



The contribution of CLIL to learners' international orientation and EFL confidence

José Goris, Eddie Denessen & Ludo Verhoeven

To cite this article: José Goris, Eddie Denessen & Ludo Verhoeven (2019) The contribution of CLIL to learners' international orientation and EFL confidence, The Language Learning Journal, 47:2, 246-256, DOI: [10.1080/09571736.2016.1275034](https://doi.org/10.1080/09571736.2016.1275034)

To link to this article: <https://doi.org/10.1080/09571736.2016.1275034>



© 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 07 Mar 2017.



Submit your article to this journal [↗](#)



Article views: 2428



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 2 View citing articles [↗](#)

The contribution of CLIL to learners' international orientation and EFL confidence

José Goris, Eddie Denessen and Ludo Verhoeven

Behavioural Science Institute, Radboud University, Nijmegen, Netherlands

ABSTRACT

Content and Language Integrated Learning (CLIL) has become increasingly popular all over Europe. As the target language is invariably English, many see CLIL as a way of helping learners develop an optimal command of English as a foreign language (EFL). The focus of many research studies has been on gains in language proficiency but the aims of CLIL reach well beyond this. The present study concentrates on whether CLIL also contributes to building pupils' confidence as EFL users, well-prepared for life in an internationalised world. Specifically, it looks at the impact on two constructs: 'EFL confidence' and 'international orientation'. The study was undertaken with 11 groups of 12–15-year-olds at 'grammar' schools (i.e. preparing for university) in the Netherlands, Germany and Italy and involved 231 pupils: 123 pupils following CLIL streams and 108 mainstream pupils. The results indicate that all pupils, both CLIL and mainstream, showed a positive development on our two variables during their first two years at grammar school. The CLIL intervention seemed to produce only a small added value. This was only a small-scale study but it highlights the need for further investigation of the impact of CLIL with a wider range of learners.

KEYWORDS

CLIL practice in the Netherlands; Germany and Italy; EFL learner confidence; international orientation; English-medium CLIL

Introduction

Content and Language Integrated Learning (CLIL) has been introduced in many European countries since the 1990s onwards. This innovative approach aims to improve language learning opportunities through the use of a target second language in the teaching of a range of subjects in the school curriculum. It has been strongly promoted in Europe where considerable value has been placed on knowledge of foreign languages but conventional teaching methods have been considered inadequate for meeting learners' future communicative needs in a changing, globalised society where English has in effect become the lingua franca (Eurydice Report 2006). Even though in principle any foreign language may be used as a medium of instruction in CLIL programmes, English is the most widely implemented target language for CLIL in Europe (Dalton-Puffer 2011).

Warschauer (2000), among others, has described how the industrial societies of the past are giving way to a new economic order based on global manufacturing, and the use of new technologies. These developments have brought about extensive international trade negotiations and cooperation, and have led the European Union to promote education for multilingual and multicultural citizens in a globalised context, where travelling, studying at a foreign university or building a

CONTACT José Goris  j.goris@pwo.ru.nl

career in a foreign country are within reach of all. Thus, attention to foreign language education has been promoted in European school curricula. Furthermore, globalisation may also be contributing to an awareness among young people that language skills are valuable in an increasingly internationalised marketplace and integrated Europe and the rest of the world. The extensive language input in CLIL classes provides additional opportunities for learners to process and use a foreign language. CLIL pupils are expected to not only learn more language for the purposes of social communication but also to develop a broader range of academic language proficiency that could potentially lay a foundation for TL use in further study or employment (Graz Group et al. 2013).

The implementation of CLIL has been the focus of research ever since it was first introduced and results suggest broadly positive outcomes. Many studies have found higher EFL proficiency levels for pupils enrolled in CLIL classes in addition to mainstream language classes (e.g. Huijbregtse 2001). This was the case even when pupils were at the very early stages of CLIL. Admiraal, Westhoff and de Bot (2006) found significantly higher scores for EFL reading comprehension, general oral proficiency and pronunciation after two years of CLIL. Goris, Denessen and Verhoeven (2013) found similarly positive results for vocabulary, grammar, idioms and text comprehension in three European countries: the Netherlands, Germany and Italy, each of which have rather different CLIL approaches. Dalton-Puffer (2008) also compared research findings from CLIL in different European countries: she found positive effects for receptive language skills, vocabulary and morphology as well as creativity, risk-taking, fluency and speaking confidence. In particular, spontaneous oral production was the area where the difference between CLIL and mainstream learners is most noticeable (Dalton-Puffer 2011).

Studies focussing on affective outcomes such as motivation, positive attitudes towards language learning, satisfaction and increased confidence have also showed positive results in favour of CLIL learners. CLIL learners tend to be more motivated to learn the foreign language than their non-CLIL counterparts and have more positive attitudes towards language learning (Doiz, Lasagabaster and Sierra 2014; Pérez-Cañado 2012). They also develop better communication skills and experience satisfaction when they succeed in mastering the content subjects in the foreign language, a feeling that enhances their motivation and linguistic confidence (Dale and Tanner 2012).

Research has also found that pupils following CLIL programmes had higher EFL proficiency scores before starting CLIL (Rumlich 2013). Verspoor, de Bot and Xu (2015) found initial proficiency to be a strong predictor for later EFL proficiency results, an effect still present after three years of study in a CLIL class, interacting with motivation and attitudes. Otwinowska and Foryś (2015) see the initial presence of favourable attitudes towards CLIL learning as a prerequisite to positive outcomes. There are questions therefore as to whether CLIL 'works' because CLIL classes tend to be 'selective', and thus the pupils following them tend to be more motivated and more proficient in the first place, or whether the CLIL approach itself can be considered the key factor in bringing about the positive outcomes highlighted by research.

The aim of the present study is to investigate how pupils in the Netherlands, Germany and Italy starting CLIL in 'grammar' schools – i.e. secondary schools preparing learners for university – differ from their peers in mainstream classes in these schools in terms of their international orientation and their perceived confidence for using their EFL skills, and how these variables develop in the two groups of pupils after two years.

The aims of CLIL

CLIL is considered by some to be based on egalitarian principles and appropriate for a broad range of learners (Marsh 2002; Wolff 2002). In several European countries (e.g. Spain, Latvia and Estonia and lately in Italy), CLIL programmes have been implemented with a wide range of pupils. However, in practice, CLIL still is predominantly a selective programme, for which schools tend to apply strict admittance criteria: pupil selection typically depends on above-average academic performance, an adequate level of EFL and motivation to persevere (Bruton 2011). These criteria were applied by the schools participating in the present study. Several studies point out that CLIL pupils are often

from internationally orientated homes (Mehisto 2007; Weenink 2005) and have a strong desire to learn English, seeing the CLIL programme as a positive challenge. This suggests that they have what Gardner (1985) describes as integrative motivation, implying that they take pleasure in language learning, and have favourable attitudes towards language learning, L2 native speakers and international cultures. Integrative motivation has repeatedly been found to be conducive to successful second language learning (e.g. Dörnyei, Csizér and Németh 2013; Dörnyei and Skehan 2003; Dörnyei, Csizér and Németh 2006).

CLIL schools have typically also fulfilled a pioneering role in internationalisation in secondary education from several social perspectives. The Eurydice Report (2006) noted 'preparing pupils for life in a more internationalised society and offering them better job prospects on the labour market' among the aims of CLIL, as well as the socio-cultural aim of 'conveying to pupils values of tolerance and respect vis-à-vis other cultures'.

CLIL practices in the Netherlands, Germany and Italy

In the Netherlands, of 642 secondary schools, there are at present 130 schools with English-medium CLIL programmes, most of them 'grammar schools' for academically gifted pupils. Similar figures were not available for Italy or Germany. In terms of the subjects taught through CLIL in these three countries, these are determined by national or regional guidelines. There is also considerable variation in the proportion of lessons taught using CLIL in different countries: Goris, Denessen and Verhoeven (2013) found that in the Netherlands, CLIL can comprise up to 50–60% of the curriculum, while in Germany, the percentage is about 20%. Italy has a modular approach, which means that CLIL subjects are not offered throughout the school year but in a set number of modules, increasing in number per year.

In addition to curricular subjects, CLIL often covers out-of-school activities such as English-oriented language excursions and theatre visits, international pupil exchanges and ICT projects. In this respect, schools in the three participating countries decide their own policy. CLIL school coordinators from the Netherlands and Germany taking part in this study mentioned pupils participating in public speaking contests or the European Youth Parliament as extra opportunities for EFL practice. This was not mentioned by the Italian schools.

Recent developments in CLIL practice relate to the introduction of English-taught programmes into a broader range of school types. A development we wish to mention here is the project launched by the Italian Ministry of Education to make CLIL mandatory in some form in the last year of secondary high schools (*Licei* and *Istituti Tecnici*) in order to provide not only the selected CLIL groups but all pupils with extra EFL practice in preparation for life in the twenty-first century (Langé 2014). This development took place after the data for the present study were collected and does not affect our research findings.

Motivation in L2 learning

Considerable research on motivation for second language learning has been conducted by Robert Gardner and associates (Gardner 1985; Gardner and Lambert 1972). This research initially distinguished between two orientations: integrative and instrumental. Integrative motivation comprises the desire to belong to, and engage with, the target language culture as well as having favourable attitudes towards the learning situation, the teacher and the course. Instrumental orientation encompasses the wish to develop favourable career prospects, and is utilitarian in nature. Socio-linguistic research has confirmed that positive attitudes towards the target language community are linked to high levels of language confidence (Hummel 2013; Noels and Clément 1996). MacIntyre et al. (1998, 2001) stress the fact that the major motivation to learn a foreign language is the development of communicative relationships with target language speakers. MacIntyre et al. define the learner's 'willingness to communicate' as 'readiness to enter into discourse at a particular time with a specific

person or persons, using an L2' (1998: 547). This is a non-cognitive variable, which was found to contribute to L2 achievement, along with linguistic confidence – the trust in one's own ability to use the foreign language adequately. This feeling of confidence and the absence of anxiety are mentioned as a positive influence on a person's willingness to use the foreign language (Dörnyei and Skehan 2003).

In later versions of his work on L2 motivation, Gardner (2010) looked at motivation in classroom learning and noted that it was affected by 'the teacher, the class atmosphere, the course content, materials and facilities, as well as personal characteristics of the student' (2010: 3). This aspect was integrated in Dörnyei and Hadfield's 'L2 Motivational Self' (2013) and relates to the impact of success in the language classroom on the development of confidence in one's L2 skills.

The present study

As we have discussed, present-day educational policy in Europe, and CLIL in particular, typically aims to promote in young people a positive attitude towards other cultures and an interest in global affairs, together with confident advanced language skills which would enable them to take up studies at a foreign university if they so choose, or start a career abroad. To what extent CLIL adds value to the achievement of these aims is the key question motivating this study.

The specific research questions for the study are as follows:

- 1) Are pupils who have chosen to follow CLIL in grammar schools in the Netherlands, Germany and Italy more internationally orientated and more confident in their EFL skills than their mainstream peers at the outset of the CLIL programme?
- 2) Does CLIL contribute more to pupils' international orientation and EFL confidence than mainstream education in the course of the first two years at grammar school in these three countries?

Method

Participants

The participants were basically the same as in our 2013 study (Goris, Denessen and Verhoeven 2013), in which we studied their cognitive EFL proficiency results. There were 231 pupils comprising 123 CLIL and 108 mainstream pupils, aged between 12 and 15. We restricted ourselves to secondary schools preparing pupils for university studies so as to have participants with broadly similar intellectual abilities and career outlook. We refer to these schools as 'grammar' schools or by their local terms, *gymnasium* in the Netherlands and in Germany, and *liceo* in Italy. Three Dutch schools took part along with two German schools, and two Italian schools. Table 1 shows the distribution of participants.

All participants had learnt some English, starting at primary school. In Dutch primary schools, at least one hour per week is obligatory for the last two years when pupils are 11 or 12. In Germany, the 16 individual states decide the details of the school curricula. In most German states, primary school pupils have two compulsory lessons per week in Years 3 and 4, at ages 8 and 9. However, both in the Netherlands and in Germany, many schools teach additional hours and also in lower grades. In Berlin, where one of the study schools was located, children have the opportunity to go to CLIL primary schools, where they practise the target language from Year 1 (aged 6). The Berlin pupils start secondary education at age 12, the other German pupils at age 10. Thus, the latter spend Years 5 and 6 at secondary school, with 2 or 3 hours of EFL teaching on the curriculum before the CLIL lessons start in Year 7.

The situation in the Netherlands and Germany was largely as described above when the data were collected for the present study. In Italy, there have been changes since then. The country undertook a reform in 2010 to make English a compulsory subject with a specific weekly timetable throughout all primary education until the end of secondary school. At the start of the present study, Italian primary schools had some form of foreign language education and many of them had started teaching

Table 1. Distribution of pupils ($N = 231$).

Country	N	Initial age	CLIL		Control	
			Boys	Girls	Boys	Girls
<i>The Netherlands</i>	84					
School 1	22	12.4			11	11
School 2	20	12.3	9	11		
School 3	42	12.5	10	7	14	11
<i>Germany</i>	86					
School 1	45	12.8	14	10	12	9
School 2	41	12.7	7	11	12	11
<i>Italy</i>	61					
School 1	20	14.2	16	4		
School 2	41	14.4	14	10	5	12

English, but in an informal way. There were considerable differences between schools. Formal EFL lessons, generally 2 or 3 per week, were on the curriculum at the start of the *scuola media*, which lasts 3 years and starts at age 11. In short, before the pupils came to their present class at grammar school they had had very diverse EFL learning paths but they can all be seen as beginners.

For the present study, we selected as our 'experimental' groups pupils at the start of secondary CLIL EFL programmes, with their counterparts in mainstream classes in the same schools – with the exception of one mainstream class in a different school in the Netherlands – comprising the control groups. Given the diverse educational contexts of the Netherlands, Germany and Italy, there were inevitably some differences in age and in initial levels of EFL between the different national groups. In the Netherlands and Germany, participants were aged 12 while in Italy, in the first year of *liceo*, they were aged 14. The majority of participants (96%) were born in the country they were studying in, and had the national language as their mother tongue.

Instruments

The participants completed a questionnaire measuring their international orientation and their confidence as EFL learners. These constructs were based on Gardner's (1985) concept of 'integrative motivation' and MacIntyre et al.'s (1998) concept of 'willingness to communicate'. International orientation was considered to encompass a broad, integrative orientation, i.e. a general interest in other languages and cultures, a sense of interest in, and identification with, target language speakers and cultural products, as well as a desire to use the target language for international communication, study, and work. Twenty-one items were drawn up, reflecting aspects of integrative motivation, and a further three items referred to more utilitarian motives such as the wish to have a better job, reflecting Gardner's concept of 'instrumental orientation'. The 24 items had high reliability (i.e. they correlated strongly at $\alpha = .88$ for the pre-test and $\alpha = .85$ for the post-test) and thus appeared to refer to one single underlying construct.

'Confidence as EFL learners' was based on those aspects of Gardner's concept of integrative motivation that pertain to the learning situation, with the addition of the concepts of linguistic confidence and willingness to use the foreign language (Dörnyei and Skehan 2003). It was measured by 5 items (with a reliability of $\alpha = .75$ for the pre-test and $\alpha = .81$ for the post-test). All items were evaluated on a 6-point Likert scale. The full list is given in the Appendix. Pearson's correlations between the constructs of international orientation and EFL confidence were $r = .199$, $p = .00$ for the pre-test and $r = .151$, $p = .02$ for the post-test. Thus, the two constructs were found to be significantly coherent. Pupils with high scores for international orientation will also have high scores for EFL confidence.

Procedure

At the start of the school year in which CLIL classes commenced, participant pupils completed the questionnaire a first time (pre-test). They repeated the questionnaire (post-test) at the end of the

following school year, i.e. more or less two years later. The test administrator, a university researcher, explained to the pupils that they were taking part in a university research project and their answers would be anonymous and for research purposes only. Both the pre-questionnaire and the post-questionnaire were completed in a single lesson period.

Results

An ANOVA of the pre-questionnaire was conducted to show initial variation on international orientation and language confidence. This was followed by ANOVAs of repeated measures of the pre-questionnaire and post-questionnaire.

The descriptive statistics shown in Table 2 indicate that for all three countries, the CLIL groups had higher initial scores than the control groups on both international orientation and EFL confidence: CLIL pupils started out with more interest in the international cultures, foreign languages and the use of English for future careers, and greater confidence in using the target language. This is confirmed by the ANOVA of the pre-test, shown in Table 3, which indicated a significant initial advantage for the CLIL groups on international orientation [$F(1, 225) = 25.16, p < .01$] and EFL confidence [$F(1, 225) = 11.61, p = .001$]. There were also significant differences between countries both for international orientation [$F(1, 225) = 16.05, p < .01$] and for EFL confidence [$F(1, 225) = 9.71, p < .01$]. The German CLIL participants had significantly higher initial scores on international orientation, while the Dutch CLIL pupils had significantly higher scores for EFL confidence. The Italian scores on both variables and for both CLIL and control groups were significantly lower than those of the corresponding Dutch and German groups.

Table 3 shows the development over time of EFL confidence and international orientation. Over the two years, all pupils became significantly more interested in international culture, foreign languages and the use of English: $F(1, 225) = 23.52, p < .01$. Significant interaction effects for group were found [$F(1, 225) = 6.59, p = .011$] and for country [$F(1, 225) = 3.5, p = .032$]. As can be seen in Table 2, there are differences in score development between the groups and countries over time: the German CLIL responses on international orientation actually decreased (from an average of 4.39 to 4.22 on the scale of 1–6), in contrast to participants from the other two countries, who gave more positive responses on the post-test. Interestingly, however, the Italian control group scores for international orientation increased more than those of the CLIL group. Scores for EFL confidence increased for both Dutch groups, but confidence decreased in the German control group and very slightly in the Italian CLIL group. Although overall, the scores on EFL confidence tended to increase over the two years, this was not found to be a significant improvement: [$F(1, 225) = .072, p = .788$].

A more detailed analysis of score development per country is shown in Table 4. This suggests that both Dutch and Italian pupils developed significantly in international orientation during the course of their first two years at grammar school: $F(1, 82) = 12.36, p = .001$ and $F(1, 59) = 12.71, p = .001$

Table 2. Scores for pupil scales, itemized for country.

	CLIL group				Control group			
	Begin year 1		End year 2		Begin year 1		End year 2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>The Netherlands</i>								
International orientation	3.86	0.54	4.07	0.50	3.55	0.57	3.75	0.61
EFL confidence	4.49	0.76	4.67	0.78	3.84	0.86	4.03	1.01
<i>Germany</i>								
International orientation	4.39	0.57	4.22	0.57	3.77	0.67	4.06	0.65
EFL confidence	4.26	1.05	4.41	0.99	4.15	1.07	4.01	1.02
<i>Italy</i>								
International orientation	3.68	0.65	3.92	0.59	3.34	0.55	3.79	0.57
EFL confidence	3.80	1.04	3.79	1.12	3.20	0.84	3.55	0.80

Table 3. ANOVA repeated measures beginning year 1 and end year 2 (pre-test–post-test).

	<i>df</i> *	International orientation			<i>F</i>	EFL confidence			<i>F</i>
		<i>SS</i>	<i>p</i>	η^2		<i>SS</i>	<i>p</i>	η^2	
WS: time	1	4.31	.000	.095	23.52	1.47	.070	.015	3.32
Time × country	2	1.28	.032	.030	3.50	0.82	.398	.008	0.924
Time × group	1	1.21	.011	.028	6.59	0.03	.788	.000	0.072
Time × group × country	2	1.11	.050	.026	3.03	1.67	.154	.016	1.88
BS: country	2	13.64	.000	.104	13.11	31.84	.000	.089	11.02
Group	1	9.94	.000	.078	19.10	19.68	.000	.057	13.62
Group × country	2	0.38	.694	.003	0.365	3.17	.336	.010	1.10

**df* error = 225.

respectively. However, in neither case were there significant differences between the CLIL and control groups.

The German results showed a somewhat different picture: taking scores for international orientation from both CLIL and control participants, there was no evidence of significant growth over time for either group. There was, however, a significant difference between the CLIL and the control group: $F(1, 84) = 11.64, p = .001$. The German control groups developed significantly more interest in international culture, foreign languages and the English language for their future purposes, than the CLIL group.

The scores for the development of EFL confidence also showed differences between groups and countries. In the Netherlands, all pupils developed significantly in their EFL confidence over time, but no significant differences were found between the CLIL and control groups: $F(1, 82) = 4.39, p = .039$. In Germany, the CLIL groups became somewhat more confident while the control groups decreased in confidence. Conversely, in Italy, the control groups increased in EFL confidence but not the CLIL groups. There was thus no significant evidence of either German or Italian pupils as a group increasing in EFL confidence over the two years; however, a more fine-grained analysis showed some growth in confidence over time for the German CLIL group and for the Italian control group.

Discussion

The aim of the present study was to explore whether the CLIL approach, as compared to the mainstream curriculum, adds value in enabling young European learners to develop into confident EFL speakers, prepared for life in a global world. Our research found that the CLIL programmes investigated in Germany, the Netherlands and Italy attracted pupils not only with higher initial EFL

Table 4. ANOVA repeated measures beginning year 1 and end year 2 (pre-test–post-test) per country.

	<i>df</i> *	International orientation			<i>F</i>	EFL confidence			<i>F</i>
		<i>SS</i>	<i>p</i>	η^2		<i>SS</i>	<i>p</i>	η^2	
<i>The Netherlands</i>									
WS: time	1	1.74	.001	.131	12.36	1.44	.039	.051	4.39
BS: group	1	4.09	.005	.093	8.43	17.09	.000	.150	14.43
Time × group	1	0.00	.969	.000	0.002	0.004	.908	.000	0.013
* <i>df</i> error: 82									
<i>Germany</i>									
WS: time	1	0.18	.335	.011	0.94	0.00	.976	.000	0.001
BS: group	1	6.47	.001	.119	11.31	2.81	.184	.021	1.80
Time × group	1	2.21	.001	.122	11.64	0.849	.223	.018	1.51
* <i>df</i> error: 84									
<i>Italy</i>									
WS: time	1	2.95	.001	.177	12.71	0.71	.204	.027	1.65
BS: group	1	1.34	.105	.044	2.71	4.31	.110	.043	2.64
Time × group	1	0.254	.300	.018	1.09	0.82	.171	.032	0.824
* <i>df</i> error: 59									

proficiency than mainstream learners, as shown by our previous research (Goris, Denessen and Verhoeven 2013) but also with an above-average linguistic confidence and interest in the international world. This was the case in all three countries, even though there was some variation between groups and countries in the detail of results. At the pre-test, the scores of Italian pupils on EFL confidence and international orientation lagged behind those of pupils in Germany and the Netherlands. This may be because their native language is of Roman, rather than Germanic, origins; but further, the introduction of EFL as a common curriculum subject in Italian primary education is of a relatively recent date as compared to the other two countries, where primary EFL lessons have been generally adopted over the past few decades. The Dutch CLIL pupils were the most confident EFL users, but the German CLIL classes also started with relatively high scores in EFL confidence and also had the highest initial scores on international orientations.

Our results suggest that the EFL CLIL approach in these three countries did not produce a significantly greater increase in learners' international orientation and language confidence than the mainstream approach: CLIL pupils developed positively, but so did mainstream pupils, and largely to the same degree. Assuming that there was a general inclusion of a global dimension in the curriculum (Mannion et al. 2011), CLIL learners did not develop any particular advantage over non-CLIL pupils as far as international orientation was concerned; rather, it appears that there was a positive development across the grammar schools on this construct.

In this respect, only a few differences between groups (CLIL vs. mainstream) and between countries could be discerned. In the Netherlands and Italy, all groups – both CLIL and control – developed along the same lines: they all became significantly more positively orientated towards international culture, foreign languages and the role of the English language. In Germany, however, the control group increased in international orientation while the CLIL group decreased. One explanation may be found in the fact that one of the two participant schools was located in Berlin, where CLIL primary schools with a variety of target languages are common practice in order to accommodate the multicultural population. Primary CLIL learners are immersed in international thinking from a very early age, which may well account for German pupils' high initial scores on international orientation. It may be that this, then, did not leave much room for growth. The mainstream pupils, on the other hand, started with lower scores, and it seems likely that they benefitted more from the general international orientation of their surroundings and contacts with CLIL schoolmates. As to EFL confidence, the variation in development between groups and countries was even smaller: no significant interaction effects were found.

In interpreting our results, several limitations should be borne in mind. In the first place, the number of participants was small and moreover, they were spread across several nations, resulting in limited numbers of participants per group. The comparison of countries has led to interesting results, yet it is very hard to generalise them to a larger population. More comprehensive studies are necessary to come to a robust value of CLIL. A further limitation lies in the fact that the CLIL groups started with higher initial scores than the control groups. It would have been useful to compare CLIL groups with control groups of mainstream learners having the same pre-test scores but who were studying in similar, but non-CLIL, schools. Even non-CLIL learners sometimes prefer schools offering a CLIL stream because of the international orientation this reflects; it is conceivable that the learning experience of these pupils in such schools is in fact influenced by the 'side-effects' of CLIL on the general school climate. Thus, the differences between the CLIL and mainstream results in the present study must be interpreted with caution.

Despite the fact that the results of the present study do not suggest conclusively that CLIL adds value in terms of promoting international orientation and EFL confidence, it should be noted that the CLIL programmes studied did generally provide an inspiring learning environment for the select group of the most motivated and confident EFL learners. The CLIL approach was generally successful in pushing high initial scores on international orientation and EFL confidence even higher.

Our research findings give rise to suggestions for future research. It would be helpful to investigate further the development of the non-cognitive variables discussed in the present study over a greater

length of time. As the age of learners increases, their educational focus may shift. Their international orientation may be affected by what goes on in the world; their cultural interests may develop in a different direction, and likewise their confidence as an EFL user.

A notable outcome of the present study is that, while mainstream learners have far less contact with target language speakers than CLIL learners, this apparently does not mean that their EFL confidence develops very differently. This raises the question of how the wider range of mainstream learners would perform in a non-selective CLIL context. Marsh (2013) sees CLIL as a particularly appropriate educational approach for today's young language learners, and likely to benefit a broad range of learners, not just a privileged group. As mentioned earlier, this has been a recent initiative in Italy where EFL through CLIL has now been made mandatory in the last year of secondary school. Such initiatives call for further studies to investigate the extent to which the positive outcomes for CLIL, both in language proficiency and in international outlook, are maintained with non-selective implementation. A further issue would be to identify the strategies CLIL content teachers use to implement CLIL effectively with more diverse learner groups, and what attitudes and beliefs support them.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Admiraal, W., G. Westhoff and K. de Bot. 2006. Evaluation of bilingual secondary education in The Netherlands: students' language proficiency in English. *Educational Research and Evaluation* 12, no. 1: 75–93.
- Bruton, A. 2011. Is CLIL so beneficial, or just selective? Re-evaluating some of the research. *System* 39: 523–32.
- Dale, L. and R. Tanner. 2012. *CLIL Activities. A Resource for Subject and Language Teachers*. Cambridge: Cambridge University Press.
- Dalton-Puffer, C. 2008. Outcomes and processes in Content and Language Integrated Learning (CLIL): current research from Europe. In *Future Perspectives for English Language Teaching*, ed. W. Delanoy and L. Volkman, 139–58. Heidelberg: Carl Winter.
- Dalton-Puffer, C. 2011. Content-and-Language integrated learning: from practice to principles? *Annual Review of Applied Linguistics* 31: 182–04.
- Doiz, A., D. Lasagabaster and J.M. Sierra. 2014. CLIL and motivation: the effect of individual and contextual variables. *The Language Learning Journal* 42, no. 2: 209–24.
- Dörnyei, Z., K. Csizér and N. Németh. 2006. *Motivation, Language Attitudes and Globalisation. A Hungarian Perspective*. Clevedon: Multilingual Matters LTD.
- Dörnyei, Z. and J. Hadfield. 2013. *Motivating Learning. Research and Resources in Language Teaching*. Harlow: Pearson Education Limited.
- Dörnyei, Z. and P. Skehan. 2003. Individual differences in second language learning. In *The Handbook of Second Language Acquisition*, 589–630. Wiley Online Library.
- Eurydice Report. 2006. *Content and Language Integrated Learning (CLIL) at School in Europe*. Brussels: European Commission.
- Gardner, R.C. 1985. *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
- Gardner, R.C. 2010. *Motivation and Second Language Acquisition: The Socio-Educational Model*. New York: Peter Lang.
- Gardner, R.C. and W.E. Lambert. 1972. *Attitudes and Motivation in Second Language Learning*. Massachusetts: Rowley, Newbury House.
- Goris, J., E. Denessen and L. Verhoeven. 2013. Effects of the content and language integrated learning approach to EFL teaching. *Written Language & Literacy* 16, no. 2: 186–207.
- Graz Group, Coyle, D., A. Halbach, O. Meyer, K. Schuck and T. Ting. 2013. *Developing Literacy Through CLIL*. The CLIL Magazine. Graz: European Centre for Modern Languages.
- Huibregtse, I. 2001. *Effecten en didactiek van tweetalig voortgezet onderwijs in Nederland*. Utrecht: University of Utrecht.
- Hummel, K.M. 2013. Target-language community involvement: second-language linguistic self-confidence and other perceived benefits. *The Canadian Modern Language Review* 69, no 1: 65–90.
- Langé, G. 2014. CLIL/Emile in Italy: a real driver for lifelong learning. Paper Presented at the ALTE 5th International Conference: Language Assessment for Multilingualism, 10–11 April 2014 in Paris.

- MacIntyre, P.D., S.C. Baker, R. Clément and S. Conrod. 2001. Willingness to communicate, social support and language orientations of immersion students. *Studies in Second Language Acquisition* 23: 369–88.
- MacIntyre, P.D., R. Clément, Z. Dörnyei and K.A. Noels. 1998. Conceptualizing willingness to communicate in a L2. A situational model of L2 confidence and affiliation. *The Modern Language Journal* 82: 545–62.
- Mannion, G., G. Biesta, M. Priestley and H. Ross. 2011. The global dimension in education and education for global citizenship: genealogy and critique. *Globalisation, Societies and Education* 9, no. 3–4: 443–56. DOI: [10.1080/14767724.2011.605327](https://doi.org/10.1080/14767724.2011.605327).
- Marsh, D. 2002. *CLIL/EMILE – The European Dimension*. Jyväskylä: University of Jyväskylä.
- Marsh, D. 2013. *The CLIL Trajectory: Educational Innovation for the 21st Century iGeneration*. Córdoba: Academic Press.
- Mehisto, P. 2007. What a school needs to consider before launching a CLIL programme: the Estonian experience. In *Diverse Contexts – Converging Goals: CLIL in Europe*, ed. D. Marsh and D. Wolff, 61–77. Frankfurt: Peter Lang.
- Noels, K.A. and R. Clément. 1996. Communicating across cultures: social determinants and acculturative consequences. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement* 28, no. 3: 214–28.
- Otwinowska, A. and M. Forys. 2015. They learn the CLIL way, but do they like it? Affectivity and cognition in upper-primary CLIL classes. *International Journal of Bilingual Education and Bilingualism*. DOI: [10.1080/13670050.2015.1051944](https://doi.org/10.1080/13670050.2015.1051944).
- Pérez-Cañado, M. L. 2012. CLIL research in Europe: past, present, and future. *International Journal of Bilingual Education and Bilingualism* 15, no. 3: 315–41.
- Rumlich, D. 2013. Students' general English proficiency prior to CLIL: empirical evidence for substantial differences between prospective CLIL and Non-CLIL students in Germany. In *Content and Language Integrated Learning (CLIL) in Europe. Research Perspectives on Policy and Practice*, ed. S. Breidbach and B. Viebrock, 181–201. Frankfurt: Peter Lang.
- Verspoor, M., K. de Bot and X. Xu. 2015. The effects of English bilingual education in the Netherlands. *Journal of Immersion and Content-Based Language Education* 3, no. 1: 4–27.
- Warschauer, M. 2000. *The changing global economy and the future of English teaching*. *TESOL Quarterly* 34: 511–35.
- Weenink, D. 2005. *Upper Middle-Class Resources of Power in the Education Arena. Dutch Elite Schools in an Age of Globalization*. Amsterdam: University of Amsterdam.
- Wolff, D. 2002. *CLIL/EMILE – The European Dimension*, 47–8. Jyväskylä: University of Jyväskylä.

Appendix: Full list of questionnaire items International Orientation and EFL Confidence

International orientation:

1. I am good at languages
2. If I know English I can get to know other cultures and peoples
3. I need it for later studies
4. I want to know more about the lives of the English speaking nations
5. I want to write letters and e-mails to friends in foreign countries
6. I would like to work in a foreign country
7. If I know English I can learn more about what is happening in the world
8. I want to be like the English or Americans
9. I would like to make friends with foreigners
10. It will help when I am on holiday in a foreign country
11. I will get a better job if I can speak English
12. I would like to learn as many foreign languages as possible
13. I want to read English books and newspapers
14. It must be wonderful to live in America
15. It is interesting to learn more about English and American people
16. I would like to live in England
17. Most of my friends also want to learn English
18. I think America is a wonderful country
19. English people are friendly
20. Some of the most important people in our town are from England or America
21. On the whole you can trust English people
22. Later, after I have left this school, I will go on studying English
23. I would like to get to know more American people
24. On the whole I like English and American people

EFL confidence:

1. I can easily write a text or a small story in English
2. Our English lessons are difficult
3. I never feel quite sure of myself when I speak English in the classroom
4. I feel uneasy whenever I must read or write an English text
5. I always feel that the other children in my class are better at English than I am

Six-point Likert scale answering possibilities:

1. This is absolutely true for me
2. This is almost true
3. This is a bit more true than untrue; more than half true
4. This is a bit more untrue than true; less than half true
5. This is almost untrue
6. This is absolutely untrue for me