outcomes in terms of learners' achievement.

Within a socio-cognitive theoretical framework, Irina Adriana Hawker examines strategies and underlying knowledge employed by primary English school students in CLIL settings. She examines learners' strategies during semantic processing in such cases in particular where the relationship between linguistic expression, propositional content and cognitive concept need to be worked out and understood. As an outcome of her explorative analysis, Hawker proposes a strategy model divided into four areas: procedural knowledge referring to information management and learning tools; personal knowledge referring to higher order thinking skills; both linguistic and discourse knowledge referring to language-oriented and genre-informed strategies. This model provides a tentative understanding of the complexity of learning mechanisms and the strategies (young) learners resort to in CLIL settings.

The well-established line of research focusing on CLIL's potential for foreign language learning/acquisition, linguistic competence and language awareness is continued by Dominik Rumlich. His large-scale longitudinal study on the Development of North Rhine-Westphalian CLIL Students (DENOCS) aims at a detailed analysis of possible CLIL effects over a period of two years. Drawing on a sample of nearly one thousand Grade six learners of English, the pre-CLIL test of general English proficiency shows that designated CLIL students, who on a regular basis receive additional language instruction, perform significantly better than regular students. An analysis of a subsample of 110 learners, who were divided into CLIL and non-CLIL learners only after a shared preparatory phase, shows a relatively small effect of the teacher, but the importance of individual learner's dispositions and characteristics. As one future outcome of his currently on-going study, Rumlich intends to be able to determine effects that can actually be attributed to CLIL and not to the learners' general cognitive capacities.

Potential language learning processes in CLIL are also at the core of Ulrich Wannagat's contribution. In a qualitative approach, he analyses classroom discourse of history CLIL learners in North Rhine-Westphalia. In a series of lesson transcripts, Wannagat retraces the learners' content-oriented English language use for "authentic" problem-solving situations. The analysis shows that learners become attentive to linguistic problems, explore hypotheses and put possible L2-expressions and forms to the test. Wannagat's main finding is that the learners' not yet fully developed language competence leads to more thoroughly reflected L2-productions as well as the learners' greater awareness of how to verbalise their ideas.

5 Aspects of Motivation

The motivational character of CLIL seems to have large face validity for teachers (see the papers in part 3 of this book). More often than not, one might suspect the motivation to occur as a result of a general "spirit of innovation" that is connected to the implementation of new educational endeavours. Whether the CLIL approach can be accounted for a sustainable increase in motivation still needs to be proved. Quite fittingly, the contributions to this part of the book look at the motivational potential of CLIL for aspects beyond the actual CLIL classroom. CLIL seems to hold some potential for reform in language learning and changes in attitude (towards negatively connoted subjects or languages).

Marie-Anne Hansen-Pauly reflects on similarities and differences between vehicular languages and languages as subjects in the educational system of Luxembourg in order to assess to what extent CLIL provides a "new momentum for learning". Technically, much of the learning that has always taken place in plurilingual Luxembourg would qualify as some form of CLIL, but since it usually happens as incidental learning in one of the national languages rather than in a taught foreign language, it has not been discussed as CLIL. Migration and mobility have exerted a great influence on the language learning classroom in Luxembourg, which is characterised by increasing diversity and a high degree of multilingualism. This complex linguistic situation has to be taken up in teacher training, which ideally devotes a good part of the curriculum to reflections on the diverse functions of language in the learning process (including concepts such as 'everyday' language and academic language), the variety of competence levels in a plurilingual learner population as well as issues of linguistic and cultural mediation. Hansen-Pauly suggests that an awareness of the importance of language for all kinds of learning should be raised in all (future) teachers. The author presents and analyses a number of CLIL related teaching scenarios as sample material in teacher education for reflection on crucial aspects of language in content-based learning.

Next to existing multilingualism in the classroom, language attitudes may also be considered an influential factor which needs to be considered when implementing CLIL. The negative image of German as a language with a supposedly "hard" pronunciation and difficult grammatical rules as well as negative stereotypes towards Germany in the Netherlands, Belgium and France form the starting points for Katja Lochtman and Vinciane Devaux's study. They investigate whether the CLIL approach can be exploited for a change in attitude and language learning motivation. Assuming that negative attitudes cause negative learning outcomes, the authors argue that CLIL may offer a more favourable context to support the students' open-mindedness towards the German language and its communities of speakers. They substantiate this claim in an empirical case study arguing that the turn away from the explicit discussion of linguistic

and cultural aspects towards a vehicular use of German might indeed decrease stereotypes and negative attitudes.

Similarly, Katharina Prüfer studies the effects of implementing CLIL modules (cf. also Abendroth-Timmer 2007) in the mathematics classroom on motivation for learning mathematics. Prüfer applies a ranking system for identifying the learner cohorts who like/dislike mathematics and the English language respectively. One of the most interesting aspects of this approach certainly is the gender bias with only boys listing mathematics in the top 25% of their subjects and mostly girls listing it in the bottom 25% as well as mostly girls listing English in the top 25%. Hence, what is up for discussion here is whether the CLIL approach may offer a much needed backdoor for increasing female learners' motivation towards mathematics. However, the sample size of Prüfer's pilot study is not large enough for drawing valid conclusions, the results seem to suggest positive effects of employing CLIL modules in the mathematics classrooms for most learner types.

6 Education Policy and Critical Reflections

Even though the CLIL approach is still accompanied by tremendous – and often simplistic – optimism as to its potential of meeting all kinds of educational challenges of the 21st century, the *Great Expectations*, as Andreas Bonnet and Christiane Dalton-Puffer call them, are increasingly reconsidered more carefully in scholarly research. In the German context, for example, recent empirical studies display a more critical attitude towards the pre-supposed "added value" of CLIL and try to shed light on the complexity of the field – by studying learner populations of various abilities such as underachievers (cf. Apsel 2012) or multilingual learners (Rauschelbach in progress). For the latter, CLIL is not so much a *second* language learning activity, but rather involves *three* or *four* languages at various competence levels. Many of the prevalent CLIL models must therefore be criticised for assuming more or less homogeneous classrooms with little linguistic diversity or other variation in learner characteristics. The relatively large number of contributions to this part of the book is another indication for the importance of critical reflections in the scholarly discourse on CLIL.

The observation that CLIL is "moving into the mainstream" and thus needs to be conceptualised for a larger number of different kinds of learners is also the starting point for Andreas Bonnet and Christiane Dalton-Puffer's reflections of Competence and standard related questions concerning CLIL. After having reconstructed the claims attached to CLIL such as the potential for foreign language acquisition, mental flexibility and higher order thinking skills, learner autonomy, reflective competences and so forth, the authors scrutinize these claims by reviewing the existing empirical research in three different areas: lan-

guage competence, subject literacy, and "added value"-aspects. Apart from the fact that only the first area seems to be thoroughly studied, Bonnet and Dalton-Puffer draw the conclusion that the competence models employed in the research on subject literacy need to be refined and possibly remodelled in order to be able to describe CLIL-specific effects theoretically and substantiate them empirically.

As general educationalists and experts in foreign language acquisition, Almut Küppers and Matthias Trautmann deliberately reflect on the current CLIL debate from a distance. By examining the CLIL rhetoric within the framework of a wider social and educational context, they afford some fairly "critical remarks on the current CLIL boom". Particularly the elitist notion connected to CLIL in the German discourse raises their concerns. Echoing Bonnet and Dalton-Puffer's (see above) concern that institutional learning in the official school language is a form of "uncontrolled" CLIL for many multilingual learners, Küppers and Trautmann put their finger on the ever sore spot in the CLIL discourse (at least in Germany) that minority, migrant and/or heritage languages need to be included in the CLIL approach and education in general. Whereas research results certainly support a profound L1-development for any kind of competence expansion, be it in an additional language or in other academic fields, authorities seem to be slow in proposing adequate models and value migrant or heritage languages in the same way they sustain global languages. According to Küppers and Trautmann, projects exploring diversity and equity issues as well as multilingual settings ought to be top on the list of further research.

This claim is met by Götz Schwab, whose study of a largely neglected learner population in CLIL stands in line with a number of exploratory projects focusing on *Hauptschule*. Within the German streaming system, this type of school is considered to be the bottom tier and often associated with underachievers or less capable learners.² In Schwab's project, CLIL modules were introduced to a group of fifth graders and observed over a period of two years. Employing a mixed-method design, the author combined classroom videography, language tests and interview data focusing on linguistic aspects (structure of classroom interaction, verbal input by the teacher, language repair strategies, listening comprehension), stakeholder attitudes, and aspects of practical realisation. The positive results of Schwab's case study indeed create an air of optimism, but the author stresses that great care must be taken when implementing CLIL programmes on a large scale for all types of learners.

The reflections on the capacities of CLIL by Wolfgang Zydatiß are somewhat different in nature. He is less concerned with possible consequences of main-

² In how far this classification is perpetuated by the system itself is certainly an important questions, which we can unfortunately not elaborate on here.

streaming CLIL. His starting point is rather the observable diversity in the field of CLIL concerning subjects, language choice, or the various curricular structures in the form of extensive programmes as opposed to rather limited modules. Across such diversity cut wide-ranging and transferable language skills and discursive competencies which learners ought to acquired in any CLIL setting. In a Vygotskyan sense, these competencies would serve as essential "cultural tools" for any kind of post-school training/education and meet the increasing demands on young people's (multi-)linguistic skills in a variety of professional fields or academic disciplines. Zydatiß argues that a description of these competences could serve as a base for quality assurance in formal education in general and CLIL in particular.

More than a decade after Decke-Cornill's cautioning remarks on an overready implementation of CLIL, we can see that at the level of European educational and language policies, unwavering optimism in favour of CLIL persists. The emerging knowledge about the full complexity of CLIL – of which some is presented in the papers in this book – however brings to light that an overly speedy implementation of CLIL for all bears considerable risks for all groups of stakeholders. On a more reconciliatory note, the quintessential message from the papers in this compilation is that CLIL need not compromise foreign language teaching nor does it necessarily put ordinary learners at risk if properly done, i.e.: pedagogically and didactically sound, informed by a growing evidence-base and sensitive to the particular learners' linguistic, cognitive and affective needs in each specific learning context.

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Integrating CLIL with Other Mainstream Discourses

Peeter Mehisto

The important thing in science is not so much to obtain new facts as to discover new ways of thinking about them.

—William Bragg

Change is the law of life and those who look only to the past or present are certain to miss the future.

—John F. Kennedy

This volume is a result of the 4th Annual Langscape Conference – CLIL: Complementing or compromising foreign language teaching? Effects and Perspectives of Education Policy Plans. For the purposes of discussion, the question embedded in the title of the conference is, as this volume testifies, thought-provoking and useful in drawing out diverse and nuanced perspectives. However, the question has a darker side. It can imply a dichotomic view of the world, a frame of mind that thirsts for certainty. Instead, academic discourse often offers uncertainty in what will always be an unstable world of emergent personal beliefs, assumptions, competing priorities and political agendas. That is not to say we do not have considerable knowledge about bilingual education that can be applied in diverse contexts (cf. Baker 2011, Cloud et al. 2000, Cummins 2000, de Mejía 2002, García 2009, Howard et al. 2007) nor is it to say that we cannot build context favourable to bilingual education (Larsen-Freeman/Cameron 2008: 7, Mehisto 2011). It is just that bilingual education including CLIL remain complex (Baker 2011, Cummins 2000) since in addition to context, the skills sets, understandings and actions of stakeholders such as students, parents, teachers, administrators and politicians always interact in unique ways to create their own constraints and opportunities.

It is some of these constraints placed on CLIL and opportunities that could be harnessed to build favourable context for CLIL that are the focus of this chapter. To do so, the chapter seeks to offer ideas from other disciplines that could potentially contribute to CLIL programme development. The chapter first redefines CLIL in greater detail than has been the case in the past thereby critically positioning it in a more transparent manner. As bilingual education is first and foremost simply a form of education, research from primarily monolingual programmes has implications for CLIL. The chapter briefly reviews this literature. Next, the chapter briefly discusses how individuals think and make decisions. This is meant to serve as a cautionary note about the limitations of individual cognition. To address these limitations the chapter proposes that the discourse on CLIL analyse how shared cognition can be harnessed to foster CLIL. To this end, the chapter draws on literature regarding professional learning communities, distributed leadership and pseudo-communities.

1 Redefining CLIL

The following redefinition is offered as a vision of what CLIL can seek to achieve. CLIL is a dual-focused teaching and learning approach in which the

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L1¹ and one or more additional languages are used for promoting both content mastery and language acquisition to pre-defined levels². At least two languages including the L1 are used to teach different content subjects such as Mathematics and History. CLIL educators largely separate the L1 and L2 by teaching a given subject primarily through one or the other language. However, the L1 is used sparingly and judiciously by teachers teaching through the students' L2 and vice versa, thereby taking into account that the L1 and L2 continually interact in the learner's mind. Concomitantly, content and language learning are systematically supported in both content and language classes. In the short and long-term, CLIL aims to support students from diverse socio-economic backgrounds in developing:

- age-appropriate levels of L1 competence in reading, writing, speaking and listening,
- age-appropriate levels of advanced proficiency in L2 reading, writing, speaking and listening comprehension,
- grade-appropriate levels of academic achievement in non-language school subjects, such as Mathematics, Science or History taught primarily through the L2 and in those taught primarily through the L1,
- an understanding and appreciation of the L1 and L2 cultures³
- the capacity for and interest in intercultural communication
- the cognitive and social skills and habits required for success in an everchanging world.

¹ The term LI refers to a student's first and strongest language. For simplicity's sake, when referring to a situation in general, it is assumed that the L1 is also the society's dominant language. At the same time, it is recognised that for individual students from immigrant or minority backgrounds the LI can be their second (L2) or even third language (L3).

² If these levels of language proficiency have not been defined in a regional or a national curriculum, various language proficiency guidelines can be used as a point of departure for their articulation. The American Council of the Teaching of Foreign Languages (ACTFL), the Centre for Applied Linguistics (CAL), Cambridge ESOL, and the Council or Europe all offer such frameworks.

³ Culture is defined as "the shared patterns of behaviors and interactions, cognitive constructs, and affective understanding that are learned through a process of socialization" (CARLA 2012). Interrelated categories of culture could be art, attitudes, beliefs, concepts of the universe, cuisine, events, experience, film, hierarchies, knowledge, literature, material objects, meanings, media, music, notions of time, possessions, practices, religion, rituals, roles, spatial relations, and values. At the same time no cultural construct is likely to be a monolithic symbol embraced by all members of a language community, and that culture is dynamic and therefore constantly changing.

This redefinition builds on earlier definitions of immersion (Genesee 2005: 5) and CLIL (Coyle et al. 2010, Marsh et al. 2010: 9 referring to Maljers et al. 2007). The referenced CLIL definitions offer very limited 'measurables' that could guide educators, officials and researchers in either co-constructing programmes or in measuring progress in programme development. In contrast, the above redefinition seeks to offer more tangible 'measurables'. By referring to both classes taught through the L1 and the L2, the redefinition speaks to the reality that CLIL classes are part of a larger ecology of an entire school. The implied stance is that CLIL does not undermine classes taught through the school's L1 and that those classes do not undermine CLIL. CLIL is presented as a value-added option.

In addition, the redefinition draws out the need to systemically support content and language learning in both content and language classes. This responds to a tendency for content teachers in countries as diverse as Canada, Estonia, Italy, Singapore, Spain, and the United States to have difficulty in seeing themselves in the dual role of content and language teacher (D'Angelo in this volume, Gajo 2007: 578, Genesee 2008: 34, Coonan 2007: 627, Fortune et al. 2008: 89 referring to Silver 2003, Mehisto 2008: 98f.). It has also been suggested that the average language teacher does not see her or himself as a teacher of nonlanguage content (Mehisto 2011). Lucietto (2010: 346) cautions that even in cases where secondary school language teachers are acting as content teachers, lesson observations demonstrate that some of these teachers are continuing primarily to teach language while using content-based themes. In Germany where many secondary school CLIL teachers have been trained to teach a second language and a content subject such as History, they have not been taught to integrate content and language, and this seems to have contributed to a similar relatively prevalent dichotomic view where content teachers do not assume a dual role as a content and language teacher (Viebrock 2007).

The above redefinition of CLIL expressly includes a mention of socio-economic background. This invites those implementing CLIL to avoid establishing elitist programmes – a state of affairs that for example in some German contexts has not been avoided (Wolff 2002: 66, Zydatiß 2012: 23) – and to build instead programmes which serve the needs of students from diverse backgrounds. The latter is a realistic goal. In the four Canadian provinces of Quebec, Manitoba, Saskatchewan and British Columbia, there is 'no real difference in the average family background of immersion and non-immersion students' (Statistics Canada 2010). Even more limited forms of bilingual instruction appear to be suitable to students from diverse backgrounds. Whittaker and Llinares (2009) studied two classes of 11-12-year-olds in their first year of the 4-year cycle of obligatory secondary education. One was a CLIL History class and one a CLIL Geography class in socio-economically different areas of Madrid. They found that for both groups the CLIL "students' written production is similar to that found in

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English language [non-CLIL] classes in the final years of schooling" (ibid.: 231f.). Van de Craen et al. (2007: 198), who studied children in Dutch-medium schools in predominately French-speaking Brussels who had been taught 10% of the curriculum through French for the first four years of primary school, concludes that CLIL has a positive effect 'for all learners irrespective of socioeconomic background'. The Van de Craen et al.-study involved three CLIL schools and one control school. The children in the control school were matched for age, socio-economic status, and language background (Dutch speakers, French speakers, speakers of other languages). The students were administered a Mathematics test that consisted of 9 subtests (ibid.: 193 referring to Dudal 2002). One CLIL school taught Mathematics through French, while two did not, choosing instead to teach Crafts or Environmental Sciences. The subject contents had not been previously or concurrently taught through Dutch. Van de Craen et al. (ibid.: 193) found that "CLIL pupils outperform non-CLIL pupils" on "nearly all subtests", that this was "true for all schools" even the two not teaching Mathematics through French, and that the more verbally the tasks were phrased, "the more remarkable the difference between the experimental and the control group." The language background of the pupils was not found to be a significant variable. Van de Craen et al. (ibid.: 193) conclude that "an enriched language environment seems to have a positive effect on learners' cognitive abilities as they are measured by a standard mathematical test", and this confirms teachers' reporting that CLIL pupils "have a better knowledge of abstract concepts".

Finally, the above proposed redefinition of CLIL integrates one of the key elements of bilingualism/plurilingualism – intercultural communication (cf. European Framework of Reference for Language⁴ (Council of Europe 2007: 168) which views the bilingual/plurilingual individual as taking "part in intercultural action"). It draws culture and intercultural communication out as one of the pillars of CLIL (cf. also Coyle et al.'s 2010 4Cs paradigm). Because the meaning of the term culture is highly debated and various definitions are contested (Eagleton 2000), it is important for a community to agree on a working definition so it can decide on what cultural content will be taught and how learning thereof will be measured. By clearly stating that bilingual education aims to build students' capacity for and interest in intercultural communication, this redefinition of CLIL invites regional and national authorities to reflect this goal in curricula and in initiatives that support curriculum implementation. As with the other constituent elements of the redefinition it would be important to define what is meant by intercultural communication, and how a student's intercultural

⁴ The Common European Framework of Reference for Languages describes a series of language competences that are acquired during the process of developing fluency in any language.

competence can be measured. (Cf. Candelier et al.'s 2010 *Framework of Reference for Pluralistic Approaches to Languages and Cultures* which atomises cultural competences –skills, knowledge, attitudes – in the form of measurable descriptors.)

What the redefinition does not address is the amount of time spent learning through the L1 or L2. It allows for multiple options in the subjects taught (cf. Mehisto 2012: 4 for an overview of some of the programme types that can be grouped under the term CLIL). This invites researchers to apply particular rigor in describing and analysing the influence of: the baseline knowledge of students entering the CLIL programme/class; the number of hours of instruction provided in and through a given language; the role of socio-economic background; language use in the classroom; language use outside of the classroom; teaching and learning practices, and other contextual factors.

2 Teaching practices

The complexities of bilingual education cannot be fully disentangled from the complexities of education in general. When best practice in education is applied, student learning as measured by test achievement has been seen to rise very significantly (Hattie 2009 referring to 800 meta-studies in education; Marzano et al. 2001). By way of extrapolation, it can be assumed that by applying general best practice in education within CLIL programmes, more content and language can be learned. Moreover, as CLIL makes extra demands on students and teachers, it is particularly important to offer an extra measure of support to students through the use of best practice in pedagogy.

As a case in point Stevens (1983) compared 11-12 year old students in a teacher-centred (TC) Canadian immersion programme where 80% of the curriculum had been delivered for two years through the L2 with students of a similar age group who were in a student-centred programme where 50% of the curriculum had been delivered through the L2. Second language skills in the student-centred programme were "comparable to those of students in the TC program, despite the time differences" (ibid.: 262). Stevens (1983: 261, 266f.) states that in the student-centred programme students: chose their own areas of study from within prescribed themes; sought out information to do project work; presented their work; used each other and the teacher as a resource; and students had contact and communication with native speakers of the L2 (cf. also Lyster 2007: 4f. summarising research by Netten 1991 and Netten/Spain 1989). The implication is that pedagogy matters and can have a profound impact on student learning. In a similar vein to Stevens, Legenhausen (2009: 382, 384f.) proposes that in effective and authentic language learning environments students have a say in setting up activities; their previous knowledge is activated; flexibility and

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openness characterise tasks; creativity, self-discovery and self-awareness are promoted, as are group dynamics and social management skills; learning outcomes and processes are negotiated and evaluated; and, accommodations are made for individual differences. Legenhausen's approach can be characterised as student-centred.

Cornelius-White (2007) analysed 119 studies, dating from 1948-2004 covering seven countries and a broad range of students, which had looked at variables associated with person-centred/student-centred education. Cornelius-White (2007: 113) defined person-centred education as including 'teacher empathy (understanding), unconditional positive regard⁵ (warmth), genuineness (self-awareness), non-directivity (student-initiated and student-regulated activities) and the encouragement of critical thinking (as opposed to traditional memory emphasis).' Cornelius-White (2007: 120) concluded that there is a strong correlation between person-centred teachers and improved student achievement.

However, applying Cornelius-White's person-centred/student-centred variables is not a simple matter. Educators operate within complex contexts where numerous factors interact. For example, Nuthall (2005: 903) found that the students' personal and social world competes for space in classrooms. Students observing videos of themselves doing assignments reported that their thinking was driven by how to complete tasks quickly or with the least amount of effort (Nuthall 2005: 918). Additionally, Nuthall found that "typically, students already knew at least 40% of what the teachers intended them to learn". Nuthall (2005: 920) suggests that "teachers depend on the responses of a small number of key students as indicators and remain ignorant of what most of the class knows and understands".

Students who are interested in completing assignments quickly and with little effort while gaining time for their personal and social world are unlikely to challenge classroom activities that do not interfere with those goals. This implies a need to maintain high levels of engagement and high expectations for all students, and for developing a broad and in-depth knowledge and skills base among teachers and students about how to do so. This would imply that reflecting on the learning process whilst also building self-awareness and the skills to manage one's own learning are central to improved achievement. The consequence of not helping students to develop learning skills, to become more autonomous and self-motivated learners can leave those students who are least prepared to manage their own learning at a distinct and likely ever-growing disadvantage. For example, Watkins (2005: 80 referring to Atkinson 1999) reports on a study that reviewed General Certificate of Secondary Education (GCSE) examination re-

⁵ Cf. also Rogers (1961: 283f.) for a discussion of the nature and value of unconditional positive regard.

sults in England, and found that students who "plan the least have just 30% of the scores of pupils who plan the most". In situations where students are faced with intellectually challenging tasks, Veenman et al. (2002: 337), who studied over 300 first-year university students, found that meta-cognitive skills are a greater determinant of student achievement than intellectual ability as measured by IQ tests. This suggests that building learning skills for the learning of content and language has an important role to play in CLIL. Similarly, Chamot (2005), Knouzi et al. (2010), Edmondson (2009) and Kohonen (2009) all argue that effective language learners operate with a high degree of learner autonomy meaning that they are skilled at managing their own learning.

School-based learning in general takes place in classrooms. Communication systems in classrooms are in large part set up by teachers and they shape "the role that pupils can play, and [...] the kinds of learning they engage in" (Hodgkinson/Mercer 2008: xii referring to Barnes 2008). According to Mercer and Dawes (2008: 57), in many classrooms there is an asymmetry between teacher and student-talk with teacher talk dominating. Furthermore, many teachers use 'teacherese', a register of language whose dominant functions are associated with "management and control, and to encourage reasoning", but not dialogue (Hopwood/ Gallaway 1999: 175). Mercer and Dawes (2008) argue that teachers over- and mis-use the "initiation-response-feedback (IRF) pattern" - asking a question, listening to a response and providing some form of feedback or evaluation (Sinclair/Coulthard 1975: 21). These exchanges are also common in bilingual education (Lyster 2007: 89f.). Although IRF exchanges can be used as a dialogic tool to build a narrative leading to a common understanding of intended learning, they can also demotivate and disempower students if they imply that only teachers ask questions without seeking permission and only teachers evaluate the student answers (Mercer/Dawes 2008: 57ff.). Restricted opportunities for students to engage in meaningful dialogue may lead to a decline in student engagement in the learning process. Yair (2000: 252, 254, 256) who studied 865 students in 33 schools concluded that students were engaged during lessons for "only 54 percent of the time" with student self-reported engagement during teacher lectures standing at 54.6% compared with 73% for group work.

Equally importantly, during teacher-student exchanges, it is common for teacher questions to concentrate on the factual without fostering higher order thinking (Echevarria 2004: 88 referring to Gall 1984). Yet, according to Baddeley (2004: 161) students are more likely to recall details from a cognitively challenging than an easy problem. Concomitantly, in dual language (immersion) education, Lindholm-Leary (2001: 139) found that "students were no more likely to incorrectly answer a high-order question than a lower-order one". In CLIL contexts, such a finding invites a further question as to whether students are being asked to and supported in thinking critically about content and language. Furthermore, drawing on the National Assessment for Educational Pro-

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gress study of nine-year-olds in the United States and PISA scores for 15-year-olds from 32 countries, Guthrie (2004: 5) argues that low socio-economic status students "can overcome traditional barriers to reading achievement, including gender, parental education, and income" through engaged reading. Guthrie (2004: 3) argues that engagement includes thinking critically about the text, writing about it, speaking about it, and using learning strategies to cope with the text and gain new knowledge from it. It is engagement through exploration of meaning be that in reading, writing, listening or speaking that thus becomes a key goal of education, and that should lead to improved learning.

The underuse of the potential of talk and higher-order thinking coupled with disengagement can all restrict opportunities for students to reveal the gaps in their current knowledge base, thinking, and language use. They would reduce opportunities for students to "re-arrange their thoughts" and to search for and use language to express those rearranged thoughts, and to take greater charge of their own learning (Barnes 1976: 108). This leads to a reduced sample of student language and verbalised thoughts which a teacher could use to assess teaching and learning needs with an increased potential for uninformed teacher decisionmaking. By giving less public space to student thinking, an opportunity is also lost to accord it and the students' greater status and to recognise their value. Restricted use of student language may also undermine the status of studentproduced language and thoughts. In the above circumstances intended learning is impeded or becomes less meaningful. By contrast, communication awareness has the potential of increasing student engagement and participation in meaningful dialogue. In bilingual education where student L2 use may be largely limited to the classroom this takes on a particular importance.

Furthermore, personal beliefs may lead teachers to restrict opportunities for low-achieving students to access exploratory talk (Solomon/Black 2008: 75ff.). Similarly, Nuthall (2005: 920, 924) argues that even teachers who are considered by administrators as exemplary, are likely to make false assumptions about the level of engagement in learning of both high and low-achieving students, about their capacity to learn, about levels of existing student knowledge, and that these teachers may lack the skill to involve the majority of their students in active discussion and learning. In particular, low teacher expectations may negatively affect students from low socio-economic and minority language backgrounds (Cloud et al. 2000: 12). Yair (2000: 256) asserts that low-achieving students are more likely to be mentally disengaged during lessons and that their alienation correlates with low levels of achievement. Similarly, Cloud et al. (2000) express a concern that "students who are held to lower standards and are not given the opportunity to learn to higher standards of achievement cannot realise their full learning capabilities": educators in bilingual education need to "believe that all students are capable of high levels of achievement".

If beliefs regarding students and learning are not discussed in schools, it is more likely that some staff will have low expectations vis-à-vis some students. Teachers "need opportunities to theorise their teaching", and to discuss and adjust their feelings, beliefs, understandings, and practices (Hardman 2008: 147). For Janks and Locke (2008: 42) critically reflective discourse practice "is the key to educational transformation." Thus, if teachers do not raise their metacognitive and meta-affective awareness through discussion, they will be less likely to consciously manage their beliefs and the impact of those beliefs on students and a school's ethos. As an additional counter-measure to low expectations, Baker (2006: 316) proposes that those working in bilingual education build high expectations for all through a conscious effort to embed a "can do" mentality into the school ethos and by "involving students in decision-making". On a practical level, this implies that learning environments also support students in working in their Zone of Proximal Development (ZPD): building on their current understandings students in their ZPD reach beyond what they could do on their own by having access to the support of peers and adults (Vygotsky 1978: 87). Logic would dictate that education systems also need to support teachers in remaining in their ZPD.

Reeve et al. (2004: 165) found that the more teachers display "autonomy-supportive instructional behaviors, the more engagement their students [show]." Feeling some level of independence, control and power over one's life are fundamental psychological needs, and if these are denied to students, they will seek ways of satisfying these needs in a manner that may well impede learning (Frey/Wilhite 2005: 157, 159). Equally importantly, education systems that are highly prescriptive and seek to heavily control teachers undermine the capacity of teachers to think critically (Scott 2000: 1; cf. also Stobart 2008). In such circumstances, Deci et al. (1982: 858) found that teachers become more controlling: they "lecture and explain more, and they give children less choice and opportunity for autonomous learning" as a consequence of which students' intrinsic motivation declines.

Further bringing to light some of the complexities associated with encouraging and supporting all students in meeting high standards Cloud et al. (2000: 10) state that in bilingual education "it is not enough that standards be clearly defined and challenging, they must also be (a) understood, (b) accepted, and (c) implemented in a coherent fashion by all educational and support personnel in the program." If expectations need to be stated, understood and implemented in a coherent fashion, this also implies that language and content goals should be established and discussed among teachers and in all classes with students. Without this discussion, these goals could not form a coherent whole. Moreover, for students to be able to achieve a learning goal, they need to first know and understand that goal (Black et al. 2004: 14). Hattie (2009: 25) adds that goals must be set for both the short and long-term, and that classroom discussion about learn-