CLIL in Hungarian bilingual schools: Problems and solutions

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Introduction

Content and Language Integrated Learning (CLIL) approaches have proliferated in primary and secondary education in Europe since the early 90s, with strong support from EU institutions (Goris 2019). This support stems from the need to develop European citizens' levels of multilingualism in response to ongoing European integration (Gabillon 2020). CLIL refers to a type of bilingual education where school subjects are taught through a foreign language (FL) so learners simultaneously develop subject knowledge plus proficiency in the FL used for teaching that subject (Marsh 2002). CLIL is an umbrella term that covers various language immersion approaches (Bailey 2015) but what distinguishes CLIL from other approaches is this dual, integrated focus on content plus language teaching (Gabillon 2020). CLIL practices cover numerous educational settings (Coyle et al. 2009) and in Hungary, German nationality (nemzetiségi) schools where all subjects are taught in German, English bilingual (kéttannyelvű) schools where some school subjects are taught in English, language lessons that develop language proficiency through literature, are all examples of CLIL.

Research reports numerous benefits of the CLIL classroom over the monolingual classroom. CLIL pupils develop higher language proficiency (Goris 2019), more sophisticated intercultural (Kondal–Bairi 2017) and social (Goris 2019) skills, achieve greater cognitive flexibility and are more motivated (Cole et al. 2010). Importantly, studying school subjects in a FL does not seem to have any negative impact on pupils' knowledge of that subject (Scott–Beadle 2014). Pupils do experience problems with CLIL (see Klimova 2012; Kondal–Bairi 2017) but the greatest challenges are those faced by teachers, challenges with language proficiency, access to materials, CLIL pedagogy.

Teachers should have a high level of FL mastery to ensure CLIL's success. They must communicate subject-specific content and terminology, develop pupils' language skills, manage the classroom mostly in the FL and may feel that their own FL proficiency is inadequate (Banegas 2012; Cañado 2016). With materials, there is a lack of quality, ready-made materials for the CLIL classroom (Cañado 2016; Kondal–Bairi 2017), a particularly acute problem in Hungary (Bakti–Szabó 2016). Invariably teachers have to create their own materials which requires much skill and time, something teachers may lack (Banegas 2015; Pérez 2019).

As for CLIL pedagogy, CLIL teachers in general, are not well-prepared in Europe (Pérez 2019; Cañado 2016). Although young learner FL pedagogy and CLIL pedagogy are rooted in the same socio-constructivist principles and methods (Bailey 2015; Pinter 2017), CLIL teachers face significant additional demands (Trentinné Benkő 2016). It is hard to communicate subject content such as maths to young learners in a FL, and teachers require a wider repertoire of scaffolding (Gerakopolou 2016) or interaction (Evnitskaya 2018) techniques to help pupils understand. They should have knowledge of subject plus the foreign language (FL) through which the subject is taught plus the subject-specific pedagogy to make pupils' learning of that subject easy (Scott–Beadle 2014). Thus their job is more complex than

that of a simple English language teacher. In practice, because of a lack of formal CLIL training, teachers tend to self-train on the job which is far from ideal (Banegas 2015).

In Hungary, approximately 6% of primary schools are target language CLIL schools (Kovács–Trentinné Benkő 2014). About 3.1% of these are English-Hungarian bilingual schools (Kétnyelvű Iskoláért Egyesület, n.d.) which are the focus of this study. Government guidelines regulate bilingual schools in Hungary (EMMI 2013) which for example stipulate the subjects taught in the FL (minimum of three), for how many hours (minimum of five per week) and the language level pupils should achieve by the end of years 6 and 8 which is A2 and B1 respectively according to the Common European Framework of Reference for Languages. Year 1–4 pupils (ages 6–10) can learn P.E., singing, art and craft, art, science in the FL. Additional subjects for years 5–6 (ages 10–12) are target language civilization and IT and for years 7–8 (ages 13–14), biology, civilization, chemistry, geography, history, maths, physics.

Primary bilingual schools have become increasingly popular since the first one opened in 1989 and numbers continue to grow (Trentinné Benkő 2016). This popularity may be due to the extra state funding bilingual schools receive thus encouraging local authorities to introduce bilingual programmes (Nikolov–Szabó 2015). Also bilingual schools in Hungary achieve very good academic results at both secondary (Vámos 2007) and primary level (Nikolov–Szabó 2015) and this may also contribute to their popularity. Whatever the reasons, the number of CLIL schools is increasing but this is not matched by an increase in CLIL training in Hungary to prepare teachers for such schools (Trentinné Benkő 2016).

1. The current study

This small-scale study aims to gain insight into how Hungarian teachers are coping with CLIL in English-Hungarian bilingual schools and is a follow up study to a career tracking survey conducted in 2019 (Sherwin 2021). In the 2019 study English teacher graduates from *a primary teacher training programme at the Faculty of Apáczai Csere János*, University of Széchenyi István (AK SZE), Győr, were questioned about their teaching careers. Results revealed that 26.7% of the 99 respondents (from a total of 138 graduates from 2006–2019), work/have worked as CLIL teachers in English-Hungarian bilingual schools and they wrote in length about problems they face. 26.7% is a high number of AK SZE graduates working as CLIL teachers, a job for which they were not trained. This study therefore aims to explore how English teachers in Hungary cope with CLIL, to understand their needs and consider ways in which the CLIL teaching community in Hungary can be better supported.

2. Methodology

2.1. Research questions, data collection, participants

The three research questions this study seeks to answer are:

- 1. What subjects are taught in English to which age groups in bilingual schools?
- 2. What problems do teachers face?
- 3. How do teachers solve these problems?

From September to December 2021, a short online survey was sent to teachers in English-Hungarian bilingual schools. Teachers were contacted by email and the survey was also posted on Facebook teaching groups to reach a wider audience. Answers were anonymous, teachers could send just one reply. The survey asked teachers about their experiences of teaching school subjects in English, combined ten closed and open questions and elicited information on: background information (e.g., years of experience, subjects and age groups taught); the problems and solutions teachers experienced; suggestions on how to better support teachers for CLIL teaching. The survey was written in English, but the school

subjects such as nature studies/természetismeret were written in English and Hungarian to avoid ambiguity. Appendix 1 contains the survey.

Thirty-eight teachers replied from seventeen different schools in Hungary located in ten different cities/towns. There were three male and thirty-five female respondents, most of whom (28 out of 38) were qualified lower primary (LP) teachers, just a few (10 out of 38) were qualified upper primary (UP) teachers. LP teachers are trained to teach all LP curriculum subjects to years 1–4 (ages 6–10) plus one specialism such as English to years 5–6 (ages 11–12). UP teachers are subject specialists and teach years 5–8 (ages 11–14). Only one teacher had undergone a CLIL teacher training at Eötvös Loránd University, Faculty of Primary and Pre-School Education.

2.2. Data Analysis

Responses to closed questions such as 'Which of these subjects do you teach?' (survey question 5) were tallied into tables, the resulting numbers were converted into percentages to facilitate comparison between different survey items. The percentages were then represented visually on graphs. The open-ended responses were organised into thematic categories such as 'Problems with English proficiency', responses tallied into category tables and converted into percentages.

3. Findings

3.1. Research question 1 (RQ1): What subjects are taught in English, to which age groups?

Figure 1 ranks subjects in order of frequency to give an indication of teacher activity. Each column corresponds to one subject, the colour blue means that this subject is taught to lower primary (LP) pupils, orange to upper primary (UP) pupils; grey to both LP and UP pupils. It should be noted that 'Science' refers to environmental studies/környezetismeret in LP years 3–4, nature studies/természetismeret in UP years 5–6 and biology in years 7–8 (EMMI 2013). Thus for the subject 'art', 42% of teachers taught art to lower primary pupils.

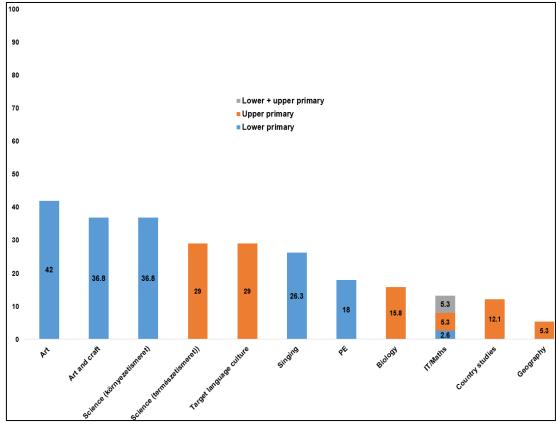


Figure 1 Subjects taught in English Source: author 2021.

Figure 1 reveals that the subjects taught most frequently are art, art and craft, science, target language culture, singing, PE. Clearly LP subjects dominate as indicated by the blue columns, but it should be noted that a sampling bias existed in data collection. More survey respondents were qualified LP teachers than UP teachers and this may explain the prevalence of LP subjects. It is unsurprising that the 'blue subjects' are most commonly taught to years 1–4. Young learners rely on speaking and listening, on visual, interaction-based contexts to understand meaning and subjects such as such as art and craft provide such contexts. Thus it is relatively easy for teachers to help pupils understand art, PE, singing in English. However, it is surprising that science is taught so frequently: 36.8% of teachers teach science to years 3–4; 29% to years 5–6. Science is more abstract than for instance 'singing' and involves more reading and writing so it is harder for teachers to communicate meaning in an age-appropriate way. Active learning, experiential learning, experimental learning methods should be used to teach science effectively to children in English (CLIL for Children 2018) and this can be challenging for teachers not versed in these teaching practices.

3.2. Research question 2 (RQ2): What problems do teachers face?

All 38 teachers stated they had faced problems with CLIL teaching at some point in their careers and five main problems emerged: Time (97.4% of respondents); CLIL materials (44.7%); Teacher English, that is their own language proficiency (39.5%); CLIL Pedagogy (36.8%); Pupil English, that is pupils' language level (23.7%). Table 1 presents these five problems in the left column illustrated by comments from survey data. The comments are from different teachers. The right column gives the percentage of teachers who identified the given problem.

Table 1 Teacher problems with CLIL teaching

Table 1 Teacher problems with CLIL teaching	
Five problems plus illustrative comments.	% of teachers identified this problem
Time	1
To teach in a bilingual school is different from teaching English in 'normal'	97.4%
schools. It needs more time and effort.	<i>91.</i> 470
CLIL Materials	
Are scarce	
There are just limited sources (e.g. bilingual books for subjects) for	
bilingual learners and teachers need to make their own.	
Are poor quality	
There is only 1 book series by Műszaki Kiadó, which is full of mistakes and	
it is definitely not using the CLIL method.	
Are not age-appropriate	44.70/
The books are very complicated and far too detailed for primary school	44.7%
students. Lots of Latin terms which they don't even know in Hungarian.	
I've often been frustrated with the textbooks we use (Műszaki Kiadó)	
because I find the language to be too difficult for the intended age group.	
Do not match Hungarian curriculum	
Hungarian books and teaching materials are not in alignment with any of	
the English ones we have, so it was difficult to synchronize the teaching	
materials.	
Teacher English: problems with	
It's really hard to teach something in English and sometimes I can't find	
, ,	20.5%
the words I want in English.	39.5%
I didn't learn the vocab of these subjects at university I had to teach the	
word 'precipitation' for my first graders that I didn't know or use before.	
CLIL Pedagogy problems with	
Integrating content and language	
My colleagues find it difficult to balance language teaching and teaching	
the subject. One of them taught art in Hungarian and then got the children	
write and learn art vocab in English during art lessons.	36.8%
Subject specific pedagogic content knowledge	
Biology is not my major. I encountered lots of new expressions. I also	
have/had problems with teaching the subject itself as I didn't learn any	
biology at the university. When I planned I didn't see problems the kids can	
have and sometimes it was a big mess in the lesson.	
Pupil English	
It was extremely difficult for the children to comprehend the material AND	22.751
learn both of the new vocabulary to it. I constantly felt that the 45 minutes	23.7%
are never enough and the children were super exhausted.	
and the second s	

Source: author 2021.

The first problem in focus is access to materials. As Table 1 shows, there is a lack of good quality, age-appropriate, methodologically sound CLIL materials tailor-made for the Hungarian classroom and nearly half of teachers commented on this. One publisher, *Műszaki Kiadó*, dominates the CLIL Hungarian market, not all school subjects are covered by this publisher and these teachers are fairly critical of the course books, especially the books for

teaching science. Respondents wrote that a rather teacher-cantered, traditional teaching/learning approach is used that relies on reading and writing tasks rather than the more experiential learning, project-based activities that would help young learners learn science concepts through English more easily.

Concerning Teacher English, most teachers mentioned how a lack of subject-specific vocabulary for all subjects has caused them problems. For example, for a year 4 science topic 'The Human Body' (Vizi 2017), teachers should learn words such as 'joints, fuse together, cartilaginous, skull, ribcage, pelvis' prior to teaching these words to pupils. Other teachers mentioned as challenging the English used to communicate what teachers know in a way that pupils can understand. Certainly, teaching about 'Plate Tectonics' to Year 6 is a complex task linguistically. For a few teachers, classroom English such as giving instructions is problematic. The main point is that many teachers feel unprepared linguistically by their teacher preparation courses, to teach subjects in English.

With pedagogy, the major challenge is integrating content and language, a main principle underpinning CLIL practices. As Table 1 shows, one teacher taught art in Hungarian and then asked pupils to learn art expressions in English. Another teacher, a proficient English speaker was asked to teach biology (the qualified biology teacher could not speak English). She herself had never formally studied biology and as her comments reveal, she lacked the pedagogic know how needed to teach it effectively. A third described a geography lesson taught in Hungarian translated simultaneously into English by a colleague. A fourth expressed concerns over assessment and whether to award marks for subject knowledge or language. These examples all illustrate the challenges teachers face when attempting to teach a school subject through English, that is integrate content and language.

3.3. Research question 3 (RQ3): How do teachers solve these problems?

The respondents solve the above problems remarkably well and the image which emerges is one of extremely dedicated teachers ready to invest time, energy and their own money to overcome challenges they face. Respondents identified four main solutions: teacher collaboration (55.3% of respondents); producing self-made materials (68.4%); undertaking teacher self-development (50%); using Hungarian (15.8%).

Table 2 Teacher solutions to CLIL problems

The solutions plus illustrative comments	% of teachers identified this solution
Teacher collaboration	
We had planning sessions every week with my co-teachers and we created extra materials, worksheets, visuals to help our work and the learning process for our pupils.	55.3%
Producing self-made materials	
We don't have a book written in English so we (nearly) had to translate the Hungarian books which is OK cos it fits the curriculum but it's really hard fit the English to the pupils. I ordered and bought history books from the US, Ireland and Spain because they have graded and/or CLIL textbooks. It takes time to match it to the Hungarian subjects. I prepaid for Twinkl and adapted it. (NB: Twinkl is a web-based educational site)	68.4%
Teacher self-development	
I went to other schools in Hungary and Austria. We got lots of help there. We had a chance to visit lessons at conferences organized by KIE (Kétnyelvű Iskolákért Egyesület). I did an online FutureLearn course. I watched Youtube videos on teaching biology. I collected the main words that I want to teach during the year in each subject.	50%
Rely on Hungarian	
I couldn't control the class in English so I did it in Hungarian. My colleague did it in Hungarian and I stood and translated. It kinda worked OK.	15.8%

Source: author 2021.

There is a healthy level of professional collaboration in schools and 55.3% of teachers wrote how they exchange and co-ordinate ideas, plan syllabuses and materials, observe or mentor colleagues. This co-operation enables them to draw support from each other to cope with CLIL.

An enormous amount of self-made materials is being produced in CLIL schools in Hungary, 68.4% of teachers mentioned this. Teachers use a range of resources such as the internet, books from abroad, translated Hungarian books, and then transform these ready-made materials to materials tailor-made for the Hungarian classroom. As comments in Table 2 illustrate, it is hard to adapt materials to the pupils' language level and the Hungarian curriculum and requires much skill and time which to recap is in short supply – 97.4% of teachers mentioned time as a problem (see Table 1). One teacher described how she shares materials with a CLIL teacher friend working in a different school, an idea that can be developed in the future. Much material production is occurring independently in all schools. Much work is being duplicated. Interschool sharing of materials can thus help alleviate CLIL teachers' workload.

Finally, an impressive level of 'on the job' self-development is happening, 50% of respondents work on their language or pedagogical expertise by: attending CLIL conferences, participating in CLIL courses (online); observing CLIL lessons (face-to-face and online); participating in online courses on topics such as British history.

4. Discussion

Teaching CLIL is challenging simply because there is so much more involved in a CLIL lesson than a monolingual class. This small-scale study has identified CLIL subjects most often taught, the problems teachers face and the solutions they implement. This information is useful because it illuminates pathways forward for Hungarian teacher educators to better support the CLIL teaching community.

Regarding RQ1 and the subjects taught in English, this study's findings reveal the most frequently taught subjects to LP pupils are: art, art and craft, science, singing, PE and to UP pupils science and target language culture. The more abstract, linguistically more demanding subjects (biology, IT/maths, country studies and geography) are taught less often and to older age groups. This information about the CLIL subjects is important because it informs teacher educators on how to better prepare students for the CLIL job market. For instance, science is taught frequently to years 3–6 and presents linguistic and pedagogic challenges which should be addressed during teacher training to help future teachers achieve success in English-Hungarian bi-lingual schools.

Concerning RQ2 teachers' problems and RQ3 their solutions, the main problems concern the: lack of good quality teaching materials; linguistic demands on the CLIL teacher, especially subject-specific vocabulary; pedagogical challenges of integrating content and language. The solutions they implemented of materials design and self-development are successful but increase their workload enormously. It should be emphasized that these survey respondents displayed an impressive level of involvement, motivation and dedication to making CLIL work.

These problems are consistent with other work into the challenges of CLIL. This suggests that the problems uncovered by this study are important and so should be addressed if a high quality of support is to be achieved. Bakti and Szabó (2016) criticize the dearth of good materials in Hungary, others point to the linguistic (Banegas 2012) or pedagogic demands on teachers (Klimova 2012; Perez 2019; Cañado 2016). These studies focus on different aspects of teaching but all agree that CLIL training is inadequate. Indeed, in Hungary it is the researcher's understanding that only Eötvös Loránd University, Faculty of Primary and Pre-School Education and Juhász Gyula Faculty of Education University of Szeged have CLIL teacher training programmes. Therefore, education systems in Hungary and elsewhere should do more to support CLIL teachers both at pre-service level, for potential CLIL teachers and at in-service level, for practising CLIL teachers.

The question arises as to what can be done and below is listed ideas suggested by survey respondents concerning how future and practising CLIL teachers can be supported.

At pre-service level, the following improvements can be made to primary English teacher training programmes such as the one at AK SZE:

- Student teachers should learn the language and pedagogy for how to teach key school subjects in English.
- Methodology programmes should cover more CLIL-related topics such as the bilingual school system in Hungary, about bilingualism/multilingualism/plurilingualism, information on CLIL networks in Europe. There should be input on materials design and assessing CLIL. CLIL peer teaching should be incorporated into methodology lessons.
- School visits to and/or teaching practice opportunities should be organised in bilingual schools.
- At in-service level, practising CLIL teachers would appreciate the following.
- A wider range of good quality course books and methodology book should be published covering all subjects and school years. This is a priority.

- Short CLIL training programmes should be provided by teacher training institutions,
- A website should be constructed that includes,
- A selection of theoretical articles,
- Webinars to provide theoretical input and practical tips,
- Videoed CLIL lessons,
- Downloadable text books and activity books,
- Professionally produced lesson plans and resources aligned to the Hungarian context,
- A materials sharing bank where teachers can share their own self-made materials,
- Links to web-based educational resources on the internet,
- Self-study language development materials for each curriculum subject,
- An online CLIL teacher community such as a chat group, blogs.

It should be note that The Association for Bilingual Schools (Kétnyelvű Iskoláért Egyesület n.d.) does have a website for target language CLIL schools in Hungary. The respondents' suggestions above could conceivably be incorporated into that.

Conclusion

This study provides a snapshot of English teacher activity in English-Hungarian bilingual schools and the picture that transcribes is of dedicated CLIL teachers, who cope admirably with the challenges of CLIL because of the time and effort they invest in their work. However, more support is needed at pre-service and in-service level, namely: improved materials, better language preparation, improved CLIL training opportunities. English-Hungarian bilingual schools are an ever-growing feature of Hungarian education today so the researcher concludes by calling on fellow teacher's educators to work together to improve the work situation for CLIL teachers in Hungary.

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Appendix – Survey: Teaching School Subjects in English

1. Are you

Male

Female

- 2. Where do you teach?
- 3. How long have you been teaching?
- 1-2 years
- 3-9 years
- 9+ years
- 4. How long have you been teaching/did you teach subjects IN ENGLISH?
- 1-2 years
- 3-10 years
- 9+ years
- 5 Which of these subjects do you teach IN ENGLISH? To which year group? (évfolyam?)

Art (rajz/vizuális kultúra)

Art and craft (technika és tervezés)

Science (környezetismeret)

Science (természetismeret)

Target language culture (célnyelvi civilizáció)

Singing (ének)

Biology

PE/ testnevelés

IT/Maths

Country studies (országismeret)

Geography (földrajz)

Other?

- 6. Do you/did you have problems teaching school subjects in English?
- 7. How do you/did you solve these problems?
- 8. Did you have any training at your university on how to teach subjects in English?
- 9. What should student teachers learn about at university to be able to teach subjects in English?
- 10. How can teachers be helped to teach subjects in English?