

BFF
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Band 15

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(Hrsg.)

Sprachen lernen integriert –
global, regional, lokal

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Vorwort

Mit und in Sprachen erwerben wir nicht nur die Fähigkeit zu kommunizieren. Sprachen erschließen uns zugleich Zugänge zur Welt, zu sozialen und kulturellen Sinngewebungen und individuellen, sozialen und kulturellen Identitäten und Gruppen. Wenn wir Sprachen lernen, schaffen wir uns nicht nur die Möglichkeit, mit anderen Individuen zu kommunizieren und mit ihnen zu kooperieren, sondern wir eröffnen uns zudem Möglichkeiten der Integration. Zugleich signalisieren wir, wenn wir Sprachen lernen oder deren Erlernen ermöglichen, dass wir andere Zugänge zur Welt, andere Bedeutungszuweisungen und Identitäten anerkennen. Wir geben zu erkennen, dass wir andere Sprachen wertschätzen und ihnen gegenüber Respekt zeigen. Insofern eröffnet das Lernen fremder Sprachen in beide Richtungen Möglichkeiten des einander Kennenlernens, des Verstehens und der Integration.

Integration mit und in verschiedenen Sprachen erfolgt nicht nur auf lokaler Ebene, sondern ist auch ein regionales und globales Phänomen und lässt sich auch beim Lehren und Lernen von Sprachen auf diesen Ebenen beobachten. Der 27. Kongress der Deutschen Gesellschaft für Fremdsprachenforschung (DGFF), der vom 27. bis 30. September 2017 an der Friedrich-Schiller-Universität Jena stattfand, führte unter dem Motto „Sprachen lernen integriert – global, regional, lokal“ die Forschung zusammen, die diese verschiedenen Bereiche und Aspekte des Sprachenlernens und -lehrens beleuchtet und dabei insbesondere die integrativen und integrierenden Wirkungen des Sprachenlernens in den Blick nimmt. Fokussiert wurden im Verlauf des Kongresses die im Untertitel anklingenden unterschiedlichen Ebenen, auf denen das Erlernen fremder Sprachen erfolgt und somit erforscht werden kann: 1) der Aspekt der *Globalität* (Begriffe wie weltweite Verständigung und kultursensible Kommunikation fielen hier); 2) die Perspektive des *Regionalen* (Bezugnahme zu den bildungspolitisch unterschiedlich geregelten Lehr-Lern-Praktiken sowie der Etablierung von Fremdsprachenangeboten in Schule und Universität) und 3) der Gesichtspunkt des *Lokalen* (Reaktionen auf konkrete, oftmals differente Herausforderungen für guten Unterricht und erfolgreichen Fremdspracherwerb). Zudem konnten bei diesem DGFF-Kongress die unterschiedlichen Ausgestaltungen des Spannungsfeldes von wissenschaftlicher Fundierung des Lehrens und Lernens im Vergleich zu konkreten Praktiken und Fallstudien ausgeleuchtet werden.

In diesem Sinne gingen die verschiedenen Kongressbeitragenden jeweils in ihren unterschiedlichen Fachdisziplinen folgenden übergeordneten Fragen nach:

- Welche integrativen Leistungen erbringt das Sprachenlernen in der Schule und in der Gesellschaft?
- Wie kann sprachliche Bildung vom frühen Fremdsprachenlernen im Elementarbereich bis zur berufsorientierten Sprachenlernen aufeinander abgestimmt und damit durchgängiger konzipiert werden?

- Welche Aspekte sind beim Fremdsprachenlernen im Beruf und in der Erwachsenenbildung, welche Besonderheiten beim Sprachgebrauch und Sprachenlernen an der Universität zu berücksichtigen?
- Welche Kompetenzen müssen Lehrende dabei z.B. im Bereich der Diagnostik mitbringen?
- Wie wirken sich Kulturen, Lernorte und Begegnungen auf die Integration beim Sprachenlernen aus?
- Welche Rolle kann dabei die Literatur übernehmen?
- Welche Funktionen und Möglichkeiten haben Medien bei der Unterstützung der Lehr- und Lernprozesse?
- Inwiefern können durch unterschiedliche Sprachen, Kulturen und Disziplinen geprägte Forschungstraditionen bei der Erforschung des Lehrens und Lernens von Sprachen zueinander in Beziehung gesetzt werden und somit zu einem besseren Verständnis beitragen?
- Wie gestaltet sich das Zusammenspiel der verschiedenen Sprachen, die in die Lehr- und Lernprozesse hineinwirken?
- Welche Bedarfe ergeben sich aus dem Wunsch nach oder dem Bemühen um Integration durch Sprachenlernen und welche bildungspolitischen Forderungen lassen sich daraus ableiten?

Diesen und vielen weiteren Fragen wurde in zwei Plenarveranstaltungen, zwölf Sektionen, zwölf Freien Formaten, einer Postersession mit 31 Posterbeiträgen sowie, in Anlehnung an die konzeptionelle Neuerung des 26. Kongresses in Ludwigsburg, einer Podiumsdiskussion zur Gesamthematik „Sprachen lernen integriert“ nachgegangen. Geleitet wurde dies von dem Gedanken, den gesamten Bereich des Lernens und Lehrens von Sprachen in seiner Komplexität und Vielfalt in Bezug auf die Fremdsprachen- und Zweitsprachendidaktik abzubilden. Dazu beigetragen hat damit nicht zuletzt auch der Plenarvortrag „Plurale Ansätze und der REPA: Landesspezifische Aspekte ihrer Rezeption und Verbreitung“ von Michel Candelier. Dieser präsentierte einen Überblick über die Bandbreite didaktischer Ansätze, welche sich in den letzten Jahrzehnten im europäischen Angebot als wesentlich herauskristallisiert haben: *Eveil aux langues*, Interkomprehensionsdidaktik, Integrative Sprachendidaktik sowie Interkulturelles Lernen. Der zweite Plenarvortrag von Michael Long mit dem Titel „ISLA (Instructed Second Language) research and the improvement of L2 learning and teaching“ erweiterte die europäische Perspektive und griff zahlreiche Themengebiete internationaler Forschungstätigkeiten auf. In den zwölf Sektionen ergaben sich Diskussionsräume für eine Vielzahl von Themen, Forschungsprojekten und Methoden, von quantitativ ausgerichteten Großstudien über hermeneutisch geprägte Grundsatzüberlegungen bis zu reflektierten Vorschlägen zu konkreten Lehr-Lern-Szenarien. Die Freien Formate arbeiteten mit unterschiedlichen Kommunikations- und Präsentationsformen, z.B. Arbeitsgemeinschaften, Diskussionsgruppen, Working Sessions, Forscher-Lehrkräfte-Plattformen, Round Tables oder Datensitzungen und

behandelten eine Vielzahl an verschiedenen Themen von Deutsch als Fremdsprache für Flüchtlinge über Mobiles Lernen, Sprachlern-Apps und gemeinsame Abiturstandards bis hin zu Problemstellungen inklusiver Pädagogik.

Der vorliegende Band enthält die überarbeiteten Texte der beiden Plenarvorträge, von den Sektionsleitungen ausgewählte Beiträge aus den einzelnen Sektionen sowie die Berichte über die Freien Formate.

Der hier dokumentierte Kongress wurde nur durch die großzügige Mithilfe zahlreicher Personen und Institutionen ermöglicht.

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- der Deutschen Forschungsgemeinschaft
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- dem Studierendenwerk Thüringen und insbesondere dessen Catering-Abteilung
- dem Vorstand und Beirat der DGFF
- den Instituten für Romanistik, Anglistik/Amerikanistik und DaF/DaZ der Universität Jena
- JenaKultur
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Ein besonderer Dank gilt den beiden Hauptvortragenden Michael Long und Michel Candelier, den Beteiligten der Podiumsdiskussion (Daniela Caspari, Hermann Funk, Bianca Roters und Karin Vogt) sowie dem Moderator Laurenz Volkmann, den Sektionsleitungen, den Moderatorinnen und Moderatoren der Freien Formate und den vielen Vortragenden.

Charlott Falkenhagen
Hermann Funk
Marcus Reinfried
Laurenz Volkmann

Plenarveranstaltungen

MICHAEL H. LONG

CLIL (and EMI): Two for the price of one?

Abstract

Eight types of education programs have been used in North America in recent years in which either a foreign or second language is the medium of instruction for at least part of the school day. The success of Canadian French immersion programs, in particular, has inspired spin-offs in many countries, including content-and-integrated learning (CLIL) and its rapidly spreading equivalent at the university level, English medium instruction (EMI). There are important differences between French immersion and CLIL and EMI, however, and evidence is lacking of CLIL's capacity to achieve better results for foreign language learning than traditional FL courses, or comparable results for subject matter courses to what is achieved when the same subjects are taught by teachers using their and their students' native language. The effects of CLIL and EMI on content learning, in particular, have barely been examined empirically. The few relevant studies suggest that the linguistic demands CLIL and EMI pose for teachers and students can result in dilution of the regular curriculum. Research is urgently needed on at least three fundamental issues.

1. Introduction

Traditional foreign language (FL) classes often fail to graduate school-age children and university students with sufficient command of the language concerned. In many parts of the world, that is particularly true of English as a foreign language (EFL) instruction, but most of what follows could apply just as well to the teaching of French, Spanish, German, Arabic, Mandarin, etc., i.e., to FL learning and teaching in general. The reason EFL is so often the target of criticism is probably because it is the most widely taught FL around the world, largely due to the extent to which English has come to facilitate access to higher education, travel, employment and the mass media over the years, and in many settings serves as a lingua franca. Given how most FLs are traditionally taught – explicitly, text-based, with language as object, controlled by a synthetic linguistic (usually a grammatical) syllabus enshrined in a commercially published course book delivered using some version of present – practice – produce (PPP) pedagogy – consumers are much more likely to be aware of their or their children's shortcomings when what they require is not *knowledge about*, but *communicative abilities* in a FL.

In many countries, dissatisfaction with the end-product of traditional courses has led to new programs intended to remedy the situation. For school-age children, one of the best known is content-and-language-integrated learning, or CLIL. For university students, similar programs are referred to by a variety of names, with English medium instruction (EMI) the most common. In both cases, inspired by

the success of French immersion programs in Canada, the idea is that students will learn more English, French, German, Mandarin, etc., if FL classes are replaced by content classes (math, history, architecture, computer science, etc.) taught through the medium of the L2. After receiving most of their content classes taught through French for several years, evaluations have found that many English-speaking children in Canada graduate from high school with strong functional abilities in the language. Perhaps children in Belgium, Germany or Spain can learn more English if, say, math or history is taught through English at secondary school for three or four hours a week, or computer science or even the entire science and technology curriculum through English at a university in Italy, the Netherlands or Saudi Arabia.

Before turning to the evidence, or the lack thereof, of the effectiveness of CLIL, it is instructive to compare immersion with a variety of other kinds of language and content programs that have been tried in North America in recent years. The comparisons suggest some important factors that might be expected to affect outcomes of CLIL and EMI.

2. Some content-based options for language learning and teaching

A number of approaches to the education of children and adults through the medium of a second or a foreign language have been adopted in North America during the past 50 years, and sometimes in Europe and elsewhere (Cenoz, Genesee & Gorter 2014; Collier & Thomas 2007; Genesee et al. 2006; Harley, Allen, Cummins, & Swain 1990; Liquanti 1999; Johnson & Swain 1997; Met 1998). While each comes with many variants, and the borders between some are porous, it is instructive to recall their typical characteristics, and which ones tend to be associated with success, before considering the likely and observed outcomes of CLIL and EMI, popular in many parts of Europe and spreading rapidly from pre-kindergarten to university there, in East Asia, the Middle East, and elsewhere (Cenoz, Genesee & Gorter 2013; Coyle 2008; Coyle, Hood & Marsh 2010; Dalton-Puffer 2011; Munoz & Naves 2007; Perez-Canado 2012).

2.1 Immersion

One of the most effective approaches, immersion, was first introduced as an educational option in Montreal in the 1970s. Early cohorts consisted mostly of middle-class anglophone children who received their elementary and/or secondary curriculum through French (Cummins 2009; Genesee 1995; Lambert & Tucker 1972; Lyster 2007; Swain & Lapkin 1991). In subsequent years, student populations diversified socio-economically, and French immersion programs developed many variants (early/middle/late, complete/partial, one/two immersion languages, etc.). Research has shown that the best students graduate from high school with their native language, English, intact, and French listening and reading skills statistically comparable to those of monolingual French-Canadian age peers, although their speaking and writing are often still marked by a range of

grammatical errors (Swain 1991). Meanwhile, the students' mastery of subjects taught through French is as good as that of anglophone children taught exclusively in English throughout their school years. French immersion in Canada, in other words, is a case of *additive bilingualism* with no adverse effects on content mastery – two for the price of one.

Not surprisingly, parental support for immersion has always been strong in Canada, motivated in part by the positive results of the early programs and in part because bilingualism in English and French is required for someone to be eligible for many government jobs. Placement in immersion programs is voluntary, and usually much sought-after. Programs inspired by the Canadian example are now to be found in many countries around the world (see, e.g., Johnson & Swain 1997).

It is important to remember that the advanced French abilities achieved by so many immersion students are the product of a decade or more during which at least 50% of classroom exposure and use was in the L2 – far more than the three or four hours a week experienced by students in some CLIL programs. Also, the regular content curriculum in Canadian immersion programs is mostly delivered by trained subject-matter teachers who are native speakers or highly proficient non-native speakers of French, to groups of students with a homogeneous (initially, little or no) command of the L2. The homogeneity means that teachers can adjust their speech to make lessons understandable for potentially all students in a class, simultaneously providing them with usable input for learning French. In CLIL classrooms, on the other hand, content teachers' own command of the FL in some countries may be relatively weak, and students' FL proficiency even weaker. Moreover, students' language proficiency within the same classroom (and in some urban locations especially, their L1 background and exposure to the L2 outside school) often varies considerably, meaning that teachers' speech adjustments may make lesson content comprehensible to some, but not to others, potentially jeopardizing curriculum content, and resulting in input that is also usable for L2 development by some, but not others. Finally, most students begin Canadian immersion programs while still young enough to be able to learn much of the L2 incidentally, the same way young children learn their L1, i.e., without intention, while doing something else – in this case, while focused on the subject matter being communicated though French. Even in cases where CLIL begins early, the few hours typically available per week mean that students tend still to be involved in relatively basic L2 development when in secondary school, by which time the capacity for incidental language learning, while still in play, is weaker.

2.2 Bilingual education

Bilingual education (BE) programs, in which most school subjects are initially taught through the children's L1, e.g., through Spanish for recently arrived immigrant Latino children with limited or no English, vary considerably in such fundamentals as starting age, the number of subjects and proportion of the school

day taught in the L1, and – of special significance – the duration of L1-medium instruction. Two basic types of BE are found in the USA: so-called transitional (early-exit) and maintenance (late-exit) BE programs. The former, lasting from one to, at most, three years, is intended to move students into English-only classrooms as soon as possible, with little interest in preserving children's command of their native language. The latter, supposedly lasting for six years, but in reality for far less in most cases, is aimed at preserving the L1 while gradually equipping students with enough English for study in mainstream English-medium classrooms.

Cummins' 'developmental interdependence' and 'threshold' hypotheses (Cummins 1979, 1981, 2008) predict that such children need to establish sufficient L1 competence before L2 exposure begins if they are to avoid cognitive disadvantages and reap the benefits of bilingualism. Specifically, whereas context-embedded, basic interpersonal communication skills (BICS) may be acquired in from one to three years, development of the typically context-reduced cognitive academic language proficiency (CALP) buttressing the more cognitively demanding, abstract thought processes essential for educational success takes far longer, perhaps four to seven years. And, indeed, such is the case. Research findings show that when literacy and basic schooling are completed in two or three years in the native language, whether in the country of origin or in the new environment, children entering school in the USA between eight and twelve typically require five to seven years to achieve adequate English-language skills for successful progress (including scores on English reading measures), compared with seven to ten years to reach grade level if submerged in English from the get-go (Collier 1989).

Cummins work would, therefore, predict greater success for late-exit BE programs, and again, that is broadly what the research has shown to be the case (August et al. 2008; Collier 1989; Krashen & Biber 1988; Ramirez, Yuen, Ramey & Pasta 1991). Nevertheless, due to a combination of political opposition, sometimes fueled by anti-immigrant prejudice, and the steady defunding of public education in the USA over the past two decades, maintenance BE – and some would argue, BE of any kind in the USA – has had little chance to show what it can do. Results have been positive, despite the constraints, but BE has been badly damaged, along with the educational life-chances of countless children, by the rise of a model favored by political and social conservatives: so-called 'structured English immersion'.

2.3 Structured English Immersion

Depending on language policy in the State concerned and other local circumstances, structured English immersion (SEI; see, e.g., Haver 2002) is a varying mix of full-time explicit, grammar-based ESL instruction, communicative ESL, and sheltered content teaching in an English-only linguistic environment, with no attempt to preserve the recently arrived immigrant children's native

language. After anything from one to three years (in Arizona, often just one year), the children are mainstreamed as soon as they are deemed capable of ‘participating meaningfully’ in regular classes surrounded by native English-speaking American students. The use of ‘immersion’ in SEI is misleading. French immersion in Canada describes programs designed to add a new (official) language for students who already speak the majority language natively. SEI is designed to promote the majority language at the expense of children’s minority native language. The subject matter in immersion is regular curricular content (math, science, social studies, etc.); the subject matter in SEI is English. Immersion students graduate bilingual; SEI students graduate with varying levels of proficiency in English, usually accompanied by a deteriorating command of their L1. SEI, like submersion (see below), is a case of *subtractive bilingualism*. (For scathing critiques of SEI in Arizona, see chapters in Valdez & Faltis 2012, especially Krashen, McSwan, & Rolstad 2012, and Long & Adamson 2012.)

Structured English immersion (SEI) has been advocated by political opponents of bilingual education since the days of the Reagan White House, often on the basis of methodologically flawed analyses of research findings (see, e.g., Baker 1998; Baker & DeKanter 1981, 1983; Rossell & Baker 1996). Excellent critiques of those publications, with re-analyses of the findings, including statistical meta-analyses (e.g., Willig 1985, 1987) have generally shown advantages for bilingual programs (Francis, Leseaux & August 2006; Genesee et al. 2006; Rolstad, Mahoney & Glass 2005; Slavin & Cheung 2005). While the number of studies is small, the same positive results for BE are found by research comparing monolingual and BE programs in Europe (Reljić, Ferring & Martin 2015). The facts notwithstanding (‘fake news’, presumably), the extremely conservative US Supreme Court, the judges on which are intensely political appointments, declared in 2009 in *Horne v. Flores* that SEI is *more* effective than bilingual education. Following well-funded voter initiatives restricting use of bilingual education in Arizona, California and Massachusetts, SEI is now mandatory in all three, and its use expanding elsewhere – an attractive, cheaper option for the political right in a period of increasing anti-immigrant bias and shrinking resources for public education.

2.4 Submersion

Submersion, or ‘sink or swim’, makes no use of students’ L1 or any attempt to preserve it. Students are assigned to mainstream English-only classes right away. Little or no ESL instruction is provided – a few hours of ‘pull-out’ ESL is the best students can hope for – with limited-English-speaking students simply thrown in at the deep end. Their task is challenging: to learn new subject matter through a language many do not speak very well or, in some cases, speak at all. It should be little wonder that many of them sink.

2.5 Content-based language teaching

Content-based language teaching (CBLT) is sometimes used as an umbrella term to refer to most of the eight program types described here (Snow, Met & Genesee 1989). However, it also has a narrower, more specific meaning. In what has come to be considered ‘traditional’ CBLT (Crandall 1993; Brinton, Wesche & Snow 2003; Mohan 1986), ESL is taught using texts from science, social studies, etc., sometimes modified for English language learners, sometimes not, in place of the typically content-free lessons found in commercial ESL textbooks. Few CBLT instructors are trained subject matter teachers. In many cases, the only difference between CBLT and traditional ESL teaching is the use of the subject matter texts. Occasionally, however, e.g., the Vancouver School Board Project (Early, Mohan & Hooper 1989; Mohan 1986), a sophisticated classroom methodology has been developed, with ‘activity’, akin to ‘pedagogic task’ in Task-Based Language Teaching (TBLT; Long 2015), the unit of analysis in lessons that should be of interest for many types of programs beyond CBLT itself. TBLT using subject matter content is another option (Long & Adamson 2012).

2.6 Dual, or two-way, immersion

In dual, or two-way, immersion programs (Lindholm-Leary 2001), a type of bilingual education, classes typically comprise a mix of one third to two thirds English-speaking, and one third to two thirds minority-language-speaking children. Elementary school students initially experience anything from 50% to 90% of the school day in their native (minority) language, the gradually increasing remainder of the time in English (Christian 1994). They are often taught by two certified teachers for half the day each, one a native speaker of English, the other of the minority language. By grade 4, 50% of instruction is conducted in each language. The goal is fluency in both, but given the lack of methodologically rigorous evaluation studies to date, how often that is achieved is open to question. An obvious problem is the difficulty inherent in attempting to make input in either language appropriate for both groups of students at a time, and therefore usable for L1 or L2 development, given that each group of children may start schooling as beginners in the other group’s language. Whether students are surrounded by the L1 or L2 outside the classroom and at home can greatly influence outcomes. There were over 300 two-way immersion programs in the USA in 2005 (Center for Applied Linguistics 2006a), and numbers are rising as BE programs are defunded or even outlawed, and two-way programs seen as a cheaper way of (at least appearing to be) catering to the needs of both L1 and L2 English-speaking children.

2.7 Sheltered subject-matter teaching

Sheltered subject-matter teaching (SST) (Dupuy 2000; Echevarria & Graves 1998; Faltis 1993; Krashen 1991; Short, Fidelman & Louguit 2012) involves content-based courses, e.g., in math or social studies, in which the language of instruction, the L2 (usually English), is modified and a variety of procedures (schema-building, slower speech rate, visual support, etc.) employed to make it comprehensible for students, all of whom are non-native speakers. An advantage is that the same lessons are viable, in principle, for children from a variety of L1 backgrounds. SST is usually found in secondary schools, when students have already achieved 'intermediate' L2 proficiency, or at university, e.g., in an introduction to psychology course at the University of Ottawa taught by the regular psychology instructors in either English or French modified for students whose mother tongue is not the language of instruction (Hauptman, Wesche & Ready 2006). The aims, both typically met, and both paralleling those of immersion education, are to develop proficiency in the L2 while students achieve an equivalent command of grade-level or college curricular content to that of students taking the same course(s) in their L1.

2.8 Foreign language immersion

Foreign language (FL) immersion programs vary as to whether use of the FL is partial or total. In total FL immersion, a typical arrangement is for everything, including initial literacy, to be taught through the FL in grades K - 2, with English use (in the USA) increasing to between 20% and 50% in grades 3 - 6. In partial FL immersion, FL and English use is roughly 50% each from the outset, with literacy in either language first or in both languages simultaneously (Lenker & Rhodes 2007). Some FL immersion programs continue through middle school and into high school. There were about 300 such programs in the USA in 2005 (Center for Applied Linguistics 2006b). A major problem is the frequent lack of articulation between schools and grade levels, resulting in elementary immersion graduates being unable to continue with the same FL at middle school, or middle school graduates at high school. The exceptions are cases like Hawai'i and Louisiana, where heritage languages (Hawaiian and French) are involved, with FL immersion programs in those languages offered at all grade levels in some schools.

FL immersion programs have existed in the USA for over 40 years. They differ from the original Canadian immersion programs chiefly in that the L2 through which content courses are taught is a true FL in the USA, not a second language, whereas French is one of two official languages in Canada and, unlike the situation in the USA, fairly widely available outside the classroom in many areas, especially Quebec, and/or via mass media. In US FL immersion programs, some or all subject matter teaching, mostly at the elementary and middle-school level, is delivered through Spanish, French, Hawaiian, German, Japanese, Mandarin, Arabic, and a small number of native-American and other languages, and with the

exception of heritage languages, the FL is new for all children, not the native language of some of them, as in two-way immersion programs. That said, some FL programs convert to two-way immersion programs when a school district needs to deal with an influx of children whose home language is the FL concerned – an example of the overlap sometimes found in these eight ostensibly distinct models. Finding sufficient qualified teachers with native, or at least adequate, command of the FL can also prove a problem, especially in the case of less commonly taught languages, like Arabic or Mandarin, sometimes resulting in a retreat from FL immersion to more traditional FL course offerings.

3. Summary

Six of the eight North American program types – all but (2.1) immersion and (2.8) foreign language immersion – are responses at the school district, state or federal level to the educational needs of minority-language speakers with limited command of English, the societal language and language of most mainstream education in the USA and Canada. Despite varying importance attached to language learning in individual cases at the local level (Met 1998), their primary purpose is not to maintain children's native language or to add a foreign language, but to transition students to English-medium content instruction as soon as possible. Four programs are monolingual throughout, using English only: (2.3) SEI, (2.4) submersion, (2.5) CBLT, and (with the exception of French in some Canadian programs) (2.7) sheltered subject matter teaching. Two involve the children's home language, but, with few exceptions, only in the early stages, followed by English only: (2.2) BE and (2.6) dual language/two-way immersion. Four involve some or all subject-matter instruction in English from the get-go: (2.4) submersion, (2.5) CBLT, (2.6) dual language/two-way immersion, and (2.7) sheltered subject matter instruction; two do so as soon as is feasible: (2.2) BE and (2.3) SEI. Regrettably, in the USA, English dominance, with English monolingualism in the long run, is considered an acceptable outcome in the USA in six out of eight cases.

Based on the thumbnail sketches above and the results of program evaluations, it is possible to begin to identify features of programs more commonly associated with success and failure, and thereby, to make initial predictions as to the likely outcomes of CLIL and EMI programs in Europe and elsewhere. Some North American models use the students' native language at least part of the time, with success in both L1 and L2 positively related to the duration of L1 use. Most focus on a second language, i.e., a language of wider communication in the surrounding society, usually English, but a few involve content instruction through a foreign language. Most teachers in successful programs are either native speakers or proficient non-native speakers of the language of instruction, and trained both as subject matter and language teachers. Students in the successful programs are usually volunteers, with strong parental support, not draftees, and the programs enjoy high status. They typically result in additive bilingualism with no adverse

effects on achievement in content subjects, whereas some programs, notably (2.2, early exit), (2.3), (2.4), (2.5) and (with considerable variation at the level of individual programs, 2.6), typically result in English eventually supplanting students' native language – subtractive bilingualism.

4. CLIL in Europe and beyond

The perceived need for foreign languages by politicians, educational policy makers and most sector of the general population in the USA is notoriously low. In part due to funding cuts for public education in general, and the prioritization of English and math by federal 'No child left behind' legislation (sometimes referred to as 'No child left bilingual'), the percentage of elementary schools offering a foreign language declined from 31% to 25% between 1997 and 2008, and that of middle schools from 75% to 58% (Rhodes & Pufahl 2009). Advanced study of a few languages at the college level, e.g., Chinese, Korean, Arabic and ASL, has increased in recent years, but the total numbers of students are tiny, and overall foreign language enrollments between 2009 and 2013 declined by 6.7%, with only 7% of students taking a language course of any kind (Goldberg, Looney & Lusin 2015). The situation in Europe and elsewhere is very different, with foreign language learning, especially, but not only, of English, viewed as important at most levels of society.

Like French immersion in Canada and FL immersion in the USA, and in contrast to the six English-dominant North American programs among the eight described above, the original goal of the first CLIL and tertiary-level English medium instruction (EMI) programs in Europe, and now in Asia and the Middle East, was not subject matter learning, but the addition of a second (third, fourth, etc.) language, usually English, but sometimes French, German or another European language. Students' native language was not at risk, provided it was one spoken widely in the surrounding society, although L1 development and maintenance might not be as secure in the case of children of ethnolinguistic minorities or refugees.

Early CLIL programs were often driven by parental, and then political, pressure on individual schools or whole education systems at the state, regional or national level. (For historical background and overviews of CLIL, see Cenoz, Genesee & Gorter 2014; Coyle 2008; Coyle, Hood & Marsh 2010; Dalton-Puffer 2011; Muñoz & Navés 2007. For history and overviews of EMI, see Macaro 2018; Macaro et al. 2018.) The received view was that command of a foreign language (FL) obtained via CLIL provided a significant advantage for educational and employment opportunities, and that the necessary levels of proficiency were better achieved via three or four hours a week of content-based instruction through that language than by an equivalent amount of traditional, code-focused FL teaching. The belief was often inspired by the success of the Canadian immersion programs, the levels of L2 proficiency achieved after conventional FL courses in Europe typically falling far short of those of graduating Canadian high school immersion

students, whose content learning also suffered no adverse effects. At the same time, however, recognition of the many differences between Canada and Europe and between the Canadian and European programs, starting with the massively greater number of hours the former required (as many as ten years of consistent schooling through French), prompted creation of the new term ‘CLIL’. To reiterate, the main motivation initially was not subject-matter learning, but FL learning (or there would have been no need for CLIL or EMI), an additional language through content – two for the price of one – not, as in six of the eight North American programs, content through a new language. Needless to say, however, it is vital that CLIL and EMI students’ subject matter learning does not suffer in the process.

CLIL and EMI programs, like immersion and the other seven North American models, vary both within and across countries. There are differences in starting age (elementary, secondary or tertiary education), the proportion of instruction delivered through the FL (from one subject, three or four hours a week, to much of the curriculum), the surrounding sociolinguistic setting (mostly monolingual, as in France, Germany, Turkey or Saudi Arabia, or mostly bilingual, as in Belgium, Catalonia or the Basque region), selection of students (open to any interested families, or only to children screened in on the basis of existing FL abilities), and type and quality of teachers (content and/or language specialists, with various levels of FL proficiency and training for CLIL or EMI). Of the situation in Spain, Ruiz de Zarobe and Lasagabaster (2010) wrote, “There are no set formulae and methods for CLIL” (p. vii), and “there are as many models as [the 17 autonomous] regions and no single blueprint exists to take root across the country” (p. ix).

The one common factor is that CLIL always involves teaching subject matter through the medium of a foreign (or occasionally, a minority) language, most often English, e.g., social studies or math through English in a Finnish or Spanish secondary school, economics, politics or art history through English or French at a Spanish or a German university, science and technology through English in an Italian or a Saudi-Arabian university, and so on. However, as pointed out by Cenoz, Genessee and Gorter (2014: 255), subject matter instruction through a L2 characterizes Canadian immersion and several other models, as well, and the validity of claimed distinctions between current incarnations of CLIL and various forms of content-based instruction (CBI), including immersion (e.g. Lasagabaster & Sierra 2010) are contested.

At least some CLIL (and EMI) and some Canadian immersion programs usually do differ, however, in several of the nine ways outlined in Figure 1.

French immersion in Canada	CLIL and EMI programs in many countries
<i>Teachers</i>	
Native or near-native speakers of the L2	Non-natives, some with limited L2 ability
Trained content and immersion teachers	Content teachers, with no or variable CLIL/EMI training
<i>Students</i>	
Greater capacity for incidental learning	Somewhat lesser capacity for EMI and for CLIL if it occurs later
Homogeneous L2 proficiency	Often varied L2 proficiency
<i>L2 exposure</i>	
Several years, part or full-time native or native-like teacher input	Three or four hours per week sometimes restricted and deviant teacher input
Some L2 access outside the classroom	Variable, often minimal, L2 access outside
<i>Specialized pedagogic materials</i>	
Often available for immersion, as are materials written for native speakers	Often unavailable for CLIL or EMI, which often must use abridged versions, as a result
<i>Articulation</i>	
Consistently available year to year, with articulation across grades and schools	CLIL may only be available for one semester or year, with little articulation across grades or schools

Figure 1: French immersion in Canada and CLIL and EMI programs in many countries compared (modified from Long et al. 2018)

Most of the differences, unfortunately, have relatively unfavorable implications for CLIL and EMI. (i) Teachers in immersion programs are usually native speakers or very proficient non-native speakers of the L2. This is crucial, given that high proficiency in the L2 is the goal of immersion programs. While CLIL and EMI teachers' command of the L2 in some countries is excellent, in others it can be poor. (ii) Immersion teachers are trained content teachers, and usually trained immersion teachers as well. Most CLIL and EMI teachers are content teachers, but in some countries, many have little or no training or experience as language teachers, depending very much on a program's location (e.g., for the situation for CLIL in Spain, see chapters in Part II: Teacher Training, in Lasagabaster & Ruiz de Zarobe 2010). (iii) Immersion, especially early immersion, relies considerably on students' capacity for incidental learning – the capacity young children have to pick up a language without an intention to do so, while focused on something else, such as play or, in the immersion classroom, on lesson content. Older children and adults can still learn that way, but the capacity for incidental language learning declines with increasing age (Janacsek et al. 2012; Nemeth et al. 2013). In particular, instance learning, i.e., the ability to pick up arbitrary form-function and form-meaning associations (e.g., vocabulary items

and collocations) without conscious attention or intention to do so, is weaker (Hoyer & Lincourt 1998). Immersion students are at a psycholinguistic advantage over most CLIL students if, as is typically the case, immersion programs begin earlier than CLIL programs. (iv) Incidental learning, moreover, requires time and large quantities of rich input. Years spent in immersion programs, even if part-time, late immersion programs, provide children with massively more target language exposure than what can sometimes be as few as three or four hours of CLIL a week (and perhaps, due to articulation problems, only for one or two years). (v) Because nearly all immersion students start as zero beginners, immersion classrooms tend to be relatively homogeneous in terms of students' L2 proficiency, making it possible for teachers to adopt or adapt materials and adjust their own classroom language use in ways that are appropriate for communicating lesson content to all students simultaneously, while in the process providing input that is adjusted in ways that also make it usable by all of them for language learning. L2 proficiency among CLIL students, in contrast, often varies considerably. (vi) The limited L2 exposure available in most CLIL situations is even more problematic if classroom input is phonologically heavily accented and/or ungrammatical, as is the case when a teacher's own command of the L2 is poor. (vii) Immersion students are more likely to have access to the L2 outside the classroom, especially where the L2 is a heritage language or an official language in the country concerned. Access for CLIL students is more variable, and sometimes non-existent, although it can be significant in some countries when the L2 is English. (viii) Materials devised especially for immersion teaching are often available for subjects taught at lower proficiency levels. Later, due to the high levels of L2 abilities immersion students achieve, materials originally written for native speakers of the L2 are viable options. Fewer materials produced especially for CLIL exist as yet, and those intended for native speakers of English or other CLIL languages are usually too linguistically complex. The proficiency goal for Spanish CLIL students in the Basque region, for example, is only B2 on the CEFR scale by the end of secondary education (only B1 for graduates from secondary EFL programs). (ix) CLIL for school-age children often suffers from an articulation problem. Due to an insufficient supply of content teachers with adequate command of the same L2, CLIL math, for example, may be an option for one semester or in one grade, but not the next, or at one school, but not the next.

5. Content learning through CLIL

The answers to some fundamental questions about CLIL were unknown when the first programs were first established in several European countries, and they remain unanswered today. Is FL achievement via CLIL really superior to that produced by traditional courses taught by trained language teachers? And, just as important, if not more so, how does CLIL students' mastery of history or biology compare with what is learned in the next-door classroom by age peers taking the same subjects through their native language? Evaluations of CLIL did not begin

until the mid-2000s, many years *after* programs had been implemented on a large scale. (Imagine the outcry where a new prescription drug released for public use before any controlled studies of its effectiveness or possible harmful side-effects.) Reflecting CLIL's original motivation, the focus of the early evaluations (e.g., Lorenzo et al. 2010) was initially FL achievement. Studies often suffered from major threats to internal validity of the kind that affect many evaluations of educational programs in situ. This was especially the case with selection (Bruton 2011; better students were sometimes chosen for admission to CLIL programs, meaning that learning outcomes were confounded with pre-existing differences), history (students might spend more time on task in some CLIL programs, or receive extra tutoring in English outside), and testing (non-equivalence of pre- and post-tests could produce the appearance of improvement simply because of a practice effect or because the post-test was easier). (See Long 1984 for a discussion of six standard threats to validity in comparative evaluations of L2 programs.)

Despite several reasons to anticipate negative outcomes in that area, several more years passed before CLIL's impact on subject matter learning was added to the scope of controlled studies. Two differences between CLIL and Canadian immersion, in particular: (viii) the scarcity of suitable pedagogic materials for CLIL, and (ix) the articulation problem, could be expected to cause problems. Further grounds for caution should have been the findings of at least three studies completed well before the advent of CLIL.

6. Three 'pre-CLIL' empirical studies

First, as part of an ethnographic dissertation study, Mackay (1986, 1993) had described what happened when native English speakers attempted to teach content lessons in English to Inuktitut-speaking children in the Canadian Arctic. Of particular concern, they tended to repair frequent embarrassing breakdowns in communication due to the language barrier by use of what Mackay termed 'hygienic' measures to clean up trouble – measures such as switching to a simpler question about a topic or dropping a topic altogether, i.e., by diluting the curriculum. Most CLIL teachers, of course, have the additional problem, unlike the teachers he observed, that they are not using their native language when such problems arise, making spontaneous repairs that much harder and the temptation to take content short-cuts that much greater.

Second, Long and Ross (1993, 2009) showed how *linguistic simplification* of a short reading passage about catfish resulted in loss of information in the original version, written for native speakers. *Elaboration* of the same native speaker version, conversely, increased its comprehensibility while retaining all the original information. Studies comparing simplified elaborated, and native speaker baseline versions of the same spoken and written texts have found elaborated versions to achieve almost the same level of improved comprehensibility as simplified versions, but without the non-nativlike L2 usage and loss of lower

frequency, but domain-appropriate, lexical items and collocations that simplification tends to cause – items to which students need to be exposed if they are ever to be learned (Yano, Long & Ross 1994). (For examples and a review of research findings, see Long 2015: 250-259.)

Third, in a laboratory study, Lynch (1987) found that in their efforts to maintain comprehensibility, NSs tasked with describing the same picture-guided stories to individual ESL speakers at three proficiency levels omitted progressively more information as their interlocutors' English abilities decreased.

While not direct studies of CLIL, the findings of the three studies (from the 1980s and 1990s) together implied that the speech modifications of CLIL teachers, who are often NNSs themselves, to CLIL students, whose L2 proficiency is often quite low, might well result in loss of a significant amount of information over a school year, leaving the students' command of the subject matter weaker than that of peers taking the same course through their native language. Subsequent research findings by Al-Thawaini (2018), Long et al. (2018), and Dallinger et al. (2016) have confirmed and extended the results of the earlier studies.

7. Three 'post-CLIL' empirical studies

Inspired by Lynch's work and by earlier research findings in the 1980s (e.g., Long 1982, 1983) on foreigner talk and input modifications to NNSs, Al-Thawaini (2018) used a criterion group design in a methodologically rigorous laboratory study (more complex than as described here), confirming the risk of curriculum dilution in CLIL classrooms. 10 NSs and 10 advanced NNSs of English were each paired with three listeners, one from each of three groups of 20 NSs, 20 high proficiency NNSs, and 20 low proficiency NNSs (as determined by scores on a dictation), randomly assigned and with order of interlocutors counter-balanced. The NNSs were all speakers of Gulf Arabic, full-time students at a large state university in the USA. After a two-story warm-up session to allow speakers to assess their interlocutor's proficiency, the 10 NSs and 10 NNSs narrated the same three picture-guided stories, the order of stories also counter-balanced. After each story, the listener's understanding was measured by the number of information bits (28 in each story) included in their written retellings. Recordings of the 60 sessions and 180 story narrations were transcribed and analyzed in terms of the linguistic adjustments speakers made and the degree of information retention or omission.

It was found that both NSs and advanced NNSs made statistically significantly more speech modifications to both high and low proficiency NNS listeners than to NS listeners. They spoke with lower syntactic complexity (S-nodes per clausal utterance), lesser lexical diversity (Corrected TTR), and lesser lexical sophistication (number of advanced/low frequency verb types over the square root of verb tokens). As measured by the number of the 28 information bits omitted from each story, the NSs also engaged in significantly more content dilution when speaking to both high and low proficiency NNS than to NSs. As was to be