CLIL in Foreign Language Education

Silvia Pokrivčáková et al.

e-textbook for foreign language teachers

KEGA 036UKF-4/2013
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Introduction

The textbook *CLIL in Foreign Language Education* is the second of the series of three modern university textbooks/methodological manuals for teacher-training courses provided by the Department of Language Pedagogy and Intercultural Studies at Faculty of Education, Constantine the Philosopher University in Nitra which are results of the project KEGA 036UKF-4/2013 "Creating textbooks and multimedia courses for a new study programme as a means of internationalization of foreign language teacher training” funded by the Ministry of Education, Science, Research and Sport of the Slovak Republic. Moreover, chapters 6, 7 and 8 are published as partial products of the international project ERASMUS+ 2015-1-SK01-KA201-008937 Transnational Exchange of good CLIL practice among European Educational Institutions. The textbook is accompanied by the interactive Moodle course.

The concept of CLIL covers all forms of teaching academic, artistic, technical and vocational subjects through the teaching of a foreign language which is not the mother tongue for most pupils in the classroom. It means that content subjects (e.g. mathematics, geography, physics, music but also accounting, human anatomy, zoology, machinery, etc. at vocational schools) is integrated with the teaching of a foreign (working) language (for a detailed explanations see for example Ball, online1 & online2; or Pokrivčáková & Lauková et al., 2008).

As proved by many research studies (they will be discussed in more detail in respective chapters of the e-textbook), CLIL represents one of the most effective ways of preparing graduates for future practical life and the labour market. Therefore, this method has been promoted in the current Concept of foreign language teaching in Slovakia (*Koncepcia vyučovania cudzích jazykov v základných a stredných školách*, 2007).

These are the reasons why future and in-practice teachers should be well informed about the principles of CLIL and ready to evaluate its pedagogical benefits/risks which can occur in foreign language classrooms.

The authors - university teachers and teacher trainers from 8 countries all over the world - wrote their chapters with the intention to modernise and up-date both the content and methodology of the contemporary English teacher-training courses. They believe that CLIL has the potential to make foreign language learning both more enjoyable and effective.

Authors

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# List of abbreviations

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BICS</td>
<td>Basic interpersonal communicative skills</td>
</tr>
<tr>
<td>CALLA</td>
<td>Cognitive academic language learning</td>
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<tr>
<td>CALPS</td>
<td>Cognitive academic language proficiency</td>
</tr>
<tr>
<td>CBI</td>
<td>Content-based instructions</td>
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<tr>
<td>CBLI</td>
<td>Content-based language instruction</td>
</tr>
<tr>
<td>CBLT</td>
<td>Content-based language teaching</td>
</tr>
<tr>
<td>CEFR</td>
<td>Common European Framework of Reference</td>
</tr>
<tr>
<td>CLIL</td>
<td>Content language integrated learning</td>
</tr>
<tr>
<td>EAP</td>
<td>English for academic purposes</td>
</tr>
<tr>
<td>EFL</td>
<td>English Foreign Language</td>
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<tr>
<td>EGP</td>
<td>English for general purposes</td>
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<td>ELF</td>
<td>English language franca</td>
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<td>EMI</td>
<td>English as a medium of instruction</td>
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<td>ESP</td>
<td>English for specific purposes</td>
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<tr>
<td>FLIP</td>
<td>Foreign language immersion program</td>
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<td>HE</td>
<td>Higher Education Institution</td>
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<td>LAC</td>
<td>Language across the curriculum</td>
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<td>LAL</td>
<td>Learning through an additional language</td>
</tr>
<tr>
<td>LAP</td>
<td>Language for academic purposes</td>
</tr>
<tr>
<td>LBCT</td>
<td>Language-based content teaching</td>
</tr>
<tr>
<td>LEE</td>
<td>Language-enriched education</td>
</tr>
<tr>
<td>LSP</td>
<td>Language for specific purposes</td>
</tr>
<tr>
<td>MLAC</td>
<td>Modern languages across the curriculum</td>
</tr>
<tr>
<td>TBE</td>
<td>Transitional bilingual education</td>
</tr>
<tr>
<td>TFL</td>
<td>Teaching through a foreign language</td>
</tr>
<tr>
<td>TL</td>
<td>Target Language – language used for teaching subjects</td>
</tr>
<tr>
<td>WAC</td>
<td>Writing across curriculum</td>
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</table>
1 History of CLIL

Dana Hanesová
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Objectives
The aim of this chapter is to survey the historical development of CLIL. At first it lists various concepts used for the idea of integrated teaching of content and languages and the theories upon which CLIL was built. Then it presents information about the earliest developments in CLIL, showing examples of how some initiative teachers started to teach content directly in a foreign language (bilingual/immersion programmes) and, later on, how the current form of CLIL developed. The recent history of CLIL is presented via brief data on some countries as well as via activities on European level.

Introduction
CLIL is a methodology of teaching languages in such a way that the main emphasis is not on the ‘form’, but on the ‘content’. In the words of its first promoter, D. Marsh, CLIL is a “language pedagogy focusing on meaning which contrasts to those which focus on form” (Marsh, 2002, p. 49). Throughout the 1980s and 1990s, several language initiatives implementing this principle have emerged (e.g. Byrnes, 1998; Brinton, Snow & Wesche (2003); Grabbe & Stoller (1997); Zelenková (2010); Richards & Rogers, 2014):

- CALLA - Cognitive academic language learning;
- CBI – Content-based instruction;
- CBLI – Content-based language instruction;
- CBLT – Content-based language teaching;
- Dual-focused language education;
- EMI – English as a medium of instruction;
- FLIP – Foreign language immersion program;
- LAC – Language across the curriculum;
- LBCT – Language-based content teaching;
- LEE - Language-enriched education;
- LAL - Learning through an additional language;
- MLAC - Modern languages across the curriculum;
- Spanish/English/Finnish as a way of instruction;
- TFL -Teaching through a foreign language;
- TBE - Transitional bilingual education;
- WAC – Writing across curriculum;
- and, of course, CLIL – Content and language integrated learning.

This chapter refers to a lot of resources, namely to a) European documents on language education; and b) studies about bilingual education/CLIL in Europe and beyond (Marsh, Langé, Dale, Maljers, Wolff, Smit, Dalton-Puffer, Mehisto, Frigols, Kovács, Breidbach, Viebrock, Pokrivčáková, etc.).

To better understand the current CLIL methodology, it is important to perceive it as a result of rather complex historical factors typical for each region. According to Dale (2011, p. 19-21), it is a consequence of the influence of bilingualism, second language acquisition theories, cognitive learning theories, and constructivism. Coyle, Hood and Marsh (2010) emphasize namely bilingual education and immersion, typical for specific regions, as well as content-based language learning/teaching or English as an additional language.
Pre-history of CLIL

Although the word CLIL came into existence only recently (1994), it is not a new educational phenomenon. Some authors even return to the history of the Akkadians around 5,000 years ago. After conquering the Sumerians (the territory of modern Iraq inhabited), the Akkadians started to learn the local Sumerian language by using it as the language of instruction.

Throughout the following centuries, there has been evidence of individuals/ethnic groups living in multilingual territories. Therefore, these groups - especially rich people in more developed regions - used their bilingualism, or even plurilingualism as a survival method. In the end of the 19th century two ways of learning foreign languages were known to wealthy families. Those who could afford it used to send their children abroad to learn a foreign language directly in the target country. Other families would hire a tutor (for boys) or a governess (for girls). The children learned not only grammar rules, but also the necessary vocabulary. Thus many of them acquired languages not only through language instruction, but also thanks to daily appearance among the people.

Bilingual education had a long tradition in countries with more official languages. E.g. in Luxembourg children learnt German (in primary schools) and French (in secondary education) long before the law setting the standards of bilingualism was issued in 1843. This new act ordered French to be taught in primary school.

The principle of learning foreign languages in their real context and their integration with meaningful subject content was emphasized already by two significant pedagogues of Central European region. At first there is a need to mention the well-known pedagogue of Czech origin, J. A. Comenius (1592 – 1670) who paid a lot of attention to effective language teaching (e.g. *Orbis Pictus, Janua Linguarum Reserata*). His ideas have been analysed and evaluated in numerous studies.

The second pedagogue that we would like to describe in more details is of Slovak origin, called Matthias Bel (1684 – 1749), also known as the Great Ornament of the Kingdom of Hungary (Hanesová, 2014 & 2015). Being a secondary teacher as well as headmaster of two grammar schools situated in a multilingual German-Hungarian-Slovak-Czech region, he was eager to facilitate foreign language learning of his students.

For Bel, the language was only a means to mastering the content of the curriculum and thus to become widely educated. Bel’s credo was: Teach the words by getting to know the reality – the world around us. His Latin students had to describe e.g. a trip to Slovak caves with verbal expressions such as “enter the cave, climb it, measure it” in Latin. He strived to prepare age-relevant lessons by using lots of pictures, maps, visualized story-telling, stimulating the learners’ vivid imaginations. Concurrently, Bel gave effort to developing communicative competence in all neighbouring languages (German, Hungarian, and Czech). He reduced the number of grammar rules to a minimum and focused on raising students’ interest in the cultural context of languages, e.g. by including historical, geographic and legislative texts and their vocabulary. Latin teachers had to help the students to compare them to their own lives and to apply appropriate parts in their own contexts. Bel wrote for them a simple Latin grammar book and several content-integrated textbooks. They focused on teaching language of everyday life, including language used in one’s vocation performance (including landlords’ instructions for maids, needed for dressing up, preparing and serving daily meals, taking care for the economic issues of households, inviting and welcoming guests, interactions during visits, walks, hunting, etc.).

Moving toward CLIL - the 2nd half of 20th century

Prior to 1970, the need to design language- and content-integrated programmes was a natural consequence of various geographic, demographic and economic issues. This type of instruction was used mainly in some specific linguistic regions (e.g. near national borders or in big cities). The aim was to provide children in those regions with bilingual instruction and to enable them to acquire language skills for authentic communication and understanding with the natives of the area.
Let us start with one of the first programmes of such sort. Around 1965, a group of English-speaking parents living in the French territory of Quebec, Canada, desired an educational kindergarten programme for their children that would give them an equal opportunity "a) to become competent to speak, read and write in French; b) to reach normal achievement levels throughout the curriculum, including the English language; c) to appreciate the traditions and culture of French-speaking Canadians, as well as English-speaking Canadians" (Baker, 1993, p. 496). They initiatively addressed their local educational authorities to solve this issue. Consequently, the solution in the form of programmes immersing students in a language other than their mother tongue was developed and implemented also in other schools. On a voluntarily basis, the English-speaking children learnt school subjects in French (e.g. Mathematics or Geography) together with the French-speaking children. In the 1970s and 1980s the term "immersion" was used as a synonym of bilingual education.

Later on, immersion programmes designed for teaching the content in the non-native language without weakening the command of the mother tongue spread all over Canada, the United States and the rest of the world (Mehisto, Marsh & Frigols, 2008). From 1960s to 1998, about 300,000 Canadian children participated yearly in such a programme (Marsh, 2002, p. 56). In 2005, "there were 317 dual immersion programs in US elementary schools, providing instruction in 10 languages" (Potowski, 2007, p. 2).

The Canadian idea is a typical example of the one-way immersion of a non-native language. For the sake of completeness of the information on CLIL history, we can mention the existence of an alternative two-way immersion programme. It served the students in Korean-English school in Los Angeles who were studying with both Korean- and English-speaking children in one class.

In 1966 another, so called LAC movement emerged in London, England. It started with a group of English secondary teachers who met to consider the role of discussion in English lessons. They found it "impossible to confine their study to English lessons alone ... "We found ourselves discussing the relationship between language and thought, how language represented experience, the functions of language in society, different kinds of language and how they were acquired ... the nature of discussion and group dynamics..." (Parker, 1985, p. 173). In this discussion the idea of language across the curriculum was born. "If children were to make sense of their school experience, and in the process to become confident users of language, then we needed to engage in a much closer scrutiny of the way in which they encountered and used language throughout school day". The first steps of the LAC movement were followed by a lot of action research and theory building. As this idea proved to be a coherent, alternative view of learning through language, it spread through England, Australia and Canada. An informal network has developed in these countries. In the USA the idea was used in a limited way, with its primary emphasis on WAC - the development of students' writing skills.

In the United States, "the integration of content and language has had a long tradition both in what is known as CBI and in Bilingual Education Programmes (BE)" (Navés, 2008, p. 3). According to Brinton, Snow et al (1989, p. 2), CBI means "the integration of particular content with language teaching aims". The content is used as a means for second/foreign language teaching and learning.

News about the success of the above-mentioned programmes soon caught the attention of Europeans interested in language policy. It has awaken their awareness of language and content integration. In 1978, the European Commission (EC) issued a proposal aimed at “encouraging teaching in schools through the medium of more than one language” (Marsh, 2002, p. 51). Later, in 1983, the European Parliament challenged the EC "to forward a new programme to improve foreign language teaching" (Marsh, 2002, p. 52). More and more mainstream, i.e. state-funded, schools in Europe began to teach some subjects in a foreign language. Even before the formation of European schools in EU countries, some schools, especially in capital cities, had begun the practice of immersion into target foreign languages.

Due to the development of various teaching methods, but also of other historical, sociological and educational factors within each region, various types of integrated approaches to teaching foreign languages (including CLIL) came into existence (Pokrivčáková 2011, p. 28). The effort to
copy the successful Canadian immersion model into the European CLIL model was not particularly successful. Marsh (2002, 56) comments that the researchers found out that "immersion bilingual education was successful for majority language speakers (e.g. in Quebec) more than for those coming from a minority language background". European teachers tried to change the ways of their language instruction “with little or no regard for corresponding methodological shift”.

Immersion programmes did not seem suitable for countries such as Slovakia and some others where the use and development of the mother tongue needed to be strengthened (McGroarty, 2001; Králiková, 2013, p. 52). In these countries the idea of CLIL developed with a rather different emphasis on the ratio of native and non-native languages. Here the mother tongue plays its important educational role. This is evident, either by comparing the number of school subjects being taught in a foreign language (e.g. in Hungary – 3 subjects from the school curriculum), or by examining legislation and policies on the role and place of foreign language in CLIL lessons (in Slovakia – the English language is used up to maximum 50% of the lesson time). Thus CLIL in Europe is considered to be a ‘milder’ version of bilingual education

In the last two decades CLIL has mainly been expanded to primary and secondary schools. But also at universities there has been a trend of a growing offer of courses or programmes in English. They have the character of CBI - teaching foreign languages integrated together with teaching a subject from the main curricula in a meaningful context (Zelenková, 2014).

**Emergence of CLIL and its recent development (since 90-ties)**

The acronym CLIL was coined by David Marsh, a member of a team working in the area of multilingualism and bilingual education at the Finnish University of Jyväskylä in 1994 (Kovács, 2014, p. 48; Marsh, Maljers & Hartiala, 2001). Marsh himself had extensive life experience in multilingual regions, being born in Australia, educated in the UK and working in Finland. He based the concept of CLIL on the experience of Canadian immersion and British LAC programs. The original concept of CLIL was used to designate teaching subjects to students through a foreign language. According to Marsh (2012, p. 1), "the European launch of CLIL during 1994 was both political and educational. The political driver was based on a vision that mobility across the EU required higher levels of language competence in designated languages than was found to be the case at that time. The educational driver, influenced by other major bilingual initiatives such as in Canada, was to design and otherwise adapt existing language teaching approaches so as to provide a wide range of students with higher levels of competence.” During the 1990s, the acronym CLIL became the most widely used term for the integrated content and language education in Europe.

In 2005, Marsh suggested CLIL to be “a general 'umbrella' term to refer to diverse methodologies which lead to dual focussed education where attention is given to both topic and language of instruction” (Kovács, 2014, p. 48-49).

In 2006, the Eurydice reported that CLIL was available in the majority of European member states. The way how CLIL worked in 2007 in 20 European countries was presented in *Windows on CLIL* (Maljers, Marsh & Wolff, D., 2007). Most of the approaches discussed in *Windows* had been implemented in secondary schools, with only a few countries running “early education programmes – Austria, Finland, Hungary, and Spain” (Kovács 2014, p. 51).

The last decade has witnessed a boom of research in CLIL, although it has focused more on the linguistic than the non-linguistic elements of CLIL (Marsh, 2012, p. V.). Thanks to multi-disciplinary research done by linguists, educators, psychologists, neurologists, etc., the model of dual language and content aims has been gradually supplemented by a third strong research focus and CLIL pillar – emphasis on student’s learning strategies and thinking skills (Coyle et al, 2010; Mehlisto et al., 2008).

**Examples of CLIL development in selected European countries**

Finland and the Netherlands are the countries with the highest level of implementing CLIL in primary and secondary schools (Pokrivčáková et al., 2008, p. 8).
The Netherlands

According to Pokrivčákova (2008, p. 8), the Netherlands was the first country to respond positively to the Maastricht’s Agreement and it began to implement the idea of development of European plurilingualism and bilingual education in 1992. In 2007 up to 300 schools belonged to the category of bilingual schools.

Finland

Finland was also among the first nations to respond to the challenge of CLIL, specifically inside its city of Jyväskylä. The ministry of education has recommended the expansion of CLIL since 1989. But the first experiences were collected during an experiment already in 1990. Due to its positive results and new education legislation, this kind of teaching has continued. In 1992, Finland introduced Swedish immersion classes. In 1993, some schools offered French content-based classes, followed by German and Russian language classes a year later. In 1996 CLIL programmes had been launched in 251 Finnish schools (179 primary and 72 secondary schools). The legislation allows the schools to choose freely how they will apply CLIL.

Hungary

The history of bilingual education and CLIL in Hungary has been carefully observed by J. Kovács (2014): The first experience with teaching subjects via means of a foreign language goes back to 1987 when the first secondary bilingual programmes started as a top-down initiative from the educational authorities. But already in 1989 the primary school teachers and parents took bottom-up initiative. They desired for their children to learn languages in a meaningful context of some school subjects, so they started to develop primary CLIL programmes. At that time, primary CLIL was in its infancy in Europe as well (except of the international schools). In the 1990s, a team of ELTE staff in Budapest was established to promote a curriculum for bilingual primary education and the first bilingual primary course books.

In 1991 the Association for Bilingual Schools was founded. In 1997 the government issued a regulation stating that a CLIL school had to offer at least three subjects via English (total compulsory number of lessons devoted to foreign language was 5 lessons/week), create a specific language syllabus and employ at least one English-speaking native teacher. In 2001 there were 25 primary CLIL programmes in Budapest and 60 in the countryside, 6% of all the primary schools in Hungary. The year 2003 was given over to designing materials for CLIL, including primary course books and teachers’ guides. In 1998 the first CLIL curricula were prepared for CLIL teacher training. In 2001 the first CLIL pre-school and primary team-teaching programme was launched. In 2004 the nation-wide in-service teacher training courses for CLIL teachers started. The academic year 2006-2007 was the first year of pre-service undergraduate CLIL teacher training courses at ELTE, Budapest.

Czech Republic

The importance of the existence of both bottom-up teachers’ initiatives and top-down ministerial directive leading to the current form of CLIL was emphasized by Benešová in her study (2015) on CLIL in the Czech Republic. The evolution of CLIL idea started in the 1990s through initiatives of the Ministry of Education, Youth and Sports; the National Institute for Education; and the National Institute for Further Education. In accordance with the EU Action Plan on Languages (2004 – 2006), the Czech national plan for education included an offer for every teacher to get educated in CLIL either through pre-service training at universities or in-service training organized by ministerial institutions. The National Institute for Education supported CLIL by producing online material (Foreign languages across the primary curriculum) which appeared in 2006.

In 1998 – 2001, as a result of a Socrates project called TIE-CLIL – Trans-language in Europe, CLIL, five modules presenting general information on CLIL, its methodology, practical tips and specifications of language demands for both CLIL teachers and pupils were produced. They were summed up in Guidelines for Teachers (2001), TIE-CLIL Professional Development Course (2002) and a paper written by Marsh Using languages to learn and learning to use languages introduces
CLIL to parents. This successful project was followed by an international CLIL project Getting Started with Primary CLIL (2006–2009). Its outcome, Getting Started with Primary CLIL, is a guidebook for CLIL lecturers educating future primary teachers in CLIL practices. Approaches to CLIL in lower secondary education, its methodology and materials became the focus of several CLIL projects (2009-2012). In 2014 a nation-wide project Foreign Languages for Life systematically disseminating CLIL idea into all types of schools was launched.

**Germany**

The history of implementation of CLIL in German schools goes back to the first bilingual German-French programmes in the 1960s. Similarly to other European countries, CLIL programmes in English languages started to spread in the 1990s and fully developed after 2000.

**Poland**

In Poland but also other countries (e.g. Hungary) “the implementation of CLIL practice in education has been adopted under the name bilingual education” (Papaja, 2014, p. 15). Its foundations were laid in the 1970s but it became even more popular after the revolution in 1990. The first schools with bilingual programmes were higher secondary schools. Due to the new Educational Reform in 1999, CLIL started to be implemented also in lower secondary schools.

**Slovakia**

According to Lojová & Straková (2012), CLIL in Slovakia started to develop in a context of positive teachers’ responses to the ITV (Integrated Thematic Teaching) programme promoted by Kovaliková’s Foundation (1996). Though ITV, originally from the USA, did not involve languages, it became a good training of the teachers’ skills of integrating the subject disciplines.

The first kind of teaching subject content via a foreign language (English, German, French, and Spanish) in Slovakia started in the form of bilingual education. Because teaching 'bilingually' at bilingual schools meant teaching at least 3 school subjects exclusively in a foreign language, it was too demanding for all schools and all their learners. So, “to bring benefits of bilingual instruction to as many learners as possible, a method of CLIL was developed in Slovakia shortly after 2000. Instead of teaching the entire content of the subjects in foreign languages, in Slovak tradition, the teaching time in a target language is usually limited to a maximum of 50%” (Pokrivčáková, 2013, p. 16).

In 2008 the Slovak National Institute for education started a 5-year experiment with CLIL called Didactic Effectiveness of CLIL in Teaching Foreign Languages in Primary Education. It investigated the possibility of implementing CLIL into the primary level starting in the first grade. It confirmed the feasibility of this approach and revealed some positive as well as negative outcomes that need refining.

**Milestones in the recent European history of CLIL**

The following chart gives an overview of the main movements in CLIL’s recent history in Europe:

<table>
<thead>
<tr>
<th>When</th>
<th>Who/What</th>
<th>Comments/explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>Lingua Programme launched by the European Commission (EC)</td>
<td>Promoting opportunities for university students to combine their main discipline with the study of a foreign language</td>
</tr>
<tr>
<td>Year</td>
<td>Source/Document</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>1994</td>
<td>D. Marsh, University of Jyväskylä, Finland</td>
<td>CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused simultaneous aims: learning of content and of a foreign language.</td>
</tr>
<tr>
<td>1995</td>
<td>EC Resolution (1995) on improving and diversifying language learning and teaching within the education systems of EU</td>
<td>“The Resolution refers to the promotion of innovative methods and, in particular, to the teaching of classes in a foreign language for disciplines other than languages, providing bilingual teaching”. It also proposes improving the quality of training for language teachers by encouraging the exchange with Member States of higher education students working as language assistants in schools, endeavouring to give priority to prospective language teachers or those called upon to teach their subject in a language other than their own.” (Eurydice Report, 2006, p. 8)</td>
</tr>
<tr>
<td>1995</td>
<td>White Paper of EC: Teaching and Learning – Towards the Learning Society</td>
<td>Emphasise on plurilingual education in Europe – especially on the importance of innovative ideas and the most effective practices for helping all EU citizens to become proficient in 3 European languages: “…it could even be argued that secondary school pupils should study certain subjects in the first foreign language learned, as is the case in the European schools” (p. 47).</td>
</tr>
<tr>
<td>2000 - 2006</td>
<td>European Grant Programmes by EC</td>
<td>Comenius, Erasmus and Socrates Programmes – financial provision for activities of ‘teaching staff of other disciplines required or wishing to teach in a foreign language’.</td>
</tr>
<tr>
<td>2001</td>
<td>European Year of Languages CLIL compendium</td>
<td>Suggestion for the promotion of language learning and linguistic diversity to be achieved through a wide variety of approaches, including CLIL type provision – a comprehensive typology of European CLIL.</td>
</tr>
<tr>
<td>2002</td>
<td>EC publication CLIL/EMILE: The European Dimension: Actions, Trends and Foresight Potential</td>
<td>“CLIL (EMILE) refers to any dual-focused educational context in which an additional language, thus not usually the first language of the learners involved, is used as a medium in the teaching and learning of non-language content.” (Marsh, p.2)</td>
</tr>
<tr>
<td>2003</td>
<td>Council of Europe, Language Policy Division</td>
<td>Bilingual policy issues</td>
</tr>
<tr>
<td>2004</td>
<td>EC: Promoting Language Learning and Linguistic Diversity: An Action Plan</td>
<td>CLIL expected to make a major contribution to the EU’s language learning goals. A set of actions suggested to promote the integrated learning of content and language.</td>
</tr>
<tr>
<td>2005</td>
<td>EC Publication</td>
<td>Special Educational Needs in Europe - The Teaching and Learning of Languages</td>
</tr>
<tr>
<td>2005</td>
<td>Eurydice report</td>
<td>CLIL – enriched with teaching any language that is not the first language.</td>
</tr>
</tbody>
</table>
| 2006 | Eurydice Report | CLIL covers: “All types of provision in which a second
**Acknowledgement**

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[http://www.icrj.eu/14/article1.html](http://www.icrj.eu/14/article1.html)


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2 CLIL in Slovakia:
projects, research, and teacher training
(2005-2015)

Silvia Pokrivčáková
Constantin the Philosopher University in Nitra, Slovakia

Objectives
This chapter briefly summarizes the current situation in applying CLIL at Slovak schools. Its aim is to provide readers – future CLIL teachers with data, hand-in facts and references that can be useful when starting with CLIL in Slovakia. These data and facts include e.g. references to schools which apply CLIL, the list of accredited courses of continual education on CLIL, the review of teaching manuals and handbooks, as well as the review of works which have published examples of good practice and first-hand experience with CLIL.

Introduction
CLIL methodology has been known and applied in Slovak schools for nearly 15 years. The CLIL method, which covers all forms of teaching academic, artistic, technical and vocational subjects through the medium of a foreign language, which is not the mother tongue for most pupils and is not used as an official language in the country the learners are living in, has been seen as “an accessible compromise between traditional monolingual education (when content subjects are taught exclusively in a mother language and foreign languages are taught exclusively as individual academic subjects) and bilingual education (when, according to the Slovak legislation, at least three content subjects from the curriculum are taught exclusively in a foreign language)” (Pokrivčáková, 2015, p. 24). The current chapter follows and complements the former summaries (Pokrivčáková, 2007, 2011, 2012, and 2013c) adding information relevant for both teacher trainees and in-practice teachers (e.g. examples of good practice) and data on the latest development, events and publications.

CLIL in Slovakia – the current state of the matter
CLIL as a method of bilingual education combines instruction in two languages. In Slovakia it is typically applied in monolingual classes with a non-native teacher for whom, as well as for learners, the working language is a foreign language. Most Slovak schools which apply CLIL integrate teaching in Slovak as a mother language and English as a foreign language. The second most frequent foreign language used within CLIL in Slovakia is German. Only a few schools apply CLIL in Spanish and French (which are taught alternatively with Russian and Italian as second foreign languages). So far no report or other type of evidence claiming that CLIL is also used to integrate the learning of content subjects and the learning of other languages (Hungarian, Ukrainian or Romany) has been published (c.f. Pokrivčáková, 2013c).

The initiative to start CLIL mostly comes from “below”, i.e. school managements or individual teachers. Many schools have started it through various school projects (see the respective subchapter later). The decision is generally appreciated and well supported by parents, who “believe that any form of bilingual education (…) will result in early and a high quality communicative competence of their children in a foreign language” (Pokrivčáková, 2013c, p. 17).

In general, it can be said that the additive type of CLIL is applied at Slovak schools in which learning a foreign language does not supress the learning of a mother language in any way. The foreign language education stands as a suplement to the mother language (primary) education. Other types of CLIL, especially the erasive/subtractive one, when a foreign language instantly or gradually replaces the learners’ mother language, contradict the objectives of the Slovak national curriculum according to which a mother tongue of learners (Slovak, Hungarian or Ukrainian) must be developed systematically and cannot be “erased” by any other language.
Schools in Slovakia are generally recommended to use a mother language of learners as a medium of education in at least 50% of teaching time a week. Such measure is believed to allow learners to develop their academic literacy sufficiently in both the mother and foreign languages without endangering the level and quality of mother tongue literacy.

Types and levels of schools
CLIL classes are provided by both mainstream and bilingual schools. At bilingual schools, CLIL activities are integrated into content subject lessons (e.g. mathematics, biology, geography, arts etc.) which are usually taught exclusively in a foreign language and by teachers qualified to teach content subjects (and only exceptionally to teach a target language). A foreign language is parallely taught as an independent curricular subject (alongside the other subjects) for min. 3 lessons a week. At mainstream schools, CLIL activities are incorporated only into some lessons, both foreign language or content subject lessons, when only an individual topic or tasks are mediated in a foreign language. The topic, type of activities, and their duration usually depend solely on the teacher’s choice. Here, CLIL is seen as a “more friendly” type of bilingual education – it is better manageable (CLIL does not require bilingual teachers with excellent proficiency in a foreign language) and better approachable by learners (“traditional” bilingual education with instruction given only in a foreign language requires learners with above-average communicative competences and is too demanding, and, thus, also demotivating for weaker learners or learners with special educational needs).

As for the level of schools, the primary CLIL in which learners learn some topic/units of content subjects in a target foreign language (not rarely along with learning its basics) is the most popular and wide-spread in Slovakia (c.f. Menzlová, 2012; Pokrivčáková, 2013d, Sepešiová, 2012a, 2012b), which quite contradicts the situation in other countries described in some research studies (c.f. Dalton-Puffer, 2011, p. 183-184). Although there is no official statistical data indicating exact numbers of primary and secondary schools applying CLIL, based on the number of school projects and published works it can be assumed that the number of primary schools applying CLIL is much higher than the number of CLIL secondary schools. Within secondary schools, CLIL is applied mostly at grammar schools, business academies and health-care secondary schools (c.f. Škodová, 2011). CLIL at secondary vocational schools is very rare and the reasons behind such a situation are yet to be studied and analysed.

School projects
Schools most often start CLIL as part of various school projects. Especially international projects (e.g. Erasmus+, previously Comenius and Lingua) are seen as extremely helpful means in promoting CLIL since they include sharing real teaching experience and good practice examples from various educational environments. CLIL projects have been undertaken by both primary (e.g. ŠZ Oravská in Žilina, ESŠ in Martin, ZŠ Obrancov mieru in Detva, ZŠ Nábrezie mládeže Nitra, ZŠ Hradná, Nové Zámky, ZŠ Kriváň ZŠ Komenského in Stará Ľubovňa, ZŠ Hrnčiarska Zvolen) and secondary schools (SPŠ in Myjava, SOŠA in Košice, ŠOSOS in Komárno, PSŠ in Prievidza, Spojená škola Námestovo, business academies in Hlubočec, Topoľčany, Trnava, Košice, secondary health-care schools in Lučenec, Nitra, Košice, Nové Zámky, grammar schools in Giraltovce, Prešov, Šurany, Malacky, Vráble, and many others. Project and school websites are good sources of both information and inspiration. Many schools have even published their lesson plans and other teaching materials there, which can be of great help to the beginning CLIL teachers.

Teacher conferences and workshops
Conferences and workshops proved to be effective environments for getting latest knowledge on the subject and valuable platforms for sharing opinions, experiences and expectations. In Slovakia, several conferences containing sessions on theoretical and practical aspects of the CLIL method have been organised:
Foreign Languages and Cultures at Schools (Nitra, 2001 – 2013) – conference websites & proceedings are available [here](#);

Rozvíjanie cudzojazyčných zručností u detí v školskom a rodinnom prostredí (Bratislava, 2012) – conference proceedings are available [here](#);

Obsahovo a jazykovo integrované vyučovanie (CLIL) v ISCED 1 (Bratislava, 2012) - conference proceedings are available [here](#);

Learning together to be a better CLIL teacher (Banská Bystrica, 2014) - conference proceedings are available [here](#);

Súčasné výzvy cudzojazyčného vzdelávania na Slovensku: ako ďalšej? (Nitra, 2015) - conference proceedings are available [here](#).

Research projects

CLIL research projects are conducted either at some universities involved in foreign language teacher training (e.g. Constantine the Philosopher University in Nitra and Žilina University), or at the National Institute of Education in Bratislava.

The main objectives of first research projects funded by the Slovak Ministry of Education, Research and Sport and conducted between 2000-2010 (e.g. KEGA 3/3036/05 Innovations in Training of Foreign Language Teachers: CLIL and LLIL, KEGA 3/6308/08 Content Reform and Modernisation of Teaching Foreign Languages in Primary and Secondary Schools: Creating Conditions for Effective Application of the CLIL Methodology, and KEGA 094-024UKF-4/2010 Integration of Foreign Language Teaching Methodology CA-CLIL into Continuous Teacher Development at Secondary Vocational Schools) was to critically assess the current state of CLIL development, to introduce the CLIL research outcomes to teachers and school managers through series of presentations, seminars, workshops and conferences, as well as to instruct them through the publication of scholarly works, teaching handbooks and teaching manuals. The later projects focus on specific aspects of CLIL in educational practice (e.g. the project KEGA 085ŽU-4/2011 Development of Higher Cognitive Functions of Learners in Integrated Education).

In 2009-2013, the Slovak Ministry of Education, Research and Sport funded the project entitled Exerimental Verification of CLIL's Pedagogical Effectiveness in Foreign Language Education at Primary Level (Menzlová, Farkašová & Pokrivčáková, 2008; Pokrivčáková, 2010a). The results of the project were presented in numerous academic events and in numerous publications (e.g. Pokrivčáková, Menzlová, Farkašová, 2010; Menzlová, 2012; Farkašová, 2012; Pokrivčáková, 2013c, etc.). The experiment measured the impact of CLIL on both young learners’ learning outcomes and their motivation to learn foreign languages. The secondary objectives were to identify suitable procedures and teaching techniques for the primary CLIL.

The project was based on measuring and comparing the learning outcomes of 361 primary learners from 22 primary schools throughout Slovakia. CLIL was applied in two content subjects: Science and Maths, with English or German as language of instruction. Learners’ foreign language proficiency was measured in the following areas: vocabulary (both active and passive), listening, reading and writing skills. The experiment results confirmed significantly better learning outcomes in all observed areas (for more details see Menzlová, 2012).

Based on the project results, the Ministry issued the set of recommendations for schools applying/planning to apply CLIL in their primary classes (MŠVVŠ SR, online):

- The teacher who applies CLIL method needs to be qualified for teaching a foreign language.
- The recommended extent of teaching time mediated in a foreign language should range between 25 - 33% a week.
- Learning outcomes are evaluated only in a mother language, the communicative competences in a foreign language are not evaluated in content subject classes.
- CLIL can be applied in teaching one or more content subjects, it is not recommended to use CLIL in mother language classes.
The outcomes of the experimental project, proving positive impact of the primary CLIL on the development of young learners’ communicative competences in a foreign language, led to the decision to continue with the experiment. Nowadays the ŠPÚ has taken up the successive project named CLIL in Lower Secondary Education (ŠPÚ, 2013).

International projects (e.g. ERASMUS Intensive Programme Crosscurricular Creativity (Žilina University), COMENIUS: eCLIL: 134321–2007–IT–Comenius-CMP (Žilina University), Mobility-enhancing science, research and education at UMB (UMB Banská Bystrica) and currently running Erasmus+ Transnational Exchange of Good CLIL Practice among European Educational Institutions 2015-1-SK01-KA201-008937 (CPU Nitra) combine research activities with sharing national experience and good practice examples in international context.

Research studies
At the international level, CLIL research has recently seen rapid development, manifested in the growing number of studies published in international research journals, e.g. International CLIL Research Journal (ICRI), International Journal of Bilingual Education and Bilingualism (IJBEB), Latin American Journal of Content & Language Integrated Learning (LACLIL).

The Slovak CLIL research has seen a similar rapid increase. The state of CLIL research in Slovakia has already been summarised and analysed (Pokrivčáková, 2012, p. 67-74; 2013), therefore in this chapter only the outcomes that occurred during the last two years have been added.

The Slovak CLIL research focuses mainly on three areas: CLIL learners, CLIL teachers and various aspects of verbal communication in the CLIL classes, e.g. combination of two working languages, types of verbal interactions between the teacher and learners, etc.

The learner-oriented CLIL research can be divided into two lines: a) studying the influence of CLIL on learning outcomes of learners in various educational environments (primary, secondary, tertiary education), and b) measuring the influence of CLIL on learners’ psycholinguistic characteristics, e.g. motivation, attitude to a foreign language, etc. The former line is in the context of the Slovak CLIL represented by the studies of Menzlová (2012), Kubeš (2012) and Luprichová (2013). The impact of CLIL on learner’s motivation and other affective functions of learners at Slovak schools were studied by Gondová (2012a), Farkašová (2012), Luprichová (2013), and Kováčiková (2013). Their results can be summarised as follows:

- In general, the respondents (both CLIL teachers and learners) believed that CLIL had a positive influence on the quality of foreign language education (c.f. Gondová, 2012a, 2013), older learners even appreciated a more balanced development of all their communication skills in English (Kováčiková, 2013).
- Surveyed learners usually expressed mostly positive attitude to the CLIL method and assessed CLIL lessons as equally or more demanding than "traditional" English or content subject classes (Gondová, 2012a, Kováčiková, 2013; Luprichová, 2013).

The teacher-oriented CLIL research worldwide studies the roles, specific professional characteristics and teaching competences of CLIL teachers (e.g. Alonso, Grisalena, & Campo, 2008; Banfi & Rettaroli, 2008, Butler, 2005, and others), as well as their opinions, beliefs, concerns and attitudes (Cammarata, 2009; Coonan, 2007; Hunt, 2011; Pavón Vázquez & Rubio, 2010; Pena Díaz & Porto Requejo, 2008, and others). Rather an ample number of studies analysed CLIL teachers’ needs and directions in teacher training (Banegas, 2012; Hillyard, 2011; Hunt, Neofitou, & Redford, 2009; Pistorio, 2009, and others).

The same structure of the teacher-oriented CLIL research is seen in the Slovak context, represented by the works of Hurajová (2013), Luprichová (2011), Menzlová (2012), Pokrivčáková (2013a, 2013b), and Sepešiová (2013). Summarising their results, the following conclusions can be formulated (c.f. Pokrivčáková, 2013c):

- Slovak CLIL teachers did not significantly differ from the needs of CLIL teachers all around the world.
They generally considered CLIL both professionally challenging and personally satisfying.

Their attitudes towards the CLIL method oscillated from neutral to very positive (none of the respondents in any of the researches expressed a univocally negative attitude).

Slovak CLIL teachers tended to perceive CLIL as a method primarily used to improve learners' foreign language proficiency. Improving learning outcomes in content subjects was seen as of secondary importance.

The cultural dimension of CLIL (c.f. 4C Framework by Coyle, 2007) was usually neglected both in pedagogical practice and research projects.

Despite the frequently mentioned drawbacks, such as work overload and demanding preparation, nearly all Slovak teachers who had started with CLIL in their teaching practice planned to continue in their endeavour because they could see their learners’ positive responses in various forms: higher motivation, better communicative skills in a foreign language, activity, higher self-confidence, etc.

Pointing to problematic aspects of CLIL, teachers usually named 5 of them: a) higher demands on teachers' performance in a foreign language; b) lack of finely-tuned CLIL materials, and c) developing mastery in bilingual instruction - finding a balance between both working languages, d) problems with planning CLIL lessons, and finally e), managing CLIL lessons for mixed ability classes with weak learners or learners with special educational needs.

Further training on CLIL was one of the repeatedly and most frequently identified teachers’ needs.

The language-oriented CLIL research studies various characteristics of verbal interactions in CLIL classes, e.g. roles of mother and target languages as languages of instruction in CLIL classes, as well as the various ways how these languages are combined (e.g. in the form of code-switching), how they support or interfere with each other. In the international CLIL research context, many language-oriented studies have been published (Dalton-Puffer, 2007; Kupetz, 2011; Llinares & Morton, 2012; Maillat, 2010; Moore, 2009, 2011; Nikula, 2007; Nikula et al., 2013 and others). On the contrary, in the Slovak context this extremely interesting and inspirational branch of the CLIL research is far from abundant, being represented by only a few works (Gondová, 2012b; Králiková, 2013). As a result of their studies, both authors stated a rather disturbing conclusion, i.e. if compared to the non-CLIL English classes, classroom interaction in the observed CLIL lessons was not significantly different in any of the monitored aspects (the amount of learners’ talking time, the frequency and type of communication structures, initiating communication, applying teaching techniques which support the interaction between learners). Although the CLIL method claims to be learner-oriented and provide as much freedom to learners to be active and express themselves freely as possible, the classroom communication interchanges in the observed CLIL classes were, in fact, usually initiated, directed and led by teachers. Learners did not learn actively, instead they remained in the role of relatively “passive absorbents” of teaching processes. These conclusions sharply contradict the majority of international research outcomes (Dalton-Puffer, 2007; Maillat, 2010; Mariotti, 2006; Moore, 2007; Nikula, 2007). In her conclusion, Gondová (2012b, p. 13) tries to explain the possible reasons behind these controversiess: “…(Slovak) teachers are aware of the necessity to use learner-oriented methods and most of them try to do so in some of the lessons, but even if they decide to use a role-play, a discovery activity or a game, they usually choose the one which is controlled or semi-controlled, which means it does not make the development of higher-order thinking skills of learners possible. It seems that teachers are not willing to lose control of what their learners do and avoid using analytical, evaluative or creative tasks enabling learners to work independently from the teacher. One of the reasons might be the long-standing culture of traditional, teacher-oriented teaching, another one the lack of knowledge of learner-oriented methods".
Králiková’s research is particularly valuable for the study of occurrences and functions of classroom code-switching (for more see Pokrivčáková, 2014), i.e. the alternating use of two (or more) languages by both the teacher or learners, in Slovak CLIL classes. Her qualitative content analysis showed that code-switching in Slovak CLIL classes was used more frequently by teachers and usually in the form of supplementing known English words in mother language utterances, e.g.:

| U: Left, tam budú látky, ktoré obsahujú vzduch, right,ktoré neobsahujú. |
| U: Keď vierte, nechajte si to pre seba. OK? When it is hot, water turns into? |
| U: Food. O tom sme sa rozprávali málo. Food is energy for what? |
| U: A computer potrebuje čo? |
| U: Condensation. Dobre. A tretí, Kubko? |
| Ž: Precipitation. |

U: Nie. Na začiatku musí byť?
Ž: Oil.
U: Oil. Dobre. (source: Králiková, 2013)

Code-switching was frequently used as a means of organising class work, e.g.:

| U: Sit down. Teraz si zopakujeme základné učivo. |
| U: Takže Samko, choose any card. |
| U: Yes, draw it on the blackboard. A samozrejme aj do zošita. |
| U: Perfektne. OK, now, ideme na vylúčovaciu sústavu a začneme Stanko. Stand up. |
| U: Anička, read your question. |
| U: Ale, keďže sme sa učili, musí jesť healthy food. |

A specific branch of language-oriented CLIL research studies various aspects of language used in CLIL textbooks (and other verbal teaching materials), as well as the learner’s responses to them (for more see Hurajová, 2007 and Sepešiová, 2015).

Reflecting CLIL research in teacher training

The general objective of any educational research is to point to the problems and find the ways of solving them, which should lead to the improvement of the existing teaching practice. Therefore, the above mentioned research results should be reflected in CLIL teacher training courses and help improve teaching practice in CLIL classes in Slovakia. The first step in this process would be to update the training of CLIL teachers, because they are the real “engines” of progress (in this process of designing up-dated CLIL teacher training courses, the European Framework for CLIL Teacher Education by Frigols Martín, Marsh, Mehisto, & Wolff, 2011 can be of valuable assistance). Based on the previous research conclusions, CLIL teacher training should focus on the following areas:

a) improving CLIL teachers’ skills to define educational objectives clearly and to integrate both content and language objectives;

b) developing their competences to manage CLIL classes with the inclusion of more learner-oriented activities;

c) introducing new and effective ways to combine two working languages in CLIL classes; and

d) instructing how CLIL materials should be selected, adapted and assessed,

e) providing more examples of good practice and finely-tuned CLIL materials compatible with the Slovak national curriculum (c.f. Sepešiová, 2012c).
A Slovak CLIL teacher can currently (i.e. at the time of the publication of this textbook) choose from the following types of support:

**Courses**

CLIL teacher training courses in Slovakia, accredited by the Slovak Ministry of Education and organised as part of continual teacher education, have been currently provided by the National Institute of Education (for more read [here](#)), Methodical and pedagogical centres (more details can be found [here](#), [here](#) and [here](#)), and other educational institutions (e.g. see [here](#)). Moreover, some pedagogical faculties have incorporated CLIL courses into the pre-service teacher training (e.g. CPU in Nitra, Žilina University and Prešov University).

**CLIL teaching handbooks and manuals**

Along with the growing number of CLIL textbooks and additional teaching materials published by large publishing houses, the number of teaching manuals and handbooks finely-tuned for CLIL teachers in Slovakia (reflecting the Slovak national curriculum) has been growing dynamically as well. Whereas before 2008 there was no such manual, nowadays the Slovak teachers can choose from a wide range of materials.


- MENZLOVÁ, B. (2014). *Slovensko-anglicko-nemecký glosár odborných termínov obsahovo a jazykovo integrované vyučovanie v primárnom vzdelávaní CLIL ISCED 1*. Bratislava : ŠPÚ.

Teaching materials, including ready-made worksheets organised in 20 modules, will be soon available for the CLIL teachers who integrate teaching science and German as a result of the project *Experimentieren auf Deutsch* guaranteed by Volkswagen–Stiftung Slovakia and Goethe Institute in Bratislava (for more see Menzlová, 2015).

Creating CLIL materials and teacher manuals was one of the objectives incorporated into the project KEGA 036UKF-4/2013 *Creating University Textbooks and Multimedia Courses for New Study Programme* (2013-2015). The e-textbook you are reading at the moment is one of its outcomes as well.

**Examples of good CLIL practice**

The papers expressing teachers’ personal experience and examples of their good teaching practice are seen as the most valuable and most trustworthy by other teachers who plan to be involved in teaching with CLIL. Here is a brief list of such sources by Slovak teachers of CLIL. The first-hand experience from the perspective of school headmasters was summarized by Sopoliga (2011) as well as in the section *Profily základných škôl zúčastnených na projekte experimentálneho overovania* (in Pokrivčáková et al., 2012, p. 133-158). Commented lesson plans for primary CLIL classes can be found in the works by Dorotová (2012), Laučeková (2011), Lászlóová (2012), Moravčíková, Smetanová & Gunišová (2012), Pokrivčáková (2010b), and
Trojčáková (2012). Some inspirational examples for secondary CLIL classes in social sciences were published by Froľo (2011). The experience with teaching physics through CLIL was discussed by Spišáková (2013). Viščeková (2015) provided and analysed the examples of CLIL activities for math and geography classes. Moreover, teaching math through CLIL was discussed in several other works, e.g. Hurajová (2012) and Kubeš (2011, 2013). Some tips aimed at developing learners’ extensive reading competencies by using CLIL activities, based on reading non-literary texts, were published by Cimermanová (2015), Straková and Sepešiová (2015). Examples of CLIL activities based on reading literary texts can be found in works by Pokrivčáková (2009) and Žemberová (2010). Combining CLIL and using digital technologies was discussed by Horváthová (2009, 2013), Veselá et al. (2011).

Expected future developments
Despite the sustained support provided by the Slovak Ministry of Education and other decisive bodies, a growing number of teachers and schools interested in CLIL methodology, as well as generally positive responses of learners (and their parents), there still remain areas requiring further attention of researchers, academics, and policy-makers. As for the future, the following steps need to be undertaken to keep CLIL running and improving:

- to establish a net of CLIL teachers, schools and other educational institutions in order to intensify mutual contacts and share experience, designing more fine-tuned CLIL teaching materials,
- to set clear assessment criteria and set objective procedures and standardized evaluation instruments for CLIL classes;
- to conduct more empirical research on various aspects of CLIL, especially research into the affective and cognitive benefits of CLIL.

Acknowledgements
The chapter presents the partial results of the KEQA 036UKF-4/2013 project funded by the Ministry of Education, Science, Research and Sport of the Slovak Republic.

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MENZLOVÁ, B. (2012). Obsahovo a jazykovo integrované vyučovanie (CLIL) na 1. stupni základnej školy. In S. Pokrivčáková et al. (Eds.), *Obsahovo a jazykovo integrované vyučovanie (CLIL)* v *ISCED 1*. (p. 13-60). Bratislava: ŠPÚ.

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3 CLIL research in the Czech Republic

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Objectives
The aim of this chapter is to introduce the latest results of the Czech CLIL research in the form of a summary of publication outcomes (books and papers) written by Czech authors and listed in recognized databases of the National Library, Prague, Web of Science and Scopus. The results show many more publications are available out of these databases on various web pages, probably because they provide and discuss real experience, not frequently describing hard research activities.

Introduction
The current world, living under the process of globalization, is calling for new competences from all individuals. This state changes the content of knowledge and skills required from them to succeed in private lives, including the labour market. One of the ways how to meet the requirements is the implementation of the Content and Language Integrated Learning (CLIL) into national curricula. Within the current globalized world, single fields, sciences, subjects penetrate, enhance and enrich each other. The ‘traditional’ approach to instruction, which applies teaching/learning single subject separately, does not meet today’s requirements any more. Moreover, contemporary curricula support the possibility to integrate learning contents of subjects and fields. Reflecting these features, the CLIL opens doors to providing flexible response to the demands required from us by the environment through new strategies which encourage a more active role of the learner in the process of instruction. The optimal environment for the CLIL implementation is the secondary professional school. The pointed integration of a foreign language in subjects (contents) which learners are professionally interested in is their ‘will to power’ enhancing motivation. If the educational institution is really flexible in responding to the 21st century reality, the synergy between the learning content and a foreign language should be applied.

CLIL definition
In short, Deller and Price (2007) define CLIL as teaching a non-language subject in a foreign language. The non-language subjects is primary and determines what language support is required (and thus developed). The foreign language is a mere part of the process, not the educational objective, despite been developed through the professional subject. The CLIL in the widest context means such a type of instruction where non-language subject (content) is mediated to the learner through a foreign language as a means of communication (Coyle, Hood, March, 2010). The ‘hard’ form of CLIL, where the whole curriculum or its part in one or more subjects are taught in another than mother tongue, follows the learning content objectives, been taught by professional subjects teachers. In the ‘soft’ CLIL the learning content is mostly applied in foreign language lessons by language teachers following language objectives. The hard CLIL more closely reflects the definition mentioned above. If the CLIL is to bring the innovation into education in the widest context, its application should be highly sophisticated; only such an approach can bring efficiency and meaning to the professional content and language education. Under optimal conditions foreign language teachers with specialization in a professional subject are the highly qualified for CLIL; in practice professional subject teachers with good knowledge (proficiency) in a foreign language are mostly those who apply CLIL in their lessons. English (in the current sense) is not the foreign language any more but the basic skill, Graddol (2006) said ten years ago.

The term of CLIL, first been used in 1994 in Finland, was originally intended to describe methods which can be applied in professional subject teaching through a foreign language.
where the professional and language learning contents are simultaneously mediated to learners (Eurydice, 2005).

Since 1990s the CLIL has become a specific type of instruction integrating approaches of foreign language didactics and professional subject didactics. Been characterized by exploitation of numerous teaching methods and organizational forms, it develops teaching/learning strategies, learners’ critical thinking, creativeness and strengthens their motivation to learn, verifying the expectation that foreign languages learning is easier if based of real concrete content mediated through the foreign language (Mehisto et al., 2008). According to the National Programme of Education Development in the Czech Republic (the White Book) designed by the Ministry of Education (2001), which emphasizes the plurilingual education in Europe, the CLIL can provide advantages both for professional and language education.

**CLIL application**

The CLIL can be applied as an approach to bilingual education (i.e. using two languages in teaching instruction: mother tongue and a foreign language, or two languages in general, e.g. in Canada, Belgium), or plurilingual form of education (using several – three or more – languages, i.e. Catalonia), or to multilingual type (several languages are taught, one or two of them are the CLIL languages, i.e. Australia).

Compared to bilingual instruction, which aims at mastering the foreign language on the level of native speaker in receptive skill (i.e. listening and writing comprehension), the CLIL focuses on the learning content and developing both receptive and productive skills, expecting a good level of knowledge in the foreign language. From the point of extent and depth of the language level, the term of language immersion is used; if only parts of the learning content are taught in the foreign language, the partial immersion is mentioned, or early immersion can be applied in early childhood, i.e. in kindergartens or first grades of the primary education.

The CLIL can be applied on all levels of education, partially at schools specialized in the foreign language instruction;
- frequently using learning sources and materials in foreign languages;
- exploiting the project method which integrated learning content of several subjects;
- where self-evaluation and peer-evaluation are regularly applied;
- where teachers use various teaching strategies emphasizing critical thinking and key competences of learners.

As a result:
- the class/school climate is improving;
- time is saved within the curriculum because the foreign language competence is developed in other than language lessons as well, thus making the concept of learning content integration wider and deeper.

Despite strong advantages, several limitations and weaknesses can be also discovered. The list of selected ones is displayed in Table 1 (Šmídová, Tejkalová & Vojtková, 2012, p. 11).

To eliminate the risks and limits, the quality, achievements and experience of teaching staff should be considered in detail, as well as teachers’ motivation for CLIL and decision on how the CLIL will be implemented in the given institution. Moreover, parents’ and learners’ opinions should be also considered, and so the co-operation with sponsors and the public.

The exploitation of the foreign language as a tool for mediating the learning content is the key contribution of the CLIL; it thus can enhance to improve the instruction, both from the point of professional content and foreign language competence. These dual objectives (i.e. relating to the professional field and language) should be balanced, both focusing on the development of learning strategies and skills (Mehisto, Marsh, Frigols, 2008). Within planning and preparation for CLIL lessons, for ´C´s are required which represent Content, Communication, Cognition and Culture. They form a framework determining in what way the knowledge, skills and content
comprehension will be provided to learners, how the foreign language will be exploited, what cognitive processes will run and what cultural aspects will learners be exposed to.

Table 1: Selected CLIL advantages and limits

<table>
<thead>
<tr>
<th>CLIL advantages</th>
<th>CLIL limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIL applies higher requirements on learners’ cognitive processes which are not commonly used in foreign language textbooks</td>
<td>insufficient language competence to exploit a foreign language in professional context with learners</td>
</tr>
<tr>
<td>CLIL develops and trains compensation strategies and communication skills efficiently</td>
<td>lack of appropriate learning materials and tools for CLIL evaluation</td>
</tr>
<tr>
<td>CLIL works with real content and information which can be used in real life</td>
<td>inform-less school management and non-systematic implementation of CLIL</td>
</tr>
<tr>
<td>CLIL increases learner’s success rate on the labour market (even abroad) and in future studies</td>
<td>teachers not willing to work in the CLIL team</td>
</tr>
<tr>
<td>CLIL develops learner’s inter-cultural competences</td>
<td>time-demanding and difficult preparation for CLIL lessons</td>
</tr>
<tr>
<td>CLIL increases teacher’s professional qualification</td>
<td>insufficient teacher qualification in foreign languages and/or professional field</td>
</tr>
</tbody>
</table>

Following attributes should be always taken into account:

- Through their authors the learning content of the professional subject always reflects footprints of the cultures. Then, the learners’ task is to critically consider them before implementing into their knowledge structures.
- Reflecting the term of CLIL, it might evoke the professional content comes before the language, in other words, the language objectives result from the professional ones. This approach is not correct – just because the CLIL is multi-contextual and thus improves knowledge and foreign language communication (and competence in general) in various fields (see hard and soft CLIL mentioned above).

Within the systematic use of CLIL, several language layers are touched on:

- language for specific purposes (vocabulary, grammar, style etc.);
- using all language skills (reading, writing, listening, speaking) for study purposes, e.g. detailed reading, searching for specific information in texts, making presentations etc.;
- language for common communication to keep in contact, manage the process of teaching, working in teams, etc.;
- and last but not least the role of mother tongue should be defined in CLIL, e.g. to what extent it will be used for mediating the learning content – key works, code-switching, etc.

**CLIL: theoretical background and support to the learning-to-learn competence development**

As the CLIL also implies to the development of ‘learning-to-learn’ (learning) competence (Tejkalová, 2010), various efficient learning strategies should be provided to learners so that they can realize which ones help them in learning, and which do not. When preparing CLIL lessons, teachers should apply following principles:

- to implement new methods and organizational forms which enable to integrate inter-subject relations both in the professional content and foreign language;
- produce creative working environment through e.g. encouraging learners to present their opinions, experience, ideas; the exchange enhances the co-operative atmosphere and autonomous learning;
single topics of the learning content should reflect real-life situations – this produces both the meaningfulness of the professional subject learning and authentic use of the foreign language;

learners should actively participate in forming the learning content by e.g. using a large extent of communication, pair/team work, self-reflection and reflection of the strategies used, they should not avoid experimenting, new solutions, asking questions and discovering both correct and incorrect results;

learners should be supported by the teacher during all their activities who facilitates them in designing the CLIL-relating processes and providing immediate feedback, and/or scaffolding towards reaching the learning objective and competences.

As clearly seen from the last bullet, the teacher’s role changed in CLIL compared to "traditional", non-CLIL instruction. In general, the teacher does not present pieces of information to the learners in a foreign language but enhance them in the process of creating their knowledge through the information and applied didactic means. Thus shifting the responsibility for own learning to the learners making them the centre of the whole process (learner-centred approach), the teacher becomes a mediator, facilitator who

- motivates learners;
- decides about what learning materials will be provided to learners and what learning strategies will be applied;
- adjusts the level of foreign language used in lessons to learners’ knowledge;
- helps learners structure and acquire new pieces of information and skills;
- supports open and friendly environment (climate) in lessons;
- applies such methods of instruction and organizational forms which make learners active, communicative and co-operative;
- changes and adjusts learning strategies to accommodate individual preferences of single learners;
- exploits to maximum extent learners’ previous knowledge and experience, and connects them with those newly acquired;
- positively apprehends learners’ mistakes and understands them as another occasion to learning;
- leads learners to making reflections of their own development and methods applied in this process;
- focuses on learners’ development, either in the professional subject, or in the foreign language learning (Šmídová et al., 2012, 22).

All the above mentioned aspects are applied within the non-CLIL instruction. In the CLIL, another aspect occurs which joins the learning content in the professional subject and foreign language learning. The background of learning strategies applied in CLIL originates from three sources:

- pedagogical constructivism, which emphasizes processes of discovery, of building mind (mental) constructions (maps) of new information and knowledge under the conditions of peer/team- learning and provides natural environment for foreign language skills development;
- critical thinking, which focuses on learners’ development in work with information, sources, their classification, consideration, verification and forming own opinions (within this context the development of competence how to of acquire and consider the cultural context is included);
- project (problem-solving) instruction.

Moreover, reflecting the Multiple-intelligences theory by Gardner (1983), the intelligence is categorized into three primary or overarching categories, which are formulated by the abilities. Gardner differentiates specific (primarily sensory) "modalities", rather than seeing intelligence
as dominated by a single general ability. He set eight criteria for behaviour to be considered intelligence and chose eight abilities meeting these criteria: musical–rhythmic, visual–spatial, verbal–linguistic, logical–mathematical, bodily–kinesthetic, interpersonal, intrapersonal and naturalistic. As defined by Gardner (1999), the intelligence is “the ability to create an effective product or offer a service that is valued in a culture, a set of skills that make it possible for a person to solve problems in life, the potential for finding or creating solutions for problems, which involves gathering new knowledge.”

The multiple-intelligences theory corresponds to various learning styles. There exist various classifications given by different authors but the conclusion they all agree with is the teacher should be aware of individual learners’ preferences. The fact is that each class consists of individuals preferring different learning styles and strategies, both in the ‘traditional’ non-CLIL and CLIL classes (Šimonová & Poulová, 2012). To meet this precondition is not easy in non-CLIL lessons, much less in CLIL ones. Identically to the non-CLIL approach, the natural solution is to provide learners with as wide as possible range of learning materials, tasks and activities to fix information and develop the knowledge within the CLIL which they can choose from.

The same approach can be applied to learning strategies. The more strategies the learners exploit, the more efficient their learning is. Komorowska (2011) proposes following strategies for efficient content and language integrated instruction:

- **memory strategies**, which help learners remember information, store it and re-call from the memory, including clustering, associating, processing information, adding details, designing mind maps, images, key words, connecting terms with actions etc.;
- **cognitive strategies**, which mediate comprehension through mental activities (revision, exploiting similarities, differences, templates, making comparisons, deduction of vocabulary meaning from the context, translation, notes, summaries, highlights, and(last but not least) scaffolding the learner’s process of cognition and work with mistakes reflecting the process are important;
- **affective strategies**, relating to emotions, feelings and motivation and participating in setting the class climate, include praise, informal recognition by peer-learners, reflection and willingness to speech the foreign language (despite they may fail);
- **social strategies**, building social contacts based on co-operation activities during lessons and in the private sphere;
- **compensative strategies**, which enable learners to cope with insufficient knowledge in the foreign language using linguistic or non-verbal signals to discover the meaning by e.g. slightly changing the meaning, using synonyms, words from mother tongue, gestures, facial expressions, describing the meaning etc.;
- and finally **meta-cognitive strategies**, which help learners co-ordinate the entire process of learning through e.g. previous knowledge and experience, ability to keep attention the topic or activity, to concentrate on the topic or problem, follow the objectives, manage their own time and work, self-assessment etc.

Learning strategies, particularly the cognitive ones, are connected to the Bloom’s taxonomy of leaning objectives. Each of six categories of the taxonomy (to remember, understand, apply, analyse, evaluate and create) corresponds to the strategies, thus joining the content and language areas.

**CLIL design**

Moreover, all the above mentioned results in the main objective of the CLIL approach, i.e. the development of key competences. Reflecting the CLIL methodology, following strategies support the key competences development as defined in the Framework education programmes in the Czech Republic:

- teacher applies various organizational forms and methods of instruction for learners to select those which are appropriate to their individual learning styles and strategies, to enhance and develop the learning-to-learn (learning) competence;
• teacher provides learners with opportunities to work independently (when learners select their own strategy to simultaneously overcome the language barrier and solve the problem within the professional subject), to enhance and develop the problem-solving competence;
• teacher gives learners time and space to express and present their own ideas, opinions, experience in the oral and written form, to apply their foreign language skills in real situations, to enhance and develop the communication competence;
• teacher applies pair/team work to support peer co-operation, help and respect to other members (and their cultures), to enhance and develop the social and personal competence;
• teacher exploits learning materials in foreign languages to let them know, understand and respect home and foreign cultures, traditions, to enhance and develop the citizenship competence;
• teacher aims learners at collecting information about professions requiring knowledge of foreign languages and thus directs them to selecting their possible future profession, to enhance and develop the work competence.

Considering the CLIL background (pedagogical constructivism, critical thinking, problem instruction), multimodality (individual preferences in learning styles and strategies), the Bloom’s taxonomy of educational objectives as a means of setting cognitive demandness of the learning content and the tools towards key competences development, the CLIL methodology as a set of active, communicative, learner-centred methods defines the content and language objective of each instructional unit (lesson).

Research in CLIL publications written by Czech authors
There exist large amounts of publications (monographs, papers in journals, proceedings, methodological manuals etc.) dealing with the topic of CLIL which are written by English-speaking authors. From the point of CLIL in the Czech educational environment, we aimed at discovering what publications are available to Czech speaking teachers. In other words: What and how numerous are the sources on CLIL for those who are or will be interested in CLIL methodology, experience, projects, i.e. in the CLIL implementation to the Czech primary, secondary, tertiary and informal or further education institutions?

Our plan was to provide those who might be interested with a list of publications structured according to the language of CLIL, subject the CLIL was applied in and learners’ age (reflecting the ISCED classification).

Methodology and tools
To research these questions, following analysis was planned to be conducted applying three criteria:
1. Time period for conducting the analysis. The strength-gaining attention has been devoted to the CLIL implementation in last two decades (since 1994, when the term of CLIL was used for the first time, as mentioned above). In the Czech Republic the process started later compared to Finland or the Slovak Republic, so the analyzed period was from 2000 to 2014.
2. Information sources relevant to the analysis. Reflecting the topicality of presented data, solely the periodical publications (journals) should be considered as the most flexible feedback to latest trends in education (compared to books). The topic of CLIL covers several professional fields comprising general pedagogy, didactics, foreign languages, all professional subjects, technology of education in the form of the e-enhanced instruction to some extent etc. On the other hand, the CLIL definitely is a topic to be dealt not only in journal papers but also in monographs, methodological guides, i.e. in publications having larger extent and closer impact on teachers than papers have. From these reasons, both works of monography type (books) and papers in journals were included under the criteria. As the research question focuses on the situation in the Czech Republic, the highly recognized Czech database became the main source – the database of National Library (NL), Prague. From the same reason, i.e.
the professional recognition, works by Czech authors were searched in international databases of **Web of Science (WoS) and Scopus**. We expected the publications in NL to be written in Czech language will be devoted to Czech, possibly non-English speaking, teachers. To make the picture more complex and detailed, recognized databases of Web of Science (WoS) and Scopus were added where publications mostly written in English are collected.

3. **Relevant key words for conducting the analysis.** In numerous works problems may occur, when key words are to be set for the search. If disciplines or topics of interest are under the development in time of research, their definition is difficult, as well as the setting of key words. In this research the choice was rather clear and **following pairs of expressions** were searched:
   - CLIL AND Czech,
   - CLIL AND foreign language,
   - CLIL AND age,
   - CLIL AND school level,
   - CLIL AND ISCED.

**Research results**
The results did not meet our expectations, from several reasons. Totally, written in Czech language in the National Library eight books (monographs and methodological manuals) were detected (plus two books written in English and one by Slovak editor in Czech/Slovak) and eleven papers in periodical publications – journals. Written in English, six papers were found (plus one written by a Slovak author but published in the Czech Republic) in the WoS, and three papers in SCOPUS. The amounts of publications are displayed in table 2.

<table>
<thead>
<tr>
<th>Source/Language</th>
<th>Books</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Library</td>
<td>8 (incl. 1 Slovak author)</td>
<td>2</td>
</tr>
<tr>
<td>Web of Science</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SCOPUS</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

Below, in table 3 the list of single publications is presented. The main objective was (1) to provide learners with publishing data for more convenient search in case of interest; (2) to display on what learners (reflecting the ISCED) the CLIL is focused, (3) what is/are the most frequently used language/s exploited for CLIL and (4) what subjects are exposed to the CLIL method.

<table>
<thead>
<tr>
<th>Author, title, publishing data</th>
<th>Language of CLIL</th>
<th>Subject</th>
<th>target group</th>
</tr>
</thead>
</table>

The methodological guide provides teachers with various activities for CLIL lessons at the primary school level. It is not a textbook but a source of inspiration for teaching/learning various subjects in English. It includes activities from a short-time tasks to work on projects and programmes for stays in the open-air school. The electronic version of the book, work sheets and additional recordings and pictures relating to the tasks are also provided on the CD-ROM.
<table>
<thead>
<tr>
<th>2</th>
<th>Vašíček, Zdeněk. Hra na klavír s komunikací v cizím jazyce (anglicky nebo německý)</th>
<th>English</th>
<th>piano</th>
<th>teacher</th>
</tr>
</thead>
</table>

The study material provides two-volume methodology on how to join the playing the piano and communication in a foreign language (English or German) following the CLIL concept. The first version of the material was piloted in CLIL courses in the Methodological centre of Janacek Music Academy, Brno, in 2004-2007. Volume One introduces the CLIL methodology and short Czech – English – German dictionary; wider dictionary is provided in Volume Two.

| 3 | Hanušová, Světlana, Vojtková, Naděžda. CLIL v české školní praxi | English | all | teacher, ISCED 1, 2, 3 |

Authors who consider CLIL a latest trend in foreign language instruction reflect their experience of facilitators and project co ordinators of interested teachers of primary and secondary schools providing them with inspiring materials, recommendations, and discovering some pitfalls of the CLIL.

| 4 | Novotná, Jarmila, Hofmanová, Marie. The onset of CLIL in the Czech Republic: selected texts from 2000-2008. | English | -- | -- |

The book strives to present CLIL from different perspectives within the European context – professional subject, foreign language, ISCED and type of school. It introduces theories and research results from didactics of mathematics, EFL, SLA, bilingual education and psychology.

| 5 | Kráľová Zdena (ed.), Gondová, Danica et al. CLIL - nová výzva | English | -- | teacher, ISCED 1, 2, 3 |

A collective monograph deals with CLIL-relating topics, e.g. CLIL from learners’ view, teacher’s competences towards, successful application of CLIL, a case study on bilingual education in Slovakia etc.

| 6 | Beritová, G. et al. Propojení cizího jazyka a vyučovacího předmětu na základní škole | English | Maths, Art educ. | teacher, ISCED 1,2 |

Methodological guide are an output of project of identical title conducted in Ceske Budejovice in 2010-12. The project focused on increase in quality of teaching through CLIL method in Mathematics and Art education lessons.

| 7 | Šmidová, Tereza, Lenka Tejkalová, Naděžda Vojtková. CLIL ve výuce: jak zapojit cizí jazyky do vyučování | all | all | all |

The publication is an output of the national project ‘Kurikulum S’ supporting the implementation of school education programmes, conducted by the Ministry of education, youth and sports. The content includes the basic CLIL terminology, strengths and weaknesses, principles, objectives and specifics. It strongly focuses on single steps in planning CLIL lessons (start-up, main and additional activities, and hints for efficient CLIL lessons are also provided for various subjects.

| 8 | Šulista, Marek. CLIL implementation in mathematics lessons. | English | Maths | teacher |

Reflecting the title of the book, it presents research results of the questionnaire administered by the primary and secondary school teacher of mathematics mapping their experience in CLIL, particularly selected topics at the lower-secondary and upper-secondary level. The evaluation is based on analyses of video-recorded lessons, interviews with learners and teachers and statistical analyses of learners’ study results.

Characteristics of the primary school learners, teaching language skills in non-CLIL classes compared to the CLIL method, its strengths, methodology, CLIL and the interactive whiteboard, CLIL materials and lesson plan for topics UK, Washington, D.C., Great fire of London, English speaking countries, culture, sports, media (Facebook), cuisine, festivals, traditions.


These are the only conference proceedings included in the National Library database. Thirteen authors presented their papers on a wide range of CLIL-relating topics, e.g. learner’s communication competence, pre-service teachers’ preparation, CLIL from the bilingual view, scaffolding, playing the piano in English, German, French and Italian, methodology of creating materials for Art education lessons and the digital CLIL materials, experience in Mathematics etc.

### National Library - Papers


Even more than a decade ago the author attracted attention to the CLIL method reflecting the theoretical background and European documents. In the second part, possible risks are mentioned and the role of stimulating environment, both in CLIL and non-CLIL instruction.


The author focuses on the identical topic which was late worked out in other publication, see N. 2, 14. In this paper the project of basic school in Tisnov is mentioned, particularly the problems detected within its process, i.e. the communication in English and German languages, and author’s experience and future perspectives of CLIL are presented.


A brief paper brings basic information answering the question in the title. The author emphasizes the role of foreign language as a tool towards reaching learning objectives in both the professional subject and foreign language, and wonders whether we all are really able to meet expectations of EU – to speak three foreign languages. In this context the prioritizing Czech reality to future EU visions is recommended.


The paper outlines the possibilities (strengths and risks) of the “playing the piano” concept using the CLIL method and presents information on CLIL projects for two institutions: Basic school, Tisnov and Methodological centre of Janacek Music Academy, Brno, particularly the applied methods, course of the projects, evaluation and research conducted within the projects. As the result, for A1 level of CEFR 300 – 500 vocabulary items are recommended, for A2 level 1,000 – 1,500.


The aim of the paper is to contribute to the discussion on selected problems of foreign language instruction in the Czech Republic. According to the author, originally, this paper was outlined the review of the work by Baladova (see N. 1) from VÚP [Research institute of pedagogy]. The author applies critical
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Title</th>
<th>Publication Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Binterová, Helena</td>
<td>Klima výuky matematiky v angličtině (metodou CLIL) [The class climate in Mathematics by the CLIL method]</td>
<td>In: Pedagogická orientace, Vol. 22(1), 2012, pp. 66-81. ISSN 1211-4669.</td>
</tr>
<tr>
<td>21</td>
<td>Sedláčková, Jolana</td>
<td>Zkuste učit základy společenských věd v angličtině [Try teaching introduction to Social Science in English]</td>
<td>In: Komenský, Vol. 137(1), 2012/2013, pp. 51-54. ISSN 0323-0449.</td>
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</table>
Expecting that the use of bilingual textbooks could be an effective incentive to raising interest in the foreign language learning, this paper deals with the incidental acquisition of foreign language vocabulary with university students who work for one semester with a bilingual textbook of financial and actuarial mathematics. The conducted case study investigates whether students working with the textbook incidentally acquire significantly more terminology compared to those who do not, even though they undertake the whole course of Financial and Actuarial Mathematics in the Czech language and their interest in acquiring the vocabulary is entirely voluntary.

| 23 | Šulísta, Marek; Binterová, Helena. Foreign language as an obstacle in the solving of a mathematical problem for non-CLIL elementary school pupils. Conference proceedings Efficiency and responsibility in education (ERIE) 2014, Czech Science University, Prague, 2014, pp. 790-796. | English | Maths | ISCED 1 |

This paper presents a piece of research focusing on the role of a foreign language in the solving of a mathematical problem taken from the pilot testing of The Programme for International Student Assessment (PISA) with 15-year-old learners and the difference in academic achievements of CLIL and non-CLIL learners. The research was based on an assessment of didactical tests taken by learners who have undertaken some mathematics lessons in a foreign language and pupils who have undertaken mathematics lesson only in the mother tongue. The academic achievements of both groups are compared to the overall PISA results of Czech learners in 2012.


The paper presents a process of optimization of CLIL didactics course for Mathematics teacher-trainees, starting from a traditional face-to-face course through an e-learning project to a blended-learning model. The process of the course design improvement is described; the current model is presented in detail, underlining the advantages of blended approach for CLIL; parallels between effective CLIL didactics and blended learning tools are discussed, methodological approach to course design is explained. The aim of this case study is to discuss possibilities of blended learning for CLIL teacher training, particularly of designers and CLIL practitioners, offering the students’ perspective based on complex feedback survey. The results show the CLIL teacher training course should expand the teachers’ didactic skills with teaching compensation strategies, focusing on multimodality, and incorporating language-teaching strategies in Mathematics lessons. The blended model of the course allows the teachers to cater to the language aspect of CLIL more effectively, and especially to illustrate CLIL methodology on two levels: as the content of the course and also via the methods employed to teach this content.


The paper publishes first results of an in-progress research on attitudes, teaching procedures and possible stereotypes of teachers applying CLIL. The research plans to triangulate data gained by survey techniques, lesson observations and both quantitative and qualitative content analyses of over 1,300 lesson plans and accompanying teaching materials produced by Slovak and Czech teachers for CLIL lessons. The present paper analyses the selected answers of 35 Slovak teachers obtained through questionnaires and follow-up interviews. Their answers point to most problematic areas related to the roles they need to play in CLIL classes, and are analysed in relation to the duration of their CLIL experience and CLIL training background.

| 26 | Klímová, Blanka. CLIL at the Faculty of Informatics and Management. 2nd world conference on educational technology research. Procedia of social and behavioural sciences, 2012, Vol.83, pp. 196-199. | English | Culture and Literature | ISCED 6 |

The article outlines the course structure, materials and assessments of the optional subjects Culture and Literature of Great Britain - taught at the Faculty of Informatics and Management of the University of Hradec Králové, Czech Republic. Moreover, it demonstrates how students build intercultural knowledge and understanding while developing their language knowledge and skills, and how they are involved in the decision-making process, which, on the other hand, makes students responsible for their own decisions and learning.
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<tr>
<th></th>
<th>Authors</th>
<th>Title and Details</th>
<th>Language</th>
<th>Subject</th>
<th>ISCED</th>
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<tr>
<td>27</td>
<td>Klímová, Blanka.</td>
<td>CLIL and the teaching of foreign languages.</td>
<td>English</td>
<td>Culture and Literature</td>
<td>ISCED 6</td>
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<td>The purpose of this paper is to discuss CLIL, its benefits, constraints and tips for teaching, within the subject of Culture and Literature of Great Britain taught within the Tourism and Management study programme at the Faculty of Informatics and Management of the University of Hradec Kralove, Czech Republic.</td>
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<td>28</td>
<td>Hanušová, Světlana.</td>
<td>Introducing CLIL to Czech schools.</td>
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<td>pre-/in-service teacher, ISCED 1, 2, 3</td>
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<td>The author reflects on her experience as a facilitator and co-ordinator of a group of primary and secondary in-service teachers who are currently introducing CLIL into the school educational programmes at their schools. The experience of accompanying practising teachers on their way to innovated teaching procedures serves as a valuable source of research data. The action research carried out in the process of cooperation with in-service teachers is beneficial in the process of introducing modules and courses aimed at CLIL to pre-service teacher education.</td>
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<td>29</td>
<td>Zinecker, Marek; Konečná, Zdeňka.</td>
<td>German language proficiency among students of business and management in the Czech Republic and its perception: the importance of German language skills on the labour market and the role of universities in foreign language training.</td>
<td>German</td>
<td>Business and Mng.</td>
<td>ISCED 6</td>
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<td>This paper presents the results of an empirical study designed to map German language proficiency among students at Czech universities of business and management. The results show that (1) the ability of students at Czech universities of business and management to communicate in German is poor, and exceeds the general German language proficiency of the Czech population only to an insignificant extent; (2) the school environment (the opportunity to learn the language, compulsory subject, language study motivation) has a decisive influence on the respondents’ ability to communicate in German; (3) nearly three-quarters of the respondents perceive German as a language that is very or rather important for their profession and career growth; (4) almost two-thirds of the respondents consider the role played by a university of business and management in the improvement of German language proficiency rather or very important. In conclusion, the study proposes directions for the potential development of the national educational system in the area of German language proficiency of university graduates in business and management in the Czech Republic, with an emphasis on the concept of CLIL.</td>
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<td>30</td>
<td>Novotná, Jarmila; Procházková, Lenka.</td>
<td>Searching for the ideal CLIL course design.</td>
<td>Eng., Ger., Hung., Swed., Cz., Ital., Polish</td>
<td>Engineering</td>
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<td>31</td>
<td>Bako, K.; Lengyel, K.</td>
<td>OVOTRAIN: On-line virtual vocational training system.</td>
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<td>The On-line Virtual Vocational Training System (OVOTRAIN) focuses on CLIL by creating a 7-language internet-based expression dictionary system in metallurgy and mechanical engineering completed with virtual vocational training opportunities (<a href="http://www.ovotrain.com">www.ovotrain.com</a>). The Metaltransys project has developed an illustrated English-German-Hungarian-Swedish language expression dictionary in metallurgy with 1,100 terms and their explanations. OVOTRAIN translated the dictionary to Czech, Italian and Polish, and developed virtual reality-based training systems. Products in virtual reality provide producers and operators of equipment and machines, students and apprentices the opportunity for effective training and short-term adjustment to operating, control and process operations.</td>
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Summary and conclusions

Several criteria were applied on the evaluation of collected publications: (1) basic publishing data to determine the item for more convenient availability; (2) on what learners (reflecting the ISCED) the CLIL is focused, (3) what is/are the most frequently used language/s exploited for CLIL and (4) what subjects are exposed to the CLIL method.

The following data were collected:

- From the view of languages exploited for the CLIL, the most frequently mentioned language was English (in 21 publications), followed by German (5), one paper also focused on Italian and Spanish, in five texts the CLIL focus was on all foreign languages and seven-language dictionary (English, German, Hungarian, Swedish, Czech, Italian, Polish) was the topic of one paper.
- Among subjects exposed to CLIL approach were mentioned all subjects (11 x), Mathematics (6), piano playing (3), Culture and Literature (2), Art education (1), Business and Management (1), Social Science (1) and Engineering (1).
- Reflecting the ISCED classification, the CLIL target group was of level 1 (8 x), level 2 (7), level 3 (5), level 6 (4), school of arts (2), all groups were mentioned 4 x and teachers were the target group in ten publications.

Within the whole survey, following features were detected:

- The CLIL implementation started later in the Czech Republic compared to other neighbouring states, particularly the Slovak Republic, which is the reason why hardly any publications (both books and papers) were written in the first part of the observed period.
- As seen from references and tables 2 and 3, the CLIL publishing activities are developed in close relations.
- When planning this research we expected the search in recognized databases (both Czech and world ones) will bring the appropriate view of the field under our interest. But, search activities simultaneously running with and within the research clearly discovered the fact that many more publications are available on the Internet (generally said), but these are not listed in recognized databases. The reason might be they were published in proceedings of Czech (local) conferences which primarily aimed at experience exchange, they did not contain research papers, which is one of pre-conditions for including proceedings into recognized databases.
- Moreover, it was difficult to decide with some publications what criteria are reached in the text, either because of vague expressions, or missing the information at all.

We are aware the list of publications is far from been complete; in spite of this it can serve a primary source of information on CLIL. For futher development of CLIL, the school management reflecting the opinions of both foreign language and professional subjects teachers should lead the process of CLIL implementation. Taking some critical opinions into account, CLIL definitely is a motivation-supporting tool which makes the foreign language learning close to real life, despite the fact this approach might be more difficult compared to ‘traditional’ way.

Acknowledgments
The text is supported by the Excellence Project N. 2208.

References
KLÍMOVÁ, B. (2012). CLIL at the Faculty of Informatics and Management. 2nd world conference on educational technology research. Procedia of social and behavioural sciences, 83, 196-199.
KRÁLOVÁ Z. (Ed.) (2012). CLIL - nová výzva. Ústí nad Labem: UJEP.


4 Primary CLIL

Jana Trníková
Constantine the Philosopher University in Nitra, Slovakia

Objectives
The objective of this chapter is to summarize basic theoretical background about young learners and CLIL (Content and Language Integrated Learning) method. It is necessary to give special attention to learners of this age because they are “new” at school and they need to be trained, motivated and the most important – they should looking forward to go to school. Our task as teachers is to focus on lesson objectives, but always keep our learners and their specifics in mind.

Introduction
Content and Language Integrated Learning (CLIL) is a pedagogical approach which has a dual (integrated) aim: learning of the subject matter - content and learning of the (second/foreign/target) language used as the medium of instruction for the content. This approach to teaching a foreign language becomes popular as a new possibility how to work with a foreign language more often and use it in authentic situations. According to Act No. 245/2008 coll. (Act on Education) it is possible to implement CLIL methodology also at primary schools in Slovakia. The research focusing on CLIL in our conditions brought many interesting outcomes and teachers implementing this methodology have a possibility to read also publications in Slovak and learn more from more than 10-year-experienced colleagues.

Learning process and the brain
According to Jensen (2009, p. 5) new learning forms new synaptic connections. Each cell body (neuron) has spindly branches call dendrites and a single longer projection called an axon. The axon of one cell connects with the dendrites of another. Novel and coherent experiences form mentioned connections. If the experience is familiar, the existing connection may simply be strengthened. If the experience is incoherent, no learning may result. In a learner’s brain, the acquisition stage is the making of connections so neurons are communicates to one another. The relevance of this is that learning takes time because learning changes the brain physically.

The sources for acquisition are endless. As Jensen (2009, p. 6) further states that they may include discussions, lectures, visual tools, environmental stimuli, hands-on experiences, role models, reading, manipulatives, videos, reflection, projects, and pair-share activities. Jensen and other researchers further mentioned that here is no single best way for learners to learn something, but the age-old rule of "students who do the talking and doing, do the learning" still applies. The actual trial-and-error processing of the learning must happen quickly or the brain may encode erroneous information. The teacher should remember to avoid letting his/her students go home with misunderstanding and to ensure they encode the correct meaning.

Nowadays, new knowledge has been fueled by a revolution in cognitive neuroscience. These discoveries are redefining the very possibilities of education itself. Brain’s learning process has several critical variables (Jensen, 2009, p. 6):
- neural history (student's brain background),
- learning environment (e.g. where, when, who, stakes at play, learners feelings),
- content acquisition (input, how the learning happens),
- elaboration of the learning (how the data are tweaked into meaningful information),
- encoding of the information (how the learning is either saved or relinquished).
The brain of a child between 5 and 12 years old is a brain of wonder ready to new challenges such as reading, writing, world of reason, etc. Kennedy (2006, p. 479) identifies several implications of brain research for the language teacher, highlighting the importance of engaging senses and an enriched environment:

- We use our emotions to tell us what is important to learn and what to remember.
- The brain stores information based on functionality and meaningfulness.
- Emotions drive attention.
- Attention drives learning and memory.
- Repetition is necessary but it requires novelty with regard to instructional design (which should incorporate all five language processes—observation, listening, speaking, reading, and writing—and utilize a variety of methods and approaches).

Caine and Caine in their book entitled Brain/Mind Learning Principles (1997, p. 104–108) point out that the search for meaning is innate. Meaningful and meaningless information are stored separately. Meaningless, or relatively unrelated, information requires far more conscious effort to learn. Meaningful information is stored in a "spatial/autobiographical" memory that does not require rehearsal and can be recalled as a complete experience.

**Learner's differences**

Gardner's theory of multiple intelligences (Connel, 2005, p. 65-68) is making a tremendous impact in the field of education and provides teacher with a multitude of new ways to teach students. It is necessary to respect different kinds of intelligence/ways of learning such as:

1. **Verbal-Linguistic;** This intelligence covers a continuum, with speaking strengths on one end and writing strength on the other end. People with this intelligence can excel on one or the other or both ends of the continuum.
2. **Logical-Mathematical;** This intelligence also covers a continuum, with mathematics on one end and science and research on the other.
3. **Spatial;** This intelligence encompasses the eye-hand skills. These people can see images in their mind's eye and replicate this image with paint, sculpture, architectural blueprints, and buildings.
4. **Musical;** This intelligence includes those who compose and those who perform music. Gardner believes that we need to bring this intelligence into our classroom more.
5. **Body-Kinesthetic;** This intelligence includes a wide spectrum of physical abilities that range from athletic to dance, swimming, acting, gymnastics, and the martial arts.
6. **Interpersonal;** This intelligence refers to ability to get along with others. They are effective leaders, communicators and mediators.
7. **Intrapersonal;** This refers to an individual's ability to recognize and accept his or her own strengths and weaknesses. People with a strong interpersonal intelligence have a deep awareness of their feelings, ideas and goals. Many believe that this is the most important intelligence to develop.
8. **Naturalistic;** This intelligence refers to an individual’s natural interest in the environment. People with strong naturalistic intelligence easily recognize and categorize plants, animals and rocks.
9. **Existential;** This is the intelligence that Gardner refers to as a "half intelligence" because he could not find a physiological location for it in the brain. I also call this a spiritual intelligence, as those who score high in this intelligence are concerned with life’s big questions.

Gardner believes that we each possess all nine of the intelligences and most of us have several highly developed intelligences, a few moderately developed and the rest remain underdeveloped. Psychologist and educator Armstrong (2003) states that with a combination of encouragement, enrichment and good instruction we can enhance our strongest intelligences, as well as develop our moderate and underdeveloped intelligences.

The more intelligences we can incorporate into the lessons, the more students we will reach and connect to in an in-depth way. Tanner (2011) has produced a chart to show what kind of
activities might be suitable for students with special strengths in the different intelligences. Multiple intelligences play a very important role in language learning because they determine individual learners’ learning styles.

Learning style is another factor influencing the learning process and of understanding information and problem solving. There are seven learning styles:

- visual (spatial),
- aural (auditory-musical),
- verbal (linguistic),
- physical (kinesthetic),
- social (interpersonal),
- logical (mathematical),
- solitary (intrapersonal).

Many learners use a combination of learning styles, whereas others learn best by using just one. For more information or self-assessment see here and here.

**Developmental characteristics**

Various theorists have described the way that children develop and the various ages as well as stages they go through. General developmental characteristics are essential for elementary school language teacher. Piaget (2001) identified four stages of cognitive and affective development and suggested that children start at:

1. *The stage of sensory-motor intelligence* (age 0 to 2 years) - behaviour is primarily motor. The child does not yet internally represent events and “think” conceptually, although “cognitive” development is seen as schemata are constructed.
2. *The stage of pre-operational thought* (age 3 to 7 years) - is characterized by the development of language and other forms of representation and rapid conceptual development. Reasoning during this stage is pre-logical or semi-logical, and children tend to be very egocentric. Children often focus on a single feature of a situation at a time.
3. *The stage of concrete operations* (age 8 to 11 years) - child develops the ability to apply logical thoughts to concrete problems. Hands-on, concrete experiences help children understand new concepts and ideas. Using language to exchange information becomes much more important than in earlier stages, as children become more social and less egocentric.
4. *The stage of formal operations* (age 12 to 15 years or older) - child's cognitive structures reach their highest level of development. The child becomes able to apply logical reasoning to all classes of problems, including abstract problems either not coming from the child’s direct experience or having no concrete referents.

The thinking skills of most children in elementary school are at the concrete operations stage, and experience plays a major role in all learning. Piaget points out, that child is not simply miniature adult who have less experience and thus less knowledge to work with as they approach problems and new situations.

Vygotsky emphasized the place of social interaction in development and the role of a "knower" providing "scaffolding" to help a child who has entered the Zone of Proximal Development (ZPD) where they are ready to learn new things.

Erikson and Maslow saw development as being closely bound up in the child's confidence and self-esteem, while Feuerstein suggested that children's cognitive structures are infinitely modifiable with the help of a modifier – much like Vygotsky's knower.

Canadian educator Egan (1992) provides insights about educational development applicable to the elementary school language program. He describes development as a process of accumulating and exercising layers of ability to engage with the world. As individuals develop, they add new layers of sophistication without leaving behind the qualities characteristic of earlier layers.
The Mythic Layer: Ages 4 to 5 through 9 to 10 Years means that:

- Emotions have primary importance – children always want to know how to feel about what they are learning, they make sense of things through emotional and moral categories (e.g., good versus bad, happy versus sad, etc.).
- Young learners are drawn into a topic or an idea through simple polar opposites. For example, they find it hard to resist the appeal of very tiny versus really huge, a wicked witch versus the perfect princess, and so on. Once presented in this way, concepts can be developed by filling in between the poles.
- The world of the imagination is vivid and real to these children, so they move easily in and out of a world where animals talk or activities take place on a magical trip to another world.
- Learners in this layer often believe that the world thinks and feels as they do.
- Learners interpret the world in terms of absolutes, in the same way that a fairy tale world operates. The wicked witch is all bad; the daring prince is all good.
- Using story form (e.g., fairy tale) is the ideal approach for teaching. Instruction should have a clear and strong beginning, middle, and end; it should introduce things using strong opposites; it should address absolute meanings; and it should have strong emotional and moral appeal. Although it does not have to be a story, instruction should incorporate these strong story elements.
- Successful teachers take into account student differences in developmental levels and individual characteristics.

Young learner’s language development

Young learners are competent users of their mother tongue and in this connection they are aware of the main rules of syntax in their own language (Scott and Ytreberg, 1994, p.4). They can:

- Understand abstracts.
- Understand symbols (beginning with words).
- Generalize and systematize.

It refers to children’s general language development. There are many similarities between learning mother tongue and learning a foreign language in spite of the differences in age and the time available. This period sees dramatic changes in children, but we cannot say exactly when it happens because it is different for all individuals. It depends on which mother tongue the learners speak and on social and emotional factors in the learner’s background.

Characteristics of young learners

Young learners (from 7 up to 10 - 11) according to Scott and Ytreberg (1994, p. 2-3) have following general characteristics:

- They have very decided views of the world because their basic concepts are formed.
- They can tell the difference between fact and fiction and ask questions all the time.
- They can plan activities.
- They can argue for something and tell you why they think what they think.
- They can use logical reasoning.
- They can use their vivid information.
- They can use a wide range of intonation patterns in their mother tongue.
- They can understand direct human interaction.
- They know that the world is governed by rules.
- They understand the situations more quickly than they understand the language used.
- They use language skills long before they are aware of them.
- Their own understanding comes through hands and eyes and ears. The physical world is always dominant.
- They are very logical – what you say first happens first.
- Young learners sometimes have difficulty in knowing what fact is and what fiction is.
Young children are often happy playing and working alone but in the company of others. They ask questions all the time. They rely on the spoken word as well as the physical world to convey and understand meaning. They are able to make some decisions about their own learning. They have definite views about what they like and don’t like doing. They have a developed sense of fairness about what happens in the classroom and begin to question the teacher's decisions. They are able to work with others and learn from others.

Young children learn differently from other age groups in the following ways (Harmer, 2007, p. 82):

- They respond to meaning even if they do not understand individual words.
- They often learn indirectly rather than directly. That is they take information from all sides, learning from everything around them rather than only focusing on the precise topic they are being taught.
- Their understanding comes not just from explanation, but also from what they see and hear, and crucially, have a chance to touch and interact with.
- They find abstract concepts such as grammar rules difficult to grasp.
- They generally display an enthusiasm for learning and a curiosity about the world around them.
- They have a need for individual attention and approval from the teacher.
- They are keen to talk about themselves and respond well to learning that uses themselves and their own lives as main topics in the classroom.
- They have a limited attention span; unless activities are extremely engaging, they can get easily bored, losing interest after ten minutes or so.

Emotions have primary importance for young learners. The learners always want to know how to feel about what they are learning. They make sense of things through emotional and moral categories (e.g., good versus bad, happy versus sad, etc.). Young children are drawn into a topic or an idea through simple polar opposites. The world of the imagination is vivid and real to these children, so they move easily in and out of a world where animals talk or activities take place on a magical trip to another world.

**CLIL methodology for young learners**

CLIL is an approach or a method which integrates the content and non-native language. It refers to teaching subjects through a foreign language. This can be done by the English teacher using cross-curricular content or the subject teacher using English as the language of instruction. Both methods result in the simultaneous learning of the content of the subject and English. The goal of the CLIL methodology in primary school is to prepare learners for purposeful and intensive learning of foreign language in high school. Successful CLIL at primary level have to fulfil following principles:

- put the emphasis on communication,
- the basis for teaching process using CLIL is active listening,
- stimulate fluency of communication more than accuracy of language, accuracy is important only with pronunciation,
- teacher supports the creativity of learners by using open-ended or divergent assignments,
- teaching process is focusing on various learning styles of learners, teacher often switch various activities,
- special attention is focused on physical movement – motoric activity (e.g. TPR),
- teaching process is connected with the real world.
Teaching to young learners means to repeat again and again the main theme, important fact or the topic in the different situations by different ways (movement, drama, role-play, pantomime, visualization and using common things). Everything needs to be fixed by practicing and training. It is necessary to review the important or basic facts right before the test or exam.

Learners have intuitive deduction so it is not necessary to explain (neither translate) everything into mother tongue. For the before mentioned reason it is appropriate to give and read instructions in English (or target language) because learners later start to use it naturally.

According to our experiences teachers should focus on pronunciation and the proper use of grammatical structures to communicate necessary language functions. The most important in CLIL lesson is to focus on content (answers of learners) and not only the language itself.

An important factor influencing the lesson and relation between a teacher and learner are a feedback and attitude to mistakes because they affect learner's performance. It is necessary to keep in mind that mistake is integral part of the learning. Teacher should focus on giving improving and supporting feedback especially in young learners’ case.

Young learners as a specific age group need to be active during lessons so the teacher needs to be well prepared, switch a lot of activities quickly in the suitable order to fulfill the objectives of the unit.

It is important to make the lessons fun and relaxed. Young learners learn very basic facts but the teacher can design creative lessons and support them. They like songs and active games so it is necessary to provide lots of encouragement and positive feedback too. It is very important to create a safe, stress-free environment that everyone can enjoy.

Another important fact is that young learners have short attention spans and are easily distracted. It is necessary to encourage learners to try their best and create a learning environment where learners do not need to worry about making mistakes. Creating activities and exercises that are entertaining, helping learners learn how to interact with one another as well as how to speak English are further tasks for teacher. The more the learners are exposed to certain material, the faster they will learn it.

Our experiences show that successful primary CLIL activities have the following features:

- Start from the individual child.
- Recognize importance for age appropriate cognition.
- Focus on communication.
- Stimulate fluency rather than accuracy.
- Encourage creativity.
- Allow for physical movement (Total Physical Response).
- Draw on different skills.
- Foster links with outside world.

These factors directly influence also the work with the CLIL worksheet. According to educational experiences it is necessary to create original exercises/tasks, creative with a different kind of activity as in the common workbooks. The new vocabulary is better remembered when we repeat it in a different way, learners can see the words, picture or other aids to create a trace in their brains. The feelings and experiences are for learning in this age crucial.

During our research focused on English language learning implementing CLIL at primary school we created worksheets for Natural Science and verified it in learning process. Below you can see not only the worksheets but also the lesson plans (model lesson plan No 1 and No 2).
### Model lesson 1

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>1st class, young learners, 7 – 8 years old</th>
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<tbody>
<tr>
<td>Subject</td>
<td>Natural Science and English Language</td>
</tr>
<tr>
<td>Thematic Unit</td>
<td>Water Kingdom</td>
</tr>
<tr>
<td>Topic</td>
<td>My Body</td>
</tr>
<tr>
<td>Type of Lesson</td>
<td>Lesson of fixation of knowledge and developing skills</td>
</tr>
</tbody>
</table>

#### Objectives
- Learners will know structure of human body and parts of human body.
- Learners will name the parts of human body and show (name) the functions of the senses.
- Learners review speaking in target language.

#### Vocabulary
- head, neck, body, arms, hands, legs, eyes, nose, ears, mouth

#### Language
- I have ....one head, neck, body.
- I have...two arms, legs.
- I can see with my eyes. I can hear with my ears.
- I can smell with my nose. I can taste with my mouth.
- I can touch with my hands.

#### Teaching Aids
- Worksheets No. 1, human body parts pictures or flashcards, Workbook, human senses flashcards, dice

### Procedure

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<tr>
<th>Time</th>
<th>Part of the lesson</th>
<th>Activity</th>
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<tr>
<td>5’</td>
<td>Warm up</td>
<td>Children can sit on the chairs or stand by desk and revise the human body parts. Ask learner to show you - head, neck, body, arms, hands, legs, eyes, nose, ears, and mouth. Activity continues as follows: Show me your head. How many heads do you have? Expected answer: I have one head. Sing a song “Head, shoulders, knees and toes”</td>
</tr>
<tr>
<td>10’</td>
<td>Fixation</td>
<td>Ask learners how we are learning about the world? Then ask questions and visualize answers: What do we have on the face? Answer is supported by visual aids – pictures of 2 eyes, 1 nose, 1 mouth, etc. Learners repeat sentences together: I can see with my eyes. I can hear with my ears. I can smell with my nose. I can taste with my mouth. I can touch with my hands.</td>
</tr>
<tr>
<td>10’</td>
<td>Developing skills</td>
<td>Worksheet: Put the pictures of human body together as soon as possible. Competition between two groups, throw a dice.</td>
</tr>
<tr>
<td>5’</td>
<td>Conclusion</td>
<td>Review activity and feedback of learners’ performance.</td>
</tr>
</tbody>
</table>

#### Notes
Worksheet 1a
Worksheet 1b

```
mouth, head, hand, leg, neck, eye, ear, body, mouth
```
# Model lesson 2

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>1st class, young learners, 7 – 8 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Natural Science and English Language</td>
</tr>
<tr>
<td>Thematic Unit</td>
<td>Water Kingdom</td>
</tr>
<tr>
<td>Topic</td>
<td>My Healthy Body</td>
</tr>
<tr>
<td>Type of Lesson</td>
<td>Combined lesson</td>
</tr>
<tr>
<td>Objectives</td>
<td>Learners will know personal hygiene and hygiene of mouth cavity. Learners will realize value of personal hygiene for them.</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>toothpaste, toothbrush, scissors, mirror, comb, shampoo, hairdryer</td>
</tr>
<tr>
<td>Language</td>
<td>I brush my teeth. I brush my hair. I wash my face. I wash my hands.</td>
</tr>
<tr>
<td>Teaching Aids</td>
<td>Worksheet No. 2, authentic material (toothbrush, comb, soap, water, towel), flashcards, CD player, Workbook, pictures of the bathroom (also furnished)</td>
</tr>
</tbody>
</table>

## Procedure

<table>
<thead>
<tr>
<th>Time</th>
<th>Part of the lesson</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’</td>
<td>Motivation</td>
<td>Conversation/dialogue with learners: Ask learners to imagine that it is a morning and they wake up? What do they usually do? What should we do to be healthy – unhealthy?</td>
</tr>
<tr>
<td>10’</td>
<td>Fixation Guided practice</td>
<td>Ask learners &quot;What’s this?&quot; Use pictures or flashcards to motivate learners for next activity. &quot;What can you see in the bathroom?&quot; Worksheet: Tousled Girl (untidy appearance) Ask learners what it is necessary to do before leaving to school?</td>
</tr>
<tr>
<td>10’</td>
<td>Fixation</td>
<td>Part of the lesson in Slovak language Workbook p. 14 (Appendix E)</td>
</tr>
<tr>
<td>5’</td>
<td></td>
<td>Revision of the phrases about personal hygiene and vocabulary of things in the bathroom.</td>
</tr>
<tr>
<td>5’</td>
<td>Conclusion</td>
<td>Review of the lesson and saying goodbye to our teddy bear.</td>
</tr>
</tbody>
</table>

## Notes
Worksheet 2

PRÍRODOVEDA - 1. ROČNÍK
MY NAME IS: SAŠKA
The most frequent mistakes of the learners during CLIL lessons are in pronunciation, insufficient listening and hearing analysis. The verbal intelligence or listening is not sufficient. It is necessary to use:

- **Authentic material** and **real objects** such as fruits, school things, flowers, leaves, towels, parts of the dress, etc.
- **Teaching aids** (flashcards, pictures, picture dictionaries) or the **own body** to remember.

**Planning the primary CLIL lesson**

Planning is very important part of the teacher’s work. Starting point of the planning process is the content. Teaching aims and objectives are what the teacher intends to do – the knowledge, skills and understanding which are intended to be taught and developed.

Teaching plans are either formal or informal and include various elements, such as learner’s identification, objectives, type of lesson, vocabulary, teaching aids and equipment, procedure with timing, follow-up notes, etc. For detailed information read Petlák (2004) and Pokrivčáková (2012).

Another important factor for planning the lesson is selecting and organizing appropriate classroom activities. General methodology distinguishes motivation, exposition/presentation, fixation and diagnostic/evaluation activities (Petlák, 2004, p. 131-162). According to the language skills to be developed variety of classroom activities and teaching techniques to develop concrete skill or fulfill the objective (Pokrivčáková, 2012, p. 82-116). For more inspirations and activities read Pokrivčáková (2013).

Planning a CLIL lesson consists of four different planning principles using the 4Cs Framework and other conceptual tools developed by Coyle (2005).

1 **Content**

is the subject or the project theme.

- What will I teach?
- What will students learn?
- What are my teaching aims/objectives?
- What are the learning outcomes?

It is important to choose appropriate theme for CLIL lesson (e.g. music instruments, shapes, weather, my town, my country, map, animals, numbers, my body, my family, surrounding, etc.). We can use CLIL method in Mathematics, Science, Geography, Art, Physical Education, Music).

2 **Communication**

It involves learners in language using in a way which is different from language learning lessons (of course CLIL does involve learners in learning language too but in a different way).

- What language do students need to work with the content?
- Specialised vocabulary and phrases?
- What kind of talk will students engage in?
- Will I need to check out key grammatical coverage of a particular tense or feature e.g. comparatives and superlatives?
- What about the language of tasks and classroom activities?
- What about discussion and debate?

3 **Cognition**

is engagement in higher-order thinking and understanding, problem solving, and accepting challenges and reflecting on students. A useful taxonomy to use as a guide for thinking skills is that of Bloom. It serves as an excellent checklist.

- What kind of questions must I ask in order to go beyond “display” questions?
- Which tasks will I develop to encourage higher order thinking – what is the language (communication) as well as the content implications?
- Which thinking skills will we concentrate on which are appropriate for the content?
4 Culture
is a ‘self’ and ‘other’ awareness, identity, citizenship, and progression towards pluricultural understanding.

- What are the cultural implications of the topic?
- How does the CLIL context allow for “value added”?
- What about otherness and self?
- How does this connect with the all Cs?

The 4Cs provides a useful guide for the overall planning of a unit of work, the 3 as tool can be used for more detailed lesson planning. Whilst there is clearly some overlap between the tools, their suggested use is significantly different. The 3As tool operates in 3 stages:
Stage 1: Analyse content for the language of learning.
Stage 2: Add to content language for learning.
Stage 3: Apply to content language through learning.

Recommendations for young learners' teacher:

- Motivate your learners.
- Include movement.
- Involve the senses.
- Use plenty of objects and pictures to work with.
- Use the school and your surroundings.
- Demonstrate what you want students to do.
- Make up rhymes, sing songs, and tell stories.
- Experiment with words and sounds.
- Use variety of activity, pace, organization and variety of voice.
- Have systems, routines, organize and plan your lessons.
- Use familiar situations and familiar activities.
- Repeat stories, rhymes, etc.
- Create an atmosphere of involvement and togetherness.
- Group the students together to encourage cooperation.
- Make regular notes about each student's progress.
- Encourage self-assessment.
- Stress the positive side of things.

Conclusion
Teacher of young learner need to spend time understanding how their students think and operate. They need to be able to pick up on their learners' current interests so that they can use them to motivate them. Good teacher need to provide a rich diet of learning experiences which encourage young learners to get information from a variety of sources. They need to work with learners individually and in groups, developing good and affective relationships (Harmer, 2007, p. 83).

Teacher need to plan a range of activities for a given time period, and be flexible enough to move on to the next exercise when they see their learners getting bored. Teacher need good oral skills in English since speaking and listening are the skills which will be used most of all at this age. The teacher's pronunciation really matters here, precisely because, as we have said, children imitate it so well.

CLIL is not language teaching enhanced by a wider range of content. To adopt the CLIL approach means to focus on language elements and teaching and learning of subject itself specific to the CLIL classroom.

We live in the times when a foreign language and its fluent use are very important. English becomes a language of the European Union and our “second” language. We are trying to study foreign languages by many different ways, and the CLIL methodology is a long term and
according to many researches also an effective way how to manage not only the “travelling part” of a language.

Acknowledgement
Herein I would like to express my thanks to my former colleague Mgr. Elena Adamíková for her support and valuable advice on teaching and creating worksheets for young learners.

The chapter presents the partial results of the KEGA 036UKF-4/2013 project funded by the Ministry of Education, Science, Research and Sport of the Slovak Republic.

References
Useful websites with primary CLIL sources
Links below can help teachers to find free, inspirational and ready to use materials for CLIL lessons:
Ed-helper. Available at: http://www.edhelper.com/
Education.com. Available at: http://www.education.com/
Education – Scholastic. Available at: http://education.scholastic.co.uk/
Enchanted learning. Available at: http://www.enchantedlearning.com/Home.html
First schol years. Available at: http://www.firstschoolyears.com/
Fun English games. Available at: http://www.funenglishgames.com/
Macmillan Inspiration. Available at: http://www.macmillaninspiration.com/new/resources/web-projects
My free bingo cards. Available at: http://myfreebingocards.com/
Onestopenglish. Available at: http://www.onestopenglish.com/
Primary resources. Available at: http://www.primaryresources.co.uk/science/science3b.htm
Puzzle-maker. Available at: http://www.puzzle-maker.com/
Smart kids worksheets. Available at: http://www.smartkidsworksheets.com/
Songs for teaching. Available at: http://www.songsforteaching.com/nurseryrhymes.htm
Teaching English. Available at: https://www.teachingenglish.org.uk/teaching-teens/resources/clil
5 CLIL at lower secondary level

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Prešov University, Slovakia

Content and language integrated learning (CLIL), as it was mentioned earlier, highlights **meaningful context** as the core work place for learners. Even though general textbooks for English learning try to provide the context for language practice, this is often too structured, too diverse or skill focused. This is why CLIL comes as a vital opportunity for teachers to widen the scopes of contextual learning via integrating content subjects and language learning.

**Profile of the learners**

Lower secondary level offers more opportunities to use English in CLIL lessons because learners are more fluent in the target language in comparison with the primary learners.

Learners at lower secondary level are ready to work with easier abstract concepts and are ready to understand most grammar principles or use analytical thinking. This age – from 10 to 15 years – is generally considered by psychologists as the best age for starting with learning a foreign language. They are well equipped with their mother tongue; they can understand the basic principles of language functions and rules within.

They become more critical of teachers and want to express their opinion. Especially higher grades of lower secondary level can be rather challenging for teachers to keep learners active. They can be very eloquent in expressing what they like and dislike. They are also very sensitive to keeping the rules of fair play and require some form of justification of teacher’s decisions. They use logical memory and start to avoid pure memorisation. We can frequently see them daydreaming, but they can become very enthusiastic as well. They can work effectively with other learners in class which means that the pair or group work will be of much higher quality as in the period before.

We still need to provide a lot of input and exposure to the target language and let learners work out the meanings for themselves. Although they are able to understand simple explanations of grammar principles, we should encourage them to come up with their own conclusions. Activities that we plan need a cognitive challenge so that the learners can work at the level of acquisition rather than learning. Examples of such activities can be reading stories, or comics. They do not need to have every word translated since they can understand the situation very quickly and their tolerance of ambiguity is still very high. It means that teachers do not need to fear using the target language with learners or use other sources that would involve learners in the perception of the target language.

**Teaching context for CLIL implementation at lower secondary level**

Applying CLIL at lower secondary level will require a higher level of teacher cooperation since at this level there are usually different teachers teaching language and content subjects. An English teacher who is qualified also for a content subject is rather an exception so at the beginning of the CLIL route at any lower secondary level there must be a clear and strong commitment on the part of teachers willing to participate in this cooperative mode of work. Their cooperation involves finding overlaps in the syllabus between English and the content subject, identifying suitable time for integration, identifying the width and depth of immersion within both content subject matter as well as language use.

A common practice is that CLIL is applied either in the English lesson or in a content lesson sporadically throughout the school year. However, some schools, especially if their teachers are fully qualified and experienced in using CLIL, opt for a separate school subject where CLIL is taught during the whole school year. It is usually taught by a teacher with dual qualification or by a team of co-operating teachers.
Whichever approach is adopted by the school, in order to ensure that learners benefit from the CLIL approach, the teacher must be absolutely clear on what is to be taught within both areas at the planning stage. By stating clearly the aims at this stage the teacher is focused on both areas and their interconnection in the entire lesson (see below).

It is necessary to mention that the experience with CLIL implementation has brought clear evidence that CLIL approach has a strong influence on the school curriculum in those areas where English language was integrated. That happens because the integration does not limit itself only to the content transfer but it involves also the transfer of EFL methodology into the content class. It means that integrated classes are guided by the principles of EFL methodology rather than the traditional one. CLIL teachers try to avoid a pure “jug-and-mug” principle and instead they opt for experiential, discovery and multisensory learning where learners are actively involved in the lesson and expected to learn new things by discovering, experimenting, and hypothesizing rather than memorizing foreign language texts. CLIL teaching cannot be narrowed only to the presentation of the content knowledge (facts) in English. It would be viewed as a burden by the learners if instead of their mother tongue they would have to use a foreign language to memorize new facts. And young teenagers themselves will not respond positively to long periods of being devoted to presentation of the subject matter (even if the teacher uses technology, e.g. PPT presentation) where their role is to passively perceive and process the information provided. A cognitive challenge which is not focused on linguistic aims might help develop learners’ thinking skills while solving problems and logical puzzles, or inventing something unusual, etc.

Learners at the lower secondary level can in comparison with primary learners apply more extensively higher-order thinking skills (according to the Bloom’s revised taxonomy: analyse, evaluate, create) and need not focus only on lower-order thinking skills (remember, understand, apply). Mayer (2002, p. 226) states that “two of the most important educational goals are to promote retention and to promote transfer (which, when it occurs, indicates meaningful learning). Retention is the ability to remember material at some later time in much the same way it was presented during instruction. Transfer is the ability to use what was learned to solve new problems, answer new questions, or facilitate learning new subject matter.” Transfer involves mainly higher-order thinking skills and CLIL allows for the meaningful connection of the knowledge and using the knowledge for some meaningful purpose.

They already have some basic knowledge of the content subject which they learnt and acquired at lower grades and have something to build on. This involves also the prior life experience as well as learning experience because some of the learners at lower secondary level might have experienced CLIL lessons as primary learners. Students at this level respond well to challenges and CLIL lessons allow for presenting the subject matter in the form of a challenge. However, it is still advisable to prepare students well for coping with ambiguous situations applying learning strategies, especially compensation strategies and social strategies (e.g. Oxford, 1990), so that they can handle moments of confusion and uncertainty. Young teenagers have a tendency to give up easily in times of trouble so the teachers should anticipate that in advance.

On the other hand, they are able to carry out collaborative work and organization of their work in a group can be sufficiently effective. They are much better at delegating a task on group members and thus function more efficiently as a team. This opens possibilities for learning from each other while carrying out experiments or solving problems whether in the content or language area.

Lower secondary level also creates conditions for involving much wider repertoire of resources that learners can use for searching for information about the content knowledge or for their outcomes since these learners are able to use technological devices and need only some educational guidance from the teacher.
Planning CLIL lesson at lower secondary level

The process of planning a CLIL lesson is more complex and demanding especially in the cases when two teachers co-operate (Sepešiová, 2011) and they both apply different principles in their own classes. The process of building a lesson together can become a developmental experience since reasoning why certain activities could be included might influence a common practice of both teachers in their own classrooms.

There are certain steps which teachers planning a CLIL lesson will probably follow:

1. **Content areas analysis** and identification of possible matches with the language learning areas: teachers will need to carefully analyse the content of both language and content subjects in order to find out and select the areas for integration. Some areas might be too difficult for students to understand in the foreign language, some might not carry the potential for experiential or discovery learning. This is why science subjects or such content subjects where students are able to grasp the key concepts through their own discovery are the most suitable. While selecting the suitable areas teachers should also realize that the selected areas should not widen the scopes of knowledge too much in comparison with the standards. The aim of CLIL teaching should not necessarily be putting more burdens on learners by asking them to learn more facts.

2. **Theme selection** – once teachers agree on the area they want to use for integration they need to identify a specific theme. It is, however, important to realize that the integration of a certain theme might require more time than just one 45 minute lesson. It, therefore, is more advisable to plan sufficient time even though it will take more lessons to teach (whether during language lessons or the content lesson time) in order to allow for the mastering of key concepts through discovery techniques.

3. **Content materials analysis** is the next step that teachers will be involved in after they have agreed on the theme. They will have to identify which parts of the theme selected can be covered by integration and which will be left for content lesson only. It should be selected carefully since not every term is necessary to use in the integrated part of teaching, some parts might be left to be the focus of regular content classes because it might be too difficult for learners. Another aspect that the teacher should consider is the language skill or performance focus and whether the material supports it.

4. **Stating clear aims** for each lesson – both content and linguistic objectives – is the next step. It is important to keep in mind that CLIL lesson has dual aims, thus teachers must be absolutely clear on what students are supposed to achieve by the end of each lesson. As Gondová (2013, p. 22) states they need to be interlinked with 4 Cs - content, communication, cognition, culture (see the previous chapter).

5. **Key vocabulary and language** identification will be the next focus after the teachers have decided about the lesson aims. Selecting key terms will help them plan the lesson in such a way that these terms will be repeated and reinforced throughout the whole lesson. It is important to build on what learners already know (revision and repetition of already learnt structures). When planning the work with key vocabulary it is also crucial to realize that learners need a careful and in-depth approach to vocabulary presentation and practice since some terminology might be difficult to remember for learners at this stage. It is important to pay enough attention to techniques which will help learners to understand and remember specific key vocabulary. Mind maps help learners to see the relations between words, support visualisation of certain categories and brain-friendly learning. Students can create their own mind maps during presentation or practice stage, or add new terms to already existing mind maps which will stimulate their thinking skills and activated the retrieval process. In the following example the learners focus on understanding definitions translating them into mother tongue, using the kinaesthetic and interpersonal intelligences; as well as cooperative learning.
Example: The teacher chooses about ten key words the students are to understand and learn and writes a definition for each leaving a gap for the key word. The teacher copies the definitions and the key words so that each student has a copy.

<table>
<thead>
<tr>
<th>exhibition</th>
<th>landscape</th>
<th>portrait</th>
<th>abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>frieze</td>
<td>gallery</td>
<td>perspective</td>
<td>collage</td>
</tr>
</tbody>
</table>

1. ____ art does not represent people or objects in a realistic way.
2. One way for artists to sell their work is to put on an ____
3. Some exhibitions are held in a ____
4. A life-like picture of a person is called a ____
5. A picture showing a view of the countryside is called a ____
6. ____ is the technique of representing three-dimensional forms on a flat surface.
7. A ____ is a picture on which pieces of paper, cloth, photographs, etc. are arranged and stuck.
8. A ____ is a band of painted or carved decoration round the top of a wall or building.

Procedure: The teacher gives out the definitions and asks the students to fill in the gaps. Students check the answers with partners or in groups. The teacher checks students’ pronunciation and then asks them to give the translation of each key word in their language. Then the teacher goes round the class giving each student a slip of paper and one of the key words. Students write the key word they were given on one side of the paper and the translation in their language on the other side. Teacher checks their translations. Students mingle around the class and read out their words in either English or their language to random partners who give them the translation. If the student doesn’t know the translation student A tells them and makes them repeat it three times. Then student B reads their word and follows the same process. When they have finished, they exchange papers and go and find another partner. They repeat the process. Each time they are with a new partner they can choose whether to start with the key word in English or in the mother tongue. After they have had a chance to hear most of the words the teacher asks them to write down from memory all the words they heard plus the translations.

(Adapted from Deller, Price 2007, pp. 57-58) Similar activity in which students do not work with texts but visual clues can be found here and it is called Art Gallery.

6. Selection of appropriate text materials - Teachers will have a wide repertoire of materials especially in English available at their disposal, however, they will need to analyse them carefully since most of especially online material has probably been produced for native speakers (e.g. Science A-Z, Science Kids, Time for Kids, Kids.gov, Adventures in Chemistry, DOGO News, Popular Science, SID the Science Kid). Thus it needs to be adapted to suit the needs and the language level of the learners. It is necessary to analyse in detail what the teacher is supposed to cover from the given theme e.g., how complex the material is, etc. There are a great many ready-made materials aimed at CLIL classes as well, which teachers or publishers share online or in printed form. Some textbook sets already have either several pages devoted to CLIL or there are even entire courses focusing on CLIL. In these courses CLIL implementation is the core principle and the whole learning material is based on integration of certain parts of content subjects and the English language (e.g. Oxford Discover, p. 110-111 in Appendix A1, A2). There are also many supplementary materials which can be used as a complement to any regular textbook, such as CLIL readers, or CLIL specific topic worksheets, picture content-areas dictionaries, or even specific websites where teachers find
not only tips for teaching, sample material but entire lesson plans for CLIL implementation (e.g., onestopenglish).

7. **Adaptation or design of new materials** to suit the needs of learners so that they can meet the lesson aims with ease. Especially when teachers use downloaded material which was meant for native speakers, it needs to be revised carefully since the language difficulty level might create obstructions in getting towards the aim.

8. **Planning individual lesson parts**: teachers who have identified aims and selected appropriate material can start building up individual lesson stages starting with lead-in activities, continuing with the main part activities where all aim-connected activities should be covered and ending with reflection on what has been learnt, summarizing the main points or highlighting possible new aims. Reflection part is very important since it leads learners to identify the important parts, to personalize these parts and remember better the main message of the lesson. It also leads to good learning habits since reflection and self-evaluation are the key aspects of metacognitive learning strategies, which are necessary important for independent learners.

**Integrating science and English language**

At lower secondary level the content of science subjects will differ to high extent since the ten-year olds and fifteen-year olds do differ in their capacity of learning, abstract thinking, or the content knowledge. Students have wider space for using the target language as a tool for learning new facts in the content subject since their language proficiency is higher. However, the teacher still must be clear on what exactly they should learn (structures, vocabulary, functions) and design the activity in such a way that the language is used naturally for the selected purpose (see sample lesson plan 1).

**Stop and think**

1. What other content and language aims can you think of for the theme Animals? Specify this theme and present at least two content and two lesson aims.
2. Can you think of a different warm-up activity for this lesson? Discuss it with a partner and present it to the class.

**Integrating art and language**

The most frequent content subjects selected for integration are science subjects such as geography, biology, maths, and physics. However, it is very useful to pay attention also to such school subjects as arts since it not only creates a unique opportunity to integrate the content and language but it also supports brain-friendly learning through the stimulation of the right hemisphere. Moreover, using art in teaching other subject represents an added value in developing aesthetic feelings of the learners leading them towards recognition of fine art masterpieces as well as stirring their creativity.

Using art in teaching is certainly not a new phenomenon and it has been used by some practitioners with a variety of outcomes. Even some authors of EFL textbooks acknowledge the importance of including the links towards art in their textbooks. However, the good practice examples are rather sparse since classroom teachers often do not feel confident enough to work with arts if they are not qualified art teachers. Their worries include uncertainty whether students might be interested in fine art in general, if they as teachers will be able to provide enough information about the individual pieces of art, or if they should bother at all since there are so many exercises in their textbook which need to be covered.
### Sample lesson plan 1: Animals in the world

(2 lessons), year 5, lower secondary level

<table>
<thead>
<tr>
<th>Content aims:</th>
<th>Language of instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>- to classify animals according to their similarities and differences</td>
<td></td>
</tr>
<tr>
<td>- to learn and revise what they know about vertebrates and invertebrates</td>
<td></td>
</tr>
<tr>
<td>- to make comparisons based on certain criteria</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language aims:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- to develop listening skills – listening for details</td>
<td></td>
</tr>
<tr>
<td>- to describe animals’ bodies</td>
<td></td>
</tr>
<tr>
<td>- to identify how animals move</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vocabulary and structures:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- vertebrates, invertebrates, backbone, slither, crawl, scales, shell, wool</td>
<td></td>
</tr>
<tr>
<td>- it can/can’t... It’s got ... Yes, it is/can/has... No, it isn’t/hasn’t/can’t...</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content</th>
<th>Language of instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead-in:</td>
<td>L2</td>
</tr>
<tr>
<td>Students discuss the main points from the previous lesson about the climate in various parts of the world. We can use a map of the world and point to different parts of the world, continents, and countries.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warm-up (in groups):</th>
<th>L2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Odd one out</strong></td>
<td></td>
</tr>
<tr>
<td>- Teacher calls out groups of animals and the task is to identify the animal which does not belong to the group.</td>
<td></td>
</tr>
<tr>
<td>- Jungle: snake, monkey, <strong>penguin</strong>, tiger</td>
<td></td>
</tr>
<tr>
<td>- Arctic: polar bear, seal, <strong>elephant</strong>, polar fox</td>
<td></td>
</tr>
<tr>
<td>- Desert: scorpion, snake, camel, <strong>panda</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sorting:</th>
<th>L2/L1</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <strong>Pair work</strong>: Flash cards are put on the board, children name them. Their task is to discuss with a partner how they would divide the animals into two groups. They need to first discuss the criteria which they could apply.</td>
<td></td>
</tr>
<tr>
<td>- The teacher draws two circles on the board and invites the children to present their conclusions. Students start dividing animals and if some animals are in the wrong circle, the teacher makes the correction. After all the animals have been placed correctly the teacher asks the students to think what criteria have been applied for this division. Students need to find what these animals have in common and what distinguishes them from the other group. If they have a problem with this, the teacher writes “backbone” on the board and explains that depending on whether animals have/don’t have a backbone we call them Vertebrates/ Invertebrates (pronunciation check). The circles are labelled.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise book entry:</th>
<th>L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students take notes of the new facts.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subcategorising:</th>
<th>L2/L1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group work:</strong></td>
<td></td>
</tr>
<tr>
<td>- Students work with a worksheet (Appendix B) and their task is to notice how they could subcategorize the animals. They need to search for common and distinguishing features. They cut out the animals and stick them to the groups where they belong to.</td>
<td></td>
</tr>
<tr>
<td>- Students present their result to other groups.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication activity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Guess my animal:</td>
<td></td>
</tr>
<tr>
<td>One student thinks of an animal from the worksheet. The other students need to find out what animal it is asking yes/no questions.</td>
<td></td>
</tr>
</tbody>
</table>
After the break

**Game: How many legs?**

Students look at the flash cards on the board and have to answer quickly the questions the teacher asks:

- How many animals have no legs?
- How many animals have two legs?
- How many animals have four legs?
- How many animals have more than four legs?
- How many animals have three legs? (for fun)

**Mind map: How do animals move?**

A mind map is created on the board. The central idea: *How do animals move?*

Students identify how animals can move. If they cannot find the proper word in the target language, the teacher helps: run, fly, crawl, jump, hop, swim, slide, slither. Children can work with a dictionary.

**Chain activity:**

The teacher starts a chain by asking: *How can a butterfly move?* The student answers: *It can fly.* After that the same student asks another student: *How can a frog move?* And the chain continues.

**Body coverings**

**Pair work:** Students fill in a worksheet (Appendix C) about animal body coverings. They check it with another pair.

The teacher checks the correct answers through questions: *How many animals have fur/feathers/a shell?*

**Animal description:** The teacher revises what students already know about animals:

- where it lives
- vertebrates/invertebrates
- how many legs...
- how it moves
- body description/coverings

**Pair work:** Students prepare a description of an animal. They read it aloud and the class should guess the name of the animal.

**Conclusion**

The summary of what students have learnt in the lesson. Revision of what students remember, summary of key points and discussion of what they personally take away from the lesson.

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*L1 – mother tongue, L2 – target language

Adapted from: Calabrese & Rampone, 2007

Another worry might be connected to language proficiency level of students. Teachers might be concerned whether their students are able to describe or to discuss the fine art work or whether they should wait until they master the language at higher level. Grundy et al. (2011, p.10) claim that “one of the most significant methodological issues in language teaching is the issue whether we learn language in order to use it or whether we learn a language through using it.” While working with a textbook usually directs the learner towards one expected outcome, involving art in teaching means opening the gates for freer use of the language by using it and for attempts to succeed with whatever is at learner’s disposal at the moment. Most of the times the students are focused on real cognitive processes – thinking about the piece of art, receiving
messages, creating an opinion, expressing that opinion – rather than rehearsing, practising those processes and looking for the correct answer.

New technologies can support the intentions of the teacher to involve fine art masterpieces in the teaching process and bring them closer to the learners. We no longer need to take the class to the gallery – unless we want the real feeling – in order to introduce the fine art to our students. That makes it easier even for the language teachers who otherwise would find it difficult to excuse the entire class from the lessons to take them to the gallery.

A good example of using famous paintings is described by Reilly and Reilly (2005). They suggest a nice activity, which can be used with e.g. grade 5 of lower secondary level using Van Gogh’s painting My Bedroom. This activity focuses on systematic use of language learners practise picture description and use of There is/There are:

- Show the children the Van Gogh picture. Tell them that the artist was called Vincent Van Gogh and although he is very famous now, he was very poor when he was alive. Tell them how much this painting is worth now.
- Elicit the vocabulary they can see: window, chairs, bed, pictures, mirror, table, walls, floor. You could also teach blanket, sheets, pillows, coat hook, if they are useful words for your class.
- Draw a table on the board similar to the one below and write in the nouns in column 5.

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<table>
<thead>
<tr>
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<td>5</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>chair window pictures bed</td>
</tr>
</tbody>
</table>

- Elicit the colours they can see in the painting and encourage them to make pairs with the nouns, for example, blue walls, a red blanket, and write the colours in column 4 next to the correct noun.
- Remind the children that when we want to describe the existence of something, we can say: There is (there’s)/There are. Write There in column 1 and is/are in column 2.
- Add a/an in column 3 if the noun is singular or some if it is plural. Alternatively, you may wish to add numbers in this column, e.g. There are two brown chairs.
- Now ask the children to think of their own bedroom and to write sentences about it, referring to the table above.

Reilly & Reilly, 2005, p.103-104

Stop and think

1. How can you develop this activity so that it can be characterized as a CLIL activity? Give examples.

However, CLIL allows for more dimensions to be taken into account than the above activity suggests. The following example presents the unit where the following content and language aims were stated:

- students will be able to recognize the famous fine art masterpieces;
- students will recognize selected famous painters;
• students will be able to characterize how the painting style has changed over the centuries;
• students will be able to express their feeling towards selected paintings;
• students will be able to describe a painting.

The entire CLIL unit can consist of more than one part. The lead-in part represents introduction into the theme *Art in our life* and can be supported by a textbook, e.g. *Project Third Edition 1*, p. 73, presents a painting by Peter Bruegel *Children’s Games*. It can be a good starting point for the entire theme where learners not only linguistically describe what they can see in the painting but also express their attitude towards the painting and emotions they feel while looking at it.

The lesson can start with an **introduction** in which learners are first confronted with the title *Art in our Life* and can talk about it in their mother tongue. The main focus of questions is about their experience with art, artists, displays, galleries, etc. After that they can be shown four names of famous artists (e.g. Pablo Picasso, Vincent van Gogh, Leonardo da Vinci, Peter Bruegel) and the teacher can ask whether they recognise some of them. Some of the names may sound familiar to students but they will probably not be able to identify all. This creates a strong learning point in this lesson. After disclosing they are all painters students can guess which one is the oldest and the youngest and try to match their names and portraits. Then are shown their paintings and they again try to match paintings and the painters. One of the paintings (by Bruegel) is identical with the picture in their textbook so the students can at this point focus on some language work based on textbook exercises. At the end of the lead-in part the students should be able to describe the selected painting and express whether they like it or not and why.

**Next part** can focus on the language production and the main aim can be to lead learners towards expressing their preference by the selection of one painting, describing it using the language they have at their disposal.

The learners are given a set of famous paintings with the name of the author at the back side, printed in colour and laminated. They look through them a talk with the teacher about painters, paintings, whether they know or seen them and after a while they choose one painting they like. Once each learner has selected one painting their task is to prepare the introduction of this painting for their class gallery. Learners are presented the idea of designing a class gallery in their classroom. Lower levels might still need some linguistic guidance such as a simple structure to follow, e.g.:

• introduce the painting (its name)
• give the name of the author (and some details)
• say what we can see there:
  - there’s somebody/something (what it looks like, what colour it is; what people are wearing, etc.)
  - somebody is doing something - What is it?
  - something is happening – What is it?
• express whether you like this picture or not and why

The first drafts can be edited and placed on the coloured paper with the laminated painting above it. Adding a string to each paper will enable hanging the painting on the class wall as in a class gallery:
Then learners can present their painting to the rest of the class and the paintings can be organised in a display from the oldest so that children can realise also how art and the style of painting has changed over the time. The teacher can highlight the most important features. Higher-level students can focus on more complex language points or language structures, e.g. as Deller and Price (2007, p. 18) suggest question forms, wh-questions and past tense:

The teacher can choose one of the painters as a topic (e.g. Pablo Picasso) and writes his name on the board. Students work in pairs and write down all questions they would like to ask about the famous painter, e.g.:

- What nationality was he?
- Did he have children?
- When did he live?
- Where did he live?
- What materials did he use?
- What is the name of his most famous painting?

The students write their questions on the board and copy them all into their notebooks. Students who wrote a question read them aloud to the class and their classmates try to predict the answers. The teacher can afterwards give a talk/ play a short video about the painter, or students can be given a text about him. Students are supposed to tick the questions that they think were answered. Students can discuss the answers they have heard, if their answers are supported by others or by the teacher, the question can be removed from the board. After they have gone through all questions that they thought were answered, they should search for the answers to those which are left on the board as a home task. They can be suggested resources they can use in order to find the missing information.

Stop and think

1. Think of one more modification of the above activity which you could use with higher level students. Discuss it with a partner.
History in integration with the language classes offers a unique context for practising the language of the past events. Language practice where students repeat one sentence using present simple, or past simple tense makes hardly any sense to the learners and it stays a depersonalized grammar exercise. However, when students start speaking about an event or a personality from the past, they naturally and unavoidably start using past tense.

**Sample lesson plan: Famous explorers – Christopher Columbus**
(www.onestopenglish.com)

**Aim:** to put events from the life of Christopher Columbus on a timeline; to reconstruct the discovery of America; to identify the important benefits of Columbus’ voyage

**Language focus:** to be able to use past tense for description of past events; ask questions in the past; express possibility in the past; understand the gapped text

**Key vocabulary:** depart, sail, route, silk, spices, king, queen, trip, land, arrive, island, journey

**Procedure**

Teacher writes the following foods on the board: *potato, corn, peanut, tomato, papaya, pineapple, avocado, chilli pepper, cocoa,* and asks the pupils what these foods have in common. Teacher explains that these are some of the foods that Spanish conquistadores brought from America when they discovered it in 1492 and on the other hand Spanish people took rice, olives, wheat and weapons to America.

Teacher elicits the prior knowledge about the explorers and elicits name Christopher Columbus. After that students play a quiz. They are divided in groups of three or four. Each group receives two cards with letters T (true) and F (false). Teacher reads the statements about the life of Christopher Columbus and students must decide whether the statement is true or false and raise the appropriate card. It is important that all groups raise their cards at the same time. The teacher records the answers on the board and continues with another statement. After all statements have been read, the teacher reads them again, this time announcing which group answered correctly.

After this introduction the students are given a worksheet about the life of Christopher Columbus and their task is to number the events and put them on a timeline.

**Task 1: Read the sentences and number them.**

- a. Columbus died in Valladolid.
- b. Columbus discovered America.
- c. King Ferdinand and Queen Isabella helped Columbus with the trip.
- d. Columbus departed from Palos de la Frontera.
- e. Christopher Columbus was born in 1451, probably in Genoa, Italy.
- f. Columbus wanted to sail to Asia. He needed a lot of money for this trip.

**Key:** 1-e; 2-f; 3-c; 4-d; 5-b; 6-a

Teacher gives out the gapped text about Christopher Columbus and asks students to fold the paper so that they do not see the options first. After they have read through the text and tried to fill in the gaps on their own, they can check whether their answers correspond to three options offered below the text.
Task 2: Read the text and fill in the gaps without looking at the options.
Christopher Columbus was born in 1451, probably in Genoa. Columbus wanted to find a new route to India and China. He wanted to bring back silk and spices. Columbus wanted to find a quicker and easier route to Asia sailing (1) _______________. It was a dangerous journey and he needed Money. He visited the courts of the kings and queens asking for help and Money. Ferdinand and Isabella, the king and queen of (2) ________________, decided to help him. In 1492 Columbus departed from Palos de la Frontera, in (3) ________________, Spain, with three ships: the Pinta, the Niña and the Santa Maria. The ships were small, between 15 and 36 metres long. In the three ships they carried about (4) _______________ men. After sailing across the (5) _______________ Ocean for ten weeks, on 12th October 1492 Columbus saw (6) _______________. He arrived at a small Island in the Bahamas. Columbus named the Island San Salvador. The people living on the islands were Arawaksa and Caribs. Columbus called all the people he met in the islands (7) _______________ because he thought he was in India. When Columbus arrived in Cuba, he thought it was Japan. Columbus came back to Spain in March 1493. Columbus sailed to America (8) _______________ more times. He received new titles: Admiral of the Ocean Sea and Governor of the Indies. Columbus died in (9) _______________.

1. a/ east b/ north c/ west
2. a/ Spain b/ Portugal c/ Italy
3. a/Huelva b/Valencia c/ Italy
4. a/ 9 b/ 90 c/ 900
5. a/Pacific b/Indian c/ Atlantic
6. a/ a cloud b/ a ship c/ land
7. a/ Indians c/ pirates c/ aborigines
8. a/ two b/ three c/ five
9. a/ 1506 b/ 1526 c/ 1530

After they have finished reading, the whole class checks the answers together. Then the groups look back at their timelines and correct any mistakes they made. After that the groups can swap their timelines and check their classmates’ timeline. If there is any misplacement they can discuss it with the teacher.

Teacher asks the groups to think about the route Christopher Columbus followed on a world map. They can think about it in groups and then present it to the class. They may suggest which route they would take if they were to take to voyage. The teacher shows the route and says which group was the closest the real route.

At the end of the lesson the students create the mind map with the key terminology they have learnt in the lesson. They express why they personally think the Columbus’ voyage was important from today’s perspective. As a home task students can prepare several quiz questions for their classmates for next lesson.

Stop and think
With a partner discuss other possibilities for teaching a CLIL history lesson. What topics would you choose? What aims would you state?
Conclusion

Implementing CLIL at a lower secondary level differs from the primary level since learners are able to communicate at a higher level and approach the content more thoroughly. In comparison with the higher secondary level, however, they will need careful consideration of the content they are to cover since their prior life and learning experience is still limited. Learners at this level need a lot of teacher’s support especially because they move from the reproductive level to productive level, so at the lower levels they will need a lot of examples of what is expected from them. On the other hand the lower secondary level students are still open to experimenting and hands-on learning. This enables the use of experiential learning which is crucial for CLIL.

References

Useful online resources for lower secondary CLIL:
http://www.pieter-bruegel-the-elder.org/Children's-Games-1559-60.html
https://www.sciencea-z.com/
http://www.sciencekids.co.nz/
http://www.acs.org/content/acs/en/education/whatischemistry/adventures-in-chemistry.html
https://www.dogonews.com/category/science
http://www.popsci.com/tags/kids
http://www.pbs.org/parents/sid/
Appendices

Appendix A1 (Source: Oxford Discover, p. 110)

The Earth gives us special and important things that we need to help us live. We call these things natural resources. Air, sunlight, water, wood, and land are all natural resources.

People Need Natural Resources

Living things need clean air to breathe and clean water to drink. Plants need sunlight and land to grow, and we need plants for food. When plants breathe, they clean the air around them. We use the wood from plants and trees to make a lot of things, like paper, some houses, and furniture.

Hurting Our Natural Resources

We shouldn't hurt our natural resources because we can't usually make more of them. Smoke from cars and factories makes the air dirty. If the air is dirty, people can get sick and plants can't grow. If we cut down trees, we should plant new ones.

Trash is very bad for our natural resources. Sometimes people throw trash into water but we can't drink dirty water, and plants can't grow near it.

Trash goes to places called landfills, and it stays there forever. Some landfills are dirty and they smell bad. People can't use that land, and farmers can't grow food on it.
Taking Care of Our Natural Resources

We can all take care of the Earth’s resources. Here are some ideas:

1. Use things until you can’t use them anymore.
3. **Reduce** the natural resources you use. Take your own bag to the store.

**Think**
Find one detail of the main idea.

What can you do today to help take care of our natural resources?

Appendix A2 (Source: Oxford Discover, p. 111)
Appendix B (Source: Calabrese & Rampone, 2007).
### Body coverings

<table>
<thead>
<tr>
<th>Animal</th>
<th>Hair/fur</th>
<th>Wool</th>
<th>Shell</th>
<th>Scales</th>
<th>Feathers</th>
</tr>
</thead>
<tbody>
<tr>
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Appendix C (Source: Calabrese & Rampone, 2007)
6 Higher secondary CLIL

Silvia Pokrivčáková
Constantine the Philosopher University, Slovakia

Objectives
The aim of this chapter is to introduce a specific context of higher secondary CLIL in Slovakia and discuss some of the teaching techniques (with model activities) which are suitable for this level of CLIL.

Specific characteristics of secondary CLIL
As mentioned before (in chapter 2 of this e-textbook), if compared to the situation in the primary CLIL, the secondary CLIL is not so wide-spread in Slovakia and so far it has attracted attention of only a few of researchers (Gondová, 2012a, 2012b; Škodová, 2011; Veselá, 2012). In the context of the Slovak secondary school, CLIL is applied mostly at grammar schools, health care schools and business academies. CLIL at Slovak vocational schools is very rare which may be caused by the schools’ and teachers’ worries that it may be a rather demanding method for vocational learners.

Considering the purposes of its application, the secondary CLIL in Slovakia is developed along two lines:
a) in academic subjects (mostly at bilingual and mainstream grammar schools) with the intention to prepare students for further university study in a foreign language,
b) in vocational subjects (mostly at business academies, health-care schools and other types of secondary vocational schools) to develop profession-oriented literacy and help learners become successful experts in their profession, as well as enable them to both communicate and cooperate in the international labour market (c.f. the document issued by the European Commission Languages for Jobs..., online). In this context, CLIL becomes one of the methods used in the vocationally-oriented language learning (VOLL) which combines developing work-related professional skills with foreign language education, as well as fosters key skills, such as communication, ICT, problem-solving and working with others (Sewell, 2004, p. 7).

As stated in many resources and proved by many projects, CLIL at a higher secondary level of education can bring many valuable benefits:
- learners can develop specific vocabulary and other language knowledge and skills which they will encounter later in their jobs,
- learners can acquire the strategies and tools that support specific text comprehension and production,
- learners can develop flexibility and adaptability which are qualities necessary for them to study or work in a different language area,
- learners (even those who are not necessarily amongst the most gifted) are motivated and make progress not only in the foreign language acquisition but also in the understanding of the vocationally related content,
- in addition to the development of their foreign language skills, learners can develop other skills they will need in their real jobs: to communicate and apply specialist knowledge, to work for and with their team, to complete an assignment under deadline pressure, consequently to present and promote their product (c.f. CLIL-LOTE Start, online; European Schoolnet, online, and many others).

Referring to Graddol’s English Next (2006), Ball emphasizes that 'the future is about 'competences', not about discussing the differences between the Past Simple and the Present Perfect. This is not to imply that CLIL does not work on, or that it is uninterested in accuracy.
What it does imply is that the development of competences is much more likely to occur within an approach that prioritises thinking skills and communication” (Ball, online 4).

Secondary CLIL tips

- It is recommended to always start from the learners’ perspective. What are they interested in? What do they really need for their life?
- Multiple sources in a foreign language should be used.
- Learners need to be showed and taught how to work with informative texts in a foreign language, e.g. how to understand their structure, organisation, using outlining, rephrasing, etc.
- CLIL lessons should be directed to the creation of a final product which integrates language and content, e.g. a presentation, an advertisement, a documentary, a poster, an interview, a mind map, an experiment etc.
- To enhance learners’ motivation, these CLIL products need to be presented or displayed to classmates, teachers, parents or the general public (e.g. through a school website or exhibition).

Teaching techniques for secondary CLIL

When Gondová (2012a) surveyed secondary CLIL learners she also asked them to give some suggestions to improve the CLIL lessons, they offered many ideas related to the choice of teaching techniques, e.g. they would wish to have more games and fun, use more group activities, more discussions, more multimedia and modern teaching aids, they would like to organize more out-door activities, and above everything – they would replace theory by practice.

In her conclusion of another work, Gondová (2012b, p. 13) explains: "...teachers are aware of the necessity to use learner-oriented methods and most of them try to do so in some of the lessons, but even if they decide to use a role-play, a discovery activity or a game, they usually choose one which is controlled or semi-controlled, which means it does not make the development of higher-order thinking skills of learners possible. It seems that teachers are not willing to lose control of what their learners do and avoid using analytical, evaluative or creative tasks enabling learners to work independently from the teacher. One of the reasons might be the long-standing culture of traditional, teacher-oriented teaching, another one the lack of knowledge of learner-oriented methods”.

Being aware of the previous research results, the next part of the chapter introduces the set of teaching methods suitable for secondary CLIL classes.

Ball (online 4) suggests that in CLIL, “there appear to be four basic types of activity that can help students to prosper, despite their relative lack of linguistic resources”. Those four types of activities are as follows with the addition of some examples:
1. activities to enhance peer communication (e.g. information gap activities, role plays, discussions, etc.);
2. activities to help develop reading strategies (e.g. outlining, activities to reorganise the informative text, mind-mapping, etc.);
3. activities to guide student production, oral and written (e.g. creating and presenting ppt presentation, movie making, blogging, etc.);
4. activities to engage higher cognitive skills (problem solving activities, projects, simulation and situation activities).

a. Information gap activities

CLIL emphasizes learning a foreign language for the sake of meaningful communication. The meaningful communication means sharing information between communicating subjects. The basic condition for such sharing is the existence of an information gap, i.e. one of communicators seeks a piece of information from the other(s). Therefore, any teaching activities based on
creating an information gap situation (role plays, discussions, questionnaires, etc.) are welcome in CLIL classrooms. Another bonus is that information gap activities are very close to real-life communication since to fulfil the task, learners have to interact, to create questions and answers and share information (for more consult Pokrivčáková, 2014, p. 54-56).

**Spot the difference**

Learners work in pairs. Each of them is given one part of a pair of two very similar pictures (picture A and B) with only a few differences. It is important that they cannot see each other’s picture. They take turns in describing their pictures and asking questions and together they try to find all differences. The teacher may find many ready-made commercial versions of this activity in magazines or puzzle books. Two examples of this activity are given below. In the first one, learners (students of car-technology programmes) need to discuss and find the differences in size, shape and type of two cars. In the second one which can be used in geography classes, learners look for differences in two versions of the GPS maps.

(source: Honda car parts, available at: [http://www.6two1.com/spot-the-difference/](http://www.6two1.com/spot-the-difference/))


Ball gives an inspirative example of an information-gap crossword about 'The accumulation of capital' (Ball, online3).
b. Discussions

A discussion is a dialogic technique based on the existence of an information/opinion gap between communicating partners. Using discussions in a CLIL class requires a higher level of learners’ foreign language speaking proficiency.

Discussions are frequently used as a motivation technique before reading or listening activities. However, “to discuss” does not mean to ask and answer questions. In reality, it is something else and more.

Three basic types of classroom discussions may be recognized (for more see Pokrivčáková, 2014, p. 32-33):

a) small-group discussions,

b) large-group discussions,

c) debate.

Small-group discussions

For this type of discussion the class is divided into several smaller groups where learners discuss freely and after some time they present their outcomes to the whole class.

Recommended procedure

1. Prepare the learners for discussion, e.g. introduce the key terms, frame structure, etc.).
2. Let learners choose from several topics or suggest their own topic, e.g. How to make our life more ecology-friendly?
3. Decide about the form for the outcome (a list of possible solutions, a final decision in a written form, individual reports on the topic, a poster, etc.).
4. Define timing for discussion (not more than 5 minutes!).
5. Divide learners into groups and let them discuss the topic.
6. After discussion ask the learners to present their outcomes (e.g. in front of the whole class).
7. After discussion is over (or during another lesson), summarise new information and/or new language (e.g. specific vocabulary).

Example

Discuss in the group what can any institution (e.g. a school or a company) do to slow the spread of infection (e.g. flu). Below are some prompts. You may use them or forget them. After discussing the problem and finding the solution, prepare a poster with your conclusions in the form of recommendations.

- Having an infection control plan.
- Providing clean hand washing facilities.
- Ask workers/learners to get the appropriate vaccine.
- Offering waterless alcohol-based hand sanitizers when regular facilities are not available (or to people on the road).
- Providing boxes of tissues and encouraging their use.
- Reminding staff to not share cups, glasses, dishes and cutlery. Ensuring dishes are washed in soap and water after use.
- Removing magazines and papers from waiting areas or common rooms (such as tea rooms and kitchens).
- Allowing employees/students to work/study from home to avoid crowding the workplace/school
- Considering cleaning a person’s workstation or other areas where they have been if a person has suspected or identified influenza.
- Making sure ventilation systems are working properly.
Large-group discussion
A large-group discussion requires a very well prepared chairman. He/she should be prepared to discuss any issue related to the discussion topic. The chairman may be a teacher or one of the learners. The chairman’s tasks include:
- starting the discussion, e.g. with a provocative question, using visuals, etc.;
- facilitating the discussion by asking questions;
- dealing with disagreements and conflicts;
- reflecting on the discussion and providing a summary.

Recommended procedure
1. The learners are initially presented with a provocative question or a problem.
2. They are asked to present their own opinions, views and beliefs on the matter.
3. The chairman takes notes on the board as an outcome of the discussion.
4. The chairman concludes the discussion by stating a summary.

Debates
The form of a debate is very close to that of a discussion. Students create two groups with conflicting views and their task is to come to an agreement/conclusion.

Recommended procedure
1. Introduce the topic. It must be controversial, e.g. Building atomic power stations, death sentence in contemporary legislation, etc.
2. Ask students to form two teams: “pros” and “cons”.
3. Give students sufficient time for preparation of their arguments.
4. Ask both teams to appoint “a speaker”.
5. Set a one-minute limit for presentations of both teams.
6. Allow teams to ask questions and answer them (5-minute limit). If the debate turns too loud, only speakers are allowed to speak.
7. After five minutes of discussion, stop the debate. Summarize both teams’ points. Ask students to make notes.

c. Outlining
In CLIL classes, both types of outlining can be used: a) outlining after reading an informative text in a foreign language, and b) outlining before writing their own texts.

Through practising both types of outlining learners learn about the organisation of the written text, and its structure. At the same time, they acquire the skills necessary to distinguish between the main ideas and their supporting details, as well as to identify their hierarchy.

Recommended procedure for outlining after reading an informative text
1. Prepare the learners for reading, e.g. provide them with necessary key vocabulary.
2. Let the learners read the text to get the general idea of the text. They can examine the length and genre of the text and think about the author.
3. Let them read the text again, now slower and in detail.
4. Ask them to preview introductory and conclusion paragraphs.
5. Ask them to identify the main idea or the purpose of the text (the topic sentence)? Usually it is expressed in the introductory paragraph. The title can help as well.
6. Learners should identify the main ideas of each paragraph (supporting sentences).
7. Ask the learners to formulate the concluding idea (usually stated in the concluding paragraph). What was the author’s intention? What is the conclusion the author offers?
8. Learners should prepare some conclusion, e.g. in the form of brief written notes, a mind map, a short review, a poster, etc.
d. Mind maps (Conceptual maps)

Mind mapping, originally a tool for organizing ideas that fuses together key words and pictures (Buzan & Buzan, 1996), is based on brainstorming the connections between facts and ideas (concepts, hence the synonymous name concept maps). When mind mapping, the learners are asked to draw their ideas and express the relationships between them by means of lines, arrows, overlapping areas or hierarchical orderings (hence mapping). Mind mapping has been proved as an effective tool in natural sciences classes, e.g. biology, geography, chemistry, but it can be used within any content subject. For examples of using mind mapping in history classes and their analysis see Reilly (online).

Mind mapping develops learners’ logical thinking, creativity, and imagination. Mind maps can be produced manually by drawing, or you can choose from several mind mapping software applications (e.g. iMindMap).

Recommended procedure
- Take a large sheet of paper.
- Draw a central image (usually an ellipse) with the topic written in it.
- Draw at least four thick branches coming outwards from the central image (it is advised to use a different colour for each branch).
- Write key words along these branches.
- Draw additional branches that extend from your main branches and write more key words (sub-topics).
- Keep expanding the mind map outwards with additional branches and sub-topics.

Example of a completed simple mind map from history

![Image of an Egyptian architecture mind map with key words and connections](http://aghsandtheancientpast.weebly.com/plus-plan---locate---use.html)


e. Project work

Project work (or simply a project) is a student-centred teaching technique when learners need to use their personal creativity and work independently to generate a final product (a report, a presentation, a lecture, a book, a magazine, etc.). It is a large-scale teaching technique
that involves research and provides students with opportunities to gain meaningful experience (for more see Pokrivčáková, 2014, p. 77-78).

**Project work** is organized in three stages:
1. planning,
2. implementation and end-product creating,
3. evaluating.

The teacher plays many roles when organizing project work: he/she is an organizer, coordinator, motivator, facilitator, a participant in project activities (to some extent) and a monitor. Despite all these roles, the irony of organizing project work lies in the fact that the more passive the teacher appears to be, the more successful the project is in terms of students’ autonomy and independent learning (Fried-Booth, 2002, p. 18).

Project work is a great CLIL means of integrating knowledge from several school subjects or fields of human knowledge. As Byrne (1991, p. 96) has it, project work should help them fulfil broader educational objectives, such as: research skills (searching and categorizing various information), social skills (cooperating in the group), and developing digital literacy (using internet sources, using ICT when creating and publishing a final product). The later named aspect of the project work is emphasized by Cimermanová (2011) who introduced the collection of project work activities that integrate learning English as a foreign language and developing digital literacy skills, e.g. creating and publishing English calendar by means of MS Publisher, editing a movie clip via MS Movie Maker, etc.

**Recommended procedure**
1. Set general aims.
2. Define language aims (what language should be used, which language items, vocabulary, etc.).
3. Define an end-product.
4. Set a time frame (at least deadline).
5. Recommend information sources.
6. Set criteria of evaluation.
7. Let students work independently (with your monitoring from background).
8. Ask students to present their end-products.
9. Evaluate.

**Examples of CLIL projects assignments**
1. Create a short biographical documentary of a famous person born in your town/village.
2. Create an attractive English tourist guide of your town/village.
3. Create an English version of your school website.
4. Create an English website of your class.
5. Create a blog on the healthy lifestyle where you and your classmates will contribute individually with articles on diets, sport activities, games, etc. Each article should have a discussion/comment session.
6. Create a short movie documentary of a lab experiment conducted in your biology/chemistry/physics class.

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7 Tertiary CLIL

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Objectives
This chapter is aimed at providing historical, social, geopolitical and educational context for CLIL at tertiary sector in Europe, outside Europe and in Slovakia. It comprises general information about teaching subject in a language in HEIs, the practice from various HEIs and the perspectives of CLIL implementation into tertiary education in Slovakia. Pitfalls of CLIL application in HEIs are discussed and several questions are arisen out of this issue at the end of the chapter.

Historical context of multilingualism, bilingualism and plurilingualism in tertiary education
The terms multilingualism, bilingualism and plurilingualism related to language/languages use can be defined from various aspects. In this chapter, we focus on educational aspect of their definitions. Using a certain language to communicate, to be educated in categorize us to a particular society, it is our identification on a) local, b) national, c) school, d) societal, e) professional f) community dimension. For example: My mother tongue Slovak identifies that my nationality is Slovak. I understand and use Latin it might identify me as a doctor, a vet or a scientist in biology field etc. I can also speak Hungarian, because I lived in southern part of Slovakia in a village where Hungarian minority lives. I can speak English as I graduated from a University in UK. English was my school language. Finally, I understand Chinese as I lived with my Chinese flat mates in the UK for several years (it is my community language identity). Can I state that I am a multilingual or plurilingual? I can say that I am a plurilingual person. I can use more than two languages, which identify me. I can use them in various domains. I would be defined as a multilingual person in my village in southern part of Slovakia where I lived and went to school as bilingual/multilingual environment is set from language and culture aspects there. Where languages and cultures are in contact we can described such environment as multilingual/multicultural (Trujillo, 2005). European Union is a plurilingual union. EU citizens speak many languages. Some states or areas are bilingual/multilingual.

Bilingualism/Multilingualism can be defined as an ability to know and use at least two languages at a certain level for specific purposes. In this video (starts at 2:50) dr Peeter Mehisto, author of Excellence in Bilingual Education: A Guide for School Principals explained how he considers bilingualism and bilingual Education. We agree with him that is very important to define bilingual education and set its goals to be able to provide rich bilingual educational environment at all level of education. Researchers have not unified the definition of multilingual and bilingual education yet. Some definitions that are used in research studies related to multilingualism/bilingualism issues can be found here.

Historical meaning of multilingualism slightly differs from current one. It can be stated, that in the past colonialism made people study, understand and speak new languages in some territories not only to arrange basic life necessities, to trade and make living, but also to become better educated as official languages used in these territories were mother tongues of conquerors. In the picture 1 you can see a map of influence of Major Empires languages on the world in 1914.
Being multilingual was essential for people from different classes in a society where more languages were spoken. This multilingual environments pressed people in a natural way to learn other languages than their mother tongue was. In class based societies each class of people had different motivation to learn them as it shown in the table 1 below.

<table>
<thead>
<tr>
<th>Lower class people</th>
<th>Middle class people</th>
<th>Upper class people</th>
</tr>
</thead>
<tbody>
<tr>
<td>To arrange the essential things for living</td>
<td>To arrange the essential things for living</td>
<td>They use their mother tongue to arrange the essential things for living</td>
</tr>
<tr>
<td>To leave their children to be educated (where compulsory educational system was set up)</td>
<td>To trade and do business</td>
<td>To travel, trade and do business</td>
</tr>
<tr>
<td>To socialize among tribes in some territories especially in Africa continent</td>
<td>To socialize with upper class people</td>
<td>To socialize with upper class people around the world</td>
</tr>
<tr>
<td>To be well educated</td>
<td>To be well educated</td>
<td></td>
</tr>
</tbody>
</table>

*Table 1*: Motivation for learning more than one language for different societal classes in the past.

Command level of languages people spoke varied depending on a) personal purpose of use of a particular language, b) size of societal pressure on use of a particular language and c) inner motivation to have good command of a particular language.

Colonial era’s has still had influence on usage of languages in current educational systems mainly in countries that went through a long colonial period in their history, such as India, South Africa. The major concern is still the attitude towards the colonial versus the local or regional languages in educational contexts (Bekker, 2003; Ferguson, 2003). Although most of these countries have more than one official language along with the colonial one. They are also used in the classroom.

Aronin and Singleton (2008, p. 4) states that current multilingualism is asimilable to politic economic aspects of globalization, global mobility and “postmodern” modes of thinking, and as such has different characteristics from historical multilingualism.

Due to modern technology, space is no more fixed and we can get instant access to other languages than our mother tongue is. Some current multilingualism drivers are:

a) globalisation of the world,
b) internationalization of HEIs,
c) international professional associations,
d) international public communities,
e) personal inner motivation to get to know various cultures through languages.

All in all current multilingualism is based either on historical background of a particular country or on individual needs or individual living requirements in the particular country. Regarding individual multilingualism, the situation is rather different depending on whether the bilingual or multilingual speakers are immersed in a society that shares this multilingualism (social multilingualism) or, on the contrary, they are surrounded by monolinguals or people who speak languages different from the ones spoken by them (Fortanet-Gómez, 2013, p. 30). Example of individual multilingualism is the issue of immigrants that settled down with their families in countries where their mother tongue is not used either in a society or at schools. Therefore, they are pressed to learn social official language to arrange their living and schooling for their children.

We can also recognize multilingual countries for example Switzerland, Canada where several official languages are spoken, but citizens can have good command of only one of them depending on the area of the country. On the contrary, there may be countries where most of the population is multilingual whereas the official languages consist of only one or two, as in many countries in Africa (Edwards, 2006).

From learning aspect, we consider bilingual and multilingual education as an environment where students are taught content subjects through two or more languages to make progress in content subjects parallely with progress in school language/languages. From linguistic point of view, we can state that bilingual/multilingual environment should let students enhance their BICS and CALP in school language/languages.

ELF approach

Great impact of globalization on tertiary education and the outcomes of the so-called Bologna process have fundamentally changed the situation at tertiary. Most universities have taken on an internationalization agenda (Graddol, 2006, p. 74), one aspect of which is the increasing adoption of English as medium of study programmes (more often master’s one, but also some bachelor’s ones) in mainland Europe (Nastansky, 2004; Wächter & Maiworm, 2008; Wilkinson & Zergers, 2007). Many universities in Europe entail that their teachers and students have to rely on English as their only shared means of communication, even though they usually have diverse and multilingual repertoires (Smit, 2010, p.60). In current era of globalization, the claim has been made repeatedly that English is used as lingua franca more often than as means of communication amongst L1 speakers (Crystal 2003; Graddol 2006). We think, that English is used as lingua franca definitely in academic outcomes such as conference presentations, poster presentations, abstracts, research studies, scientific articles in professional journals, other academic publications. To publish research data, results, thoughts, ideas, theories etc. on academic issues in English is currently a “must” to become a recognized researcher, scientists, and teacher and to share academic outcomes within a certain professional community. It seems that scholars from smaller EU countries and from post-communist states including Slovakia catch up with more recognized scholars from bigger EU states such as the UK, France, Germany, Spain. We should also admit that non-native English scholars make more effort to compete with native English scholars whose mother tongue is English. So, from this aspect ELF approach being implemented at tertiary is welcomed. However, it would be important to specify what is the added value of ELF concept for higher education. English medium education is a novelty for mainland Europe. Using English as lingua franca unifies academic fields and amplifies expert readership. The concept is supported by EU (see. the Bologna process). Internationalisation of higher education and EFL approach application have increased mobility of students, teachers and scientists within EU. Good command of English enables students and scholars to cooperate and share their research results, knowledge etc. with other professionals at their field of study around the world.
How can we illustrate the ELF concept for higher education from practical and linguistic point of view? How EFL environment should be set up? Smit 2010 suggested the conceptual frame for ELF as classroom language as it is shown in figure 1 below.

![Conceptual Frame for ELF as Classroom Language](image)

Figure 1: A conceptual frame for ELF as classroom language

As Smit illustrated, the four complex resources are considered as equally relevant to the conceptual frame and do not stand in any special order of preference:

1. **Community of multilingual sojourners** = participant resource (teachers and more important students), to build EFL as classroom language the HEIs need students who are bilingual/multilingual or at least they have good command of English and they are ready to act as a sojourner. The role of sojourner also has important implications as regards the participants’ linguistic repertoires, that is, “the total range of codes available to the multilingual speaker (Banda, 2009, p. 6). We can understand this participant resource as a crucial one for creating a natural community as defined by Eckert (2000, p. 35) “communities of practice” – they are united by some enterprise and develop and share ways of doing things, ways of talking, beliefs, values – in short, practices – as a function of their joint engagement in activity. Learning is surely such a “common enterprise” which, when seen from a social constructivist understanding (Vygotsky, 1978), is also a social undertaking requiring “joint engagement” (Smit, 2010, p. 64). The social actors engaged in ELF and tertiary learning practices form a community of multilingual sojourners for the duration of their particular educational programme (Smit, 2010, p. 65).

2. **Institutionalized purposes**

HEIs have their own educational policies. As it was mentioned above most of European HEIs have been trying to internationalise themselves with massive EU support. They try to provide study programmes in English and attract multilingual students to choose their study programmes to arrange multilingual learning atmosphere. An active ELF classroom language environment depends on learning process. Marton, Runessson and Tsui (2004, p. 24) claim that learning is constituted by linguistic means in the interaction between teacher and students. If the interaction is centrally done in English, it is seen that ELF classroom language environment fulfils the institutionalized purposes.

3. **Classroom talk**

The third resource needed to build an active EFL classroom language environment concerns the specific nature of language use in formal educational settings. The features of classroom talk are illustrated by **IRF exchange pattern** consisting of **Initiation** (teacher), **Response** (student) and **Feedback** (teacher) (Smit, 2010,p.65). This institutionalized pattern of classroom talk, specific for educational setting, can be useful body of reference of ELF as classroom language. In other words, quality of the IRF pattern of classroom talk, dynamics of classroom talk, topic development etc. can demonstrate efficiency of ELF as classroom language. See more in Dalton-Puffer 2007 and Smit 2010.
4. ELF practice

The function of ELF is to allow for interaction, which in turn is a social practice by which the community members construct meaning and, at the same time create, maintain and/or modify their collective history (Hall, 1993, p. 146). Smit (2010, p. 66) describes three dimensions ELF relies on:

a) Communicating,
b) Established Practice,
c) Individual Repertoire.

Communication is a necessity of an active EFL classroom language environment. Establishing EFL classroom language practice depends on interactional purposes and constellation of all participants. ELF interlocutors bring their own linguistic backgrounds and histories; their individual repertoires can enhance EFL classroom language and contribute to establishing an active EFL classroom language environment.

To establish an active EFL classroom language environment at tertiary is about not only English as lingua franca but the relevant ESP discourse, conventions and genres play a great role to fulfil the educational goals related to the study subjects.

Think!

Can we consider EFL classroom language approach/concept as reasonable solution for Slovak HEIs to internationalized themselves? Do Slovak HEIs have all required /suggested resources in the conceptual frame of ELF classroom language to establish an active ELF classroom language environment? Try to answer the questions above; they will be discussed later in this chapter.

ESP and EAP approaches

When we obtain an insight into tertiary education in Slovakia, we can state, that our HEIs do not have so strong international community of students comparing to the recognized HEIs in Europe or around the world. None of the HEIs in Slovakia has appeared to the 500th place in the list of the best universities in the world 2014/2015. One of the indicators that are taken into account to rank the HEIs is its international outlook. As regards world or European rankings of HEIs, our best HEI is STU Bratislava with 290th place in the list of best universities in Europe and 675th place in the world ranking of HEIs for the year 2014/2015. Low rankings of the HEIs in Slovakia make them not so attractive for international students to choose them for graduating in their study programmes. It also causes slower process of internationalization of higher education in Slovakia. In contrary, there some options for international students to get a bachelor degree in English (e.g. here and here).

The facts mentioned above led us to claim, that the HEIs in Slovakia do not have all resources required for establishing an active EFL classroom language environment. The most amount of student of HEIs in Slovakia are Slovak citizens and major school language is Slovak. However, internationalization or “Englishisation” of higher education is still trend around the world. Regarding this trend, the students and scholars in HEIs in Slovakia are pressed to be able to get a good command of English to get and keep touch with the counterparts in higher education around the world. They are requested to be aware of delivering various genres in English that can help to lift up ranking of the HEIs they work for.

As it was stated above, students can get a bachelor degree in English in some HEIs in Slovakia. Those students who decided for study programmes in English are requested to have a required level of English. English as a major school language is also used in study programmes concerning with English from linguistic aspect (English teacher programmes, English interpreters ....).
All types of students of HEIs in Slovakia need to foster their English at least for academic purposes. We recognize several academic genres the students, teachers and scholars obviously use to put forward their outcomes in English. Some of them are displayed in the figure 2.

![A list of some academic genres](image)

Figure 2: A list of some academic genres

To learn more about other academic genres from structure, language, style, vocabulary aspects, click [here](#) and [here](#).

English for academic purposes courses should be compulsory courses for all types of students studying in the HEIs in Slovakia to enhance their English level for academic purposes. As we know, such courses are very rarely a part of study programmes in the HEIs in Slovakia. What is often provided for students are ESP courses, courses focused on enhancing specific professional vocabulary in English. Sometimes ESP and EAP approaches are combined.

Reason to design EAP courses for students in HEIs abroad can be little bit different from that one we outlined above. EAP course is a kind of courses provided for overseas students to help them to cope with their intended college courses, accordingly, such students of EAP must have some background in English (Ibrahim, 2010, p.200).

The terms EGP, EAP and ESP – English for general, academic and specific purposes are often replaced. EFL teachers are confused what should be the content of the courses. We would like to define all these terms from learning perspective at tertiary education.

Mackay and Mountford (1978) defined ESP as the teaching of English for a “clearly utilitarian purpose”. The purpose they refer to is defined by the needs of the learners, which could be academic, occupational, or scientific. Traditional ESP is a language-focused approach, which is designed to meet specified needs of the learner, identified through, needs analysis (Dudley-Evans and St John, 1998; Hutchinson and Water, 1987). Although it is different from General English, ESP has inherited the patterns of word formation, syntactic, discourse analysis and other importance grammar aspects too (Choroleeva, 2012). It is deemed that in traditional ESP, the professional content matter has no learning value in which learners do not acquire any professional knowledge; instead, it is only used as a tool or source to acquire a target language (Khor and Liew, 2013). Recently the term “integrated” ESP has arisen again. Integrated ESP is opposed to the traditional language-focused ESP. ESP course designs today commonly give some, if not equal emphasis on the importance of content. In integrated ESP learning the focus shifted from learning the language to learning simultaneously both professional content matter and the language for professional communication (Snow, Met and Genesee, 1989; Tarnopolsky, 2013). After reading the last statement it seems that integrated ESP resembles CLIL, which is
the approach, used to teach a non-language subject matter in the target language. This approach will be described later in this chapter.

We illustrate EGP, EAP, ESP and CLIL approaches in the figure 3 in so-called English Tertiary Education Pyramid.

![Figure 3: English Tertiary Language Education Pyramid (ETLE Pyramid)](image)

We would like to demonstrate optimal settings of learning English in tertiary education by the ETLE Pyramid. We think, that all HE students who are non-English speaking should command a solid knowledge of general English (EGP) when enter a HEI. The students with insufficient level of English should be offered some additional courses to get the required level of general English. Such EGP courses do not have to be a part of a study programmes and they can be led by EFL teachers/lecturers. Those students whose level of English meet B1 criteria (according to CEFR) can apply for EAP courses that can be included into study programmes as compulsory or optional courses. EAP courses can be led by EFL teachers/lecturers. The main focus of EAP courses should be on academic use of English to prepare students for delivering academic outcomes of various academic genres in English. ESP courses should be also a part of study programmes either in compulsory or optional mode aiming at enhancing specific vocabulary of students and focusing on language skills progress in target language. Dual types of educational approaches such as integrated ESP and CLIL should be taught by non-language subject teachers with active support of EFL teachers to ensure the dualism of such education.

**EMI approach**

There are various driving forces behind the adoption of EMI in higher education around the world (Coleman 2006). This instructional approach is often viewed by national governments as an important strategy to gain access to cutting-edge knowledge and enhance national competitiveness in innovation and knowledge production (Hu, 2007). EMI has also been promoted as means of facilitating the internationalization of higher education to compete for students and/or academics and open up new sources of revenue (Wilkinson, 2013). Furthermore, many universities have adopted EMI to enhance the employability of their graduates in the domestic or global markets (Björkman, 2008; Pecorari et al., 2011).

We would put EMI approach on the top of the ETLE Pyramid described in 2.3 as an approach mainly focusing on subject matters in English. We think, if this approach is implemented in HEIs, students should be required to have a good command of English at least at B2 level according to CEFR better C1 level as EMI approach deploys students’ level of English to learn non-language subjects and gain deeper knowledge in it.

Why is EMI so attractive for the whole spectrum of education? Regarding tertiary education, there is a growing belief that learning an academic subject through EMI will enhance or facilitate the learning of that subject by the home students. The argument is put forward with particular emphasis in the sciences where it is claimed (almost certainly correctly) that the majority of important and influential research is published through the medium of English. Thus if the students are reading large quantities of material in English for their course then the oral input
and interaction in the classroom or the lecture room should be in English – and, as a consequence, so should the assessment system be in English. This shift to EMI therefore presupposes that English for Academic Purposes courses in the home country are not sufficient to enable the students to read and (possibly) write in English (Macaro, 2015).

EMI programmes, this rapidly growing phenomenon, should be examined to get serious data how efficient the EMI approach at tertiary education is especially in non-English speaking countries. As it was mentioned before, home students and international students can find EMI programmes in the HEIs in Slovakia as well. Universities in Bratislava particularly by STU Bratislava provide most of them. We can declare that EMI approach has not been adopted by most of the HEIs in Slovakia yet. One of the reasons is that EMI approach implementation requires subject teachers’ preparedness from linguistic aspect and students’ higher level of English. Home students’ level of English is not sufficient to be involved in such programmes so there is not high demand on EMI programmes. On the other hand, those students with required level of English, they do not have a wide range of EMI programmes in the HEIs in Slovakia, so they choose EMI programmes in their requested field abroad. So how to internationalize higher education in Slovakia to attract more international students to study in the HEIs here?

We think that dual education approaches can move us closer to EMI programmes implementation in higher education in Slovakia.

**CLIL approach**

It has been declared several times in this chapter that CLIL approach is a dual type of education, which means that subject and target language are parallelly taught to ensure for students some progress in both of them. CLIL programmes at tertiary are recommended to be prepared by EFL teachers and subject teachers in cooperative environment. The cooperation model depends on HEI’s policy on study programmes taught in target language (English). Coleman (2006) warns of predictable problems for example staff and students ‘language skills, intercultural issues, assessment, and institutional involvement when a HEI considers applying CLIL into study programmes. His enthusiasm in CLIL implementation at tertiary led to establishing Integrating of Content and Language in Higher Education Association (ICLHE) in 2010. The Association has already 80 members with no Slovak representative of HEIs and with one from the Czech Republic. The Association aims to provide a platform for the exchange of opinions, experiences, initiatives and research concerning the interface between content and language in higher education, to stimulate the synergy from cooperation among members from different backgrounds and contexts. It also provides educational space on these issues.

**LANQUA project 2007 – 2010 – Language Network for Quality Assurance** funded by the Lifelong Learning Erasmus Network of the European Union brought together 60 partner institutions to map the current landscape for languages in higher education. The CLIL subgroup consisted of teachers from 10 states. They described their CLIL practice in HEIs around Europe. CLIL application into education at Primary and Secondary education is more spread in Europe, however, CLIL implementation is a relatively new issue in this field. The participants of the CLIL subgroup suggested using CLIL term as an umbrella term for all those HE approaches in which some form of specific and academic language support is offered to students in order to facilitate their learning of the content through that language. The project results on CLIL issues as they are described in the document you can find here.

CLIL-type approaches are frequently becoming adopted in European higher education in the fields of law, business, economics, engineering, medicine and humanities. Predominantly they appear at MA level, often as degree programmes which are either fully delivered in a foreign/target language (most frequently English) or contain extensive modules delivered in the target language. At BA and postgraduate levels, students may take ‘content’ modules or individual lectures in a foreign language. Language support is delivered both as direct contact teaching and using blended approaches with e-learning methodology/distance-learning. The number and distribution of hours, as well as the European Credit Transfer System (ECTS) credits allocated differ with each higher education institution and the CLIL variety adopted. Language
for specific purposes (LSP)/language for academic purposes (LAP) practices are more common than fully integrated approaches. The ‘content’ courses are usually taught by either a native or a non-native speaker of the target language, and collaboration between the ‘content’ teacher and the language teacher is quite rare. Some institutions have developed CLIL practices whereby specific LSP/LAP courses are offered as pre-sessional modules to students before they enrol in their subject studies. Closer content and language integration, with the language support coinciding with what is required in the subject studies is also practised successfully. These models involve full collaboration between language specialists and subject specialists, either in the form of joint planning or team teaching. Learning outcomes are mainly assessed separately and a clear distinction is made between language mastery and subject mastery. The more integrated approaches, namely adjunct CLIL and dual focus CLIL then involve (full) coordination between language specialists and subject specialists, either in the form of joint planning or team teaching. Learning outcomes and criteria are specified for both language and content. The CLIL forms currently provided in HEIs in Europe are described in the table 2. (LANQUA project’s outcome). The described CLIL forms are offered commonly on Master’s level.

As we have seen the CLIL types presented in the table 1, it seems that the both partial CLIL forms resemble ESP /LSP courses and the last two adjunct CLIL resembles the above mentioned integrated ESP and dual CLIL completely focuses on content and language learning. If there is form, where a subject is taught in a target language without any language support for students, we can call such type programme EMI (if the target language is English). Current situation in the HEIs in Slovakia concerning CLIL forms offered is similar to the presented situation in Europe. There are a few EMI programmes offered for students on both Bachelor’s and Master’s level. The most provided CLIL forms are ESP courses done by EFL teachers in some cases focused more on language progress, in other cases on specific content. We think that there are no dual CLIL programmes implemented into education at tertiary. The potential reasons why dual CLIL forms are not offered at tertiary education in Slovakia might be as follows:

- Subject teachers might not have enough language confidence for lecturing in a target language (for example English).
- Subject teachers might not be professionals at language didactics to be able to scaffold learning materials.
- ESP/EFL teachers might not be able to set effective, students ‘needs driven goals of ESP courses, CLIL courses.
- Many Slovak students have insufficient language level for dual CLIL.
- HEIs might not be aware of how to set their policy to foster their internationalization.
- There is not enough practice evidence of active cooperation between EFL/ESP teachers and subject teachers.
- There might be lack of money to start dual education in the HEIs.
- Potential fear of loosing or not getting professional vocabulary in mother tongue.
- A professional networking is missing to support idea of dual CLIL education at tertiary.
- Insufficient official support by Ministry of education.
- A shift in pre-teacher education is needed to allow subject pre-teachers to obtain adequate education in a target language (English).

**Summary**

CLIL at tertiary is defined the same as in primary and secondary education as an umbrella term covering various CLIL forms offered in the HEIs in Europe and around the world. The participants of LANQUA project mentioned in 2.5 presented the following CLIL forms used in the HEIs:

- partial CLIL (one type with main focus on language LAP, on content in a target language, on discipline based LSP),
- adjunct CLIL,
- dual CLIL.
<table>
<thead>
<tr>
<th>TYPE</th>
<th>PARTIAL CLIL (LSP/Discipline-based LT)</th>
<th>PARTIAL CLIL (language – LAP focus)</th>
<th>PARTIAL CLIL (content – focus in L2)</th>
<th>ADJUNCT CLIL</th>
<th>(Dual-focus) CLIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main aim(s)</td>
<td>Language mastery and typically also study skills (LAP) study skills; explicit L2 aims.</td>
<td>Language and study skills mastery, tailored for future content learning, i.e., pre-sessional course; explicit L2 aims.</td>
<td>Content mastery; L2 learning incidental; language aims not specified, but often implicit L2 learning aims.</td>
<td>Content mastery and L2 learning; tailored, adjunct L2 instruction to support content learning outcomes; explicit L2 aims.</td>
<td>Content mastery and L2 learning; dual focus and integrated and specified aims for both.</td>
</tr>
<tr>
<td>Target group</td>
<td>Non-native learners</td>
<td>Non-native learners</td>
<td>Any group, both native and non-native learners</td>
<td>Mixed group, but L2 adjunct courses more aimed at non-native learners</td>
<td>Typically non-native learners</td>
</tr>
<tr>
<td>Main actor(s)</td>
<td>Language specialist</td>
<td>Language specialist, often in cooperation with subject specialists</td>
<td>Subject specialist</td>
<td>Subject specialist and language specialist in collaboration; i.e., two teachers</td>
<td>Subject specialist alone or teaming with a language specialist</td>
</tr>
<tr>
<td>Pedagogical approach</td>
<td>Language teaching and LSP approaches, with an additional focus on LAP, tailored learning tasks.</td>
<td>Study skills teaching and LSP approaches, with an additional focus on LSP, tailored learning tasks.</td>
<td>Often lecture-type, focus on transmission of knowledge, expert-centred. Approach depends on what is typical of the discipline or preferred by teacher.</td>
<td>Lecture-type or learner-centred; L2 adjunct courses constructed in collaboration between language and content specialist to promote skills needed for content mastery.</td>
<td>Multi-modal, interactive and learner-centred approaches which systematically support both content and L2 learning aims.</td>
</tr>
<tr>
<td>Main view of language (L)</td>
<td>L as subject and mediator.</td>
<td>L as subject and mediator.</td>
<td>L as tool.</td>
<td>L as mediator.</td>
<td>Multiple views of L.</td>
</tr>
<tr>
<td>Learning outcomes expected</td>
<td>LSP competence: functional, professional language and communication competence in the disciplinary field and in general. LSP competence for the purposes of the discipline.</td>
<td>LSP competence: functional, professional language and communication competence in the disciplinary field and in general.</td>
<td>As in content instruction, language learning dependent on the pedagogical approach and on learner’s own motivation, initiative and autonomy. Lack of awareness of the role of language is typical.</td>
<td>As in content instruction, but with a clear awareness of the role of language, i.e., partially integrated content and language competence. Focus of L2 adjunct instruction is on production and interactive skills.</td>
<td>Integrated content and language competence. Both developed systematically through tailored learning tasks; main emphasis in L2 development is on production and interactive skills. Full awareness of L.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Language and communication skills assessment forms according to set criteria.</td>
<td>Language and communication skills assessment forms according to LAP criteria.</td>
<td>Content mastery assessed in whatever way is typical; language learning not assessed apart from possible self-assessment.</td>
<td>Each teacher assesses his/her share; often joint assessment criteria and multiple forms; credits given for both.</td>
<td>Assessment of content and language according to aims set; often continuous and multiple forms of assessment.</td>
</tr>
</tbody>
</table>

Table 2: CLIL forms in the presented HEIs within the LANQUA project.
All the CLIL forms are explained in the table 2 in 2.5. Pérez-Vidal (2005) distinguishes three CLIL models (A, B, C) by their level of focus on content and language. A) students do not struggle with language and hence language is not the issue, B) more focus on language (English) teaching and integrates content-driven themes, C) equally focused on language and content as each is a vehicle conducive to the other.

Scholars have not unified terminology regarding language and content driven teaching at tertiary. Many approaches have been mentioned in this chapter such as CBI, ESP, EAP, EMI, CLIL, integrated ESP etc. CLIL is considered in this chapter as an umbrella term for various form of language and content teaching with different focus on content and language within programmes in tertiary education. We can assume that CLIL and its various forms cover all mentioned types of language and/or content driven courses in a target language (in most cases in English). Considering a particular CLIL form implementation into tertiary education several aspects should be taken into account such as: a) policy and level of internationalization of HEIs; b) social, historical and cultural context; c) home students' level of a target language; d) subject teachers' level and confidence of a target language; d) capacity of ESP teachers; e) curriculum of a particular HEI; f) HEI's budget.

Use CLIL form matrix in the figure 4 to choose potentially the best CLIL form for a particular context.

Figure 4: CLIL form matrix

To strive for effective CLIL, both pedagogical and administrative support structures need to be provided for, with appropriate funding and development (Taillefer, 2015, p. 63). Many research studies were conducted to find CLIL impact on students' level of TL (English), on CLIL teachers' role and competences and their perception on CLIL. The research has been majorly done in primary and secondary level of education. Using CLIL forms and their impact on students and teachers in tertiary education have recently become research interest. Tsuchiya and Murillo (2015) provide a brief overview of CLIL in higher education in Spain in Japan and they investigated students' perceptions of CLIL implementation in both countries through questionnaire surveys. About half of the respondents in both countries show a positive view of CLIL at tertiary level. They also present advantages and disadvantages of classes taught in English at university expressed by students: the importance of English for their future careers, students' lack of English skills to understand subject contents, the risk of loosing opportunities to learn subjects in their mother tongue, teachers without adequate English skills teach subjects, the need to improve CLIL curricula and assessment system etc. Vilkanciene (2011) states that as in secondary education, CLIL type
teaching in higher education increases learner motivation, contributing to both cognitively more demanding content and language learning and communicative skills development. It enables learners to perform to the level of their linguistic and academic competence. On the other hand, Kamal (2015) declares, that despite of controversy of using English as a medium of instructions at schools in Pakistan, currently conducted study demonstrates this issue not so controversial because majority of the teachers considered the importance of English language as unavoidable necessity and thus suggested for its development as a medium of instruction in future from primary to higher level of education.

We have not discussed potential pitfalls of CLIL implementation in higher education yet. They might arise from all “ingredients” required to set an effective dual teaching environment. Some of them are mapped in the figure 5.

Finally, we can claim that there is very little or no chance to stop internationalization process of higher education, which results in “Englishisation” of study, programmes in the HEIs around the world. CLIL approach seems to be somewhere in the middle of the “Englishisation” process because it allows students to learn content and language paralelly. CLIL approach and its application into tertiary education is a great challenge for all stakeholders, however, it is a tool for designing degree programme fully taught in TL (English) in order to attract more home students and also international students to study at a particular HEI what can establish natural international/multilingual environment.

Figure 5: Basic CLIL ingredients

Questions to consider and more materials to study
We think that some questions should be considered to institutionalize any forms of study programmes taught in a target language at tertiary.
1. What nationalities are home students of a HEI?
2. What is the home students’ level of TL?
3. What is the HEI subject teachers’ level of TL?
4. Are there any ESP/EFL teachers that can be involved in the process of CLIL/EMI implementation?
5. Is society and local, national education authorities open for dual education such as CLIL, EMI programmes?
6. What is HEI education policy?
Finally, we provide a list of links where you can study more particular experience and practice with CLIL, EMI programmes at tertiary around the world. CLIL as a dual approach of education that ensure students’ progress in BICS and CALP of a target language has its pluses and minuses at different levels in education. Some of them at tertiary have been mentioned in 2.6. You can study more in a presentation on “Experience of CLIL at different levels in education – what can be learnt” (Björklund, 2010). CLIL experience with CLIL at University of Shimane in Japan is published here. Brief overview of CLIL in higher education in Spain and in Japan you can find here and here. English medium programmes at Austrian business faculties, presentation about national trends, programme design and delivery can be accessed here. Teachers’ perceptions about the role of English in students’ assessment and also current practices in higher education in Pakistan are published here. The situation at Jessenius Medical Faculty in Martin regarding English for medical purposes is mapped here.

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References


8 Being a CLIL teacher

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Objectives
The chapter aims at describing the differences between immersion programmes, bilingual programmes and CLIL. It focuses on one of the main stakeholders in CLIL environment, on CLIL teachers. Do CLIL teachers deploy any special skills, competences to be able to create an effective CLIL teaching–learning environment? The chapter brings basic information about CLIL materials and some way how to find and prepare appropriate materials for CLIL activities, CLIL lessons. The model of professional teacher competences is introduced in the chapter and the role of ESP teachers in CLIL environment at tertiary is discussed.

Terminology and literature review
Content and Language Integrated Learning (CLIL) is a general expression which refers to any teaching of a non-language subject through the medium of a second or foreign language (L2). CLIL has been seen as a means of improving knowledge and competence in foreign language learning and teaching, and of renewing interest and motivation among children in schools (Coyle, Holmes and King, 2009). The essential questions about CLIL are who should be responsible for teaching content through the second language and how this should be done. Many content teachers are unsure about the way they should perform in the CLIL class because they are not aware of the methodological changes required in these contexts (Pavón & Rubio, 2010, p. 50), or because these methods differ from the way they have learnt languages and from the way they have been trained to become regular teachers (Kaplan & Baldauf, 1997, p. 134).

Both content and language teachers become qualified teachers in Slovakia after completing one-subject or two-subject master study programmes in one of universities offering teacher training study programmes. Their education is multidisciplinary because except extensive subject or subjects’ knowledge, they acquire strong knowledge in pedagogy, psychology and the practical skills and competencies necessary to guide pupils and students. However, being a teacher is not a job but a mission because it is about passion, enthusiasm, creativity, ability to overcome negative student behaviours, or to encourage individual students and this fact each future teacher should keep in mind before he/she decides to start this career.

The career system of teachers in Slovakia is defined by Law 317/2009 on pedagogical employees and 445/2009 which include relevant requirements in the career development of teachers and both define stages teachers are obliged to undergo.

Becoming a good content or language teacher requires being an expert not only in the content area but also have a deep understanding of the cognitive, sociocultural and psychological elements of foreign language learning and, at the same time, to be ready to solve all situations at school. Therefore, a university graduate is obliged, after recruiting into school, to start so-called adaptation education which usually takes one year but should be completed up to two years. A teacher in an adaptation period is called a novice teacher and is tutored by one of the independent teachers, from the same school, with the first qualification grade. A novice teacher may become an independent teacher after passing a final interview, performing and evaluated open lesson before the commission. Such a teacher becomes an independent teacher who possesses all key competencies defined by Common European Principles for Teacher Competences and Qualifications and is fully skilled enough to work and cooperate with others, is able to work with various types of knowledge, can use modern information and communication technology and can work with and in society.

Teachers obviously go through the typical three-stage teacher-attitude cycle (this parallels research done by Frances Fuller and John L. Watzke):
Shock: "Whoa! This is too much, and I want out."
Cynicism: "The students don’t care. The administration doesn’t support us."
Self-Actualization: "I can do this. This is fun. If I help just one student, it is worth it!"

In each of these steps, a novice teacher benefits greatly from the patient ministrations of several other seasoned teachers who show them the ropes on how to do grading, discipline, effective lessons, and ways to manage the volume of work to become one day a good teacher.

**CLIL**

As an intensive learning of foreign languages does not seem to be the best solution in increasing students’ foreign language proficiency without taking up additional time, the CLIL approach has proved increasing students’ foreign language capabilities. But the question is what exactly the CLIL approach involves to avoid confusions, for example with bilingual education or immersion programmes.

<table>
<thead>
<tr>
<th>Immersion programmes (IP)</th>
<th>Bilingual education (BE)</th>
<th>CLIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a form of additive bilingual education (they aim for functional proficiency in both the student’s L1 and L2)</td>
<td>bilingual education is the use of the target languages to teach prescribed academic subjects</td>
<td>CLIL refers to teaching subject, such as science or mathematics to students through a foreign language</td>
</tr>
<tr>
<td>2 or more languages are used for academic instruction</td>
<td>a goal is to master two or more languages in native speaker level</td>
<td>goal of CLIL is based on language skills which learners have already acquired in language lessons,</td>
</tr>
<tr>
<td>L1 is students’ home language and L2 is a second language</td>
<td>all academic instruction is presented in the L2</td>
<td>CLIL develops a wider range of discourse skills than does traditional language instruction (because of incorporation of higher cognitive skills)</td>
</tr>
<tr>
<td>the use of the L2 to teach regular academic subjects, such as mathematics and science</td>
<td>students who receive content instruction in L2, but are tested in L1, may exhibit deficiencies in the content due to incomplete mastery of the language</td>
<td>a successful CLIL lesson should combine elements of content, communication, cognition and culture,</td>
</tr>
<tr>
<td>students are expected to achieve the same levels of achievement in these subjects as students learning through the medium of their L1</td>
<td>of testing (once students receive academic instruction in the L1, these disparities usually disappear)</td>
<td>in schools the proportion of instruction in L2 can vary depending on the school, teacher and language context – recommended is up to 50% of all lessons</td>
</tr>
<tr>
<td>IPs promote proficiency in the L2 by teaching academic subjects through the medium of the L2</td>
<td>a subtractive form of bilingualism (L1 + L2 - L1 = L2) – student speaks the first language and the second one is added while the first is subtracted</td>
<td>code switching is a natural communication strategy (teachers do not use translation to solve every difficulty and</td>
</tr>
<tr>
<td>teachers use only the L2 for instruction during all or significant portions (at least 50%) of the school day</td>
<td>additive form (L1 + L2 = L1 + L2) – a second language is added without any loss of the first language</td>
<td>misunderstanding)</td>
</tr>
<tr>
<td>teachers never or almost never use the students’ L1 during these times</td>
<td>a need of intensive language courses before teaching through the medium of L2 starts</td>
<td>the foreign language can be used in different situations (in the same subject, some lessons can</td>
</tr>
<tr>
<td>teachers also use the L2 for all social interaction during designated times (at least 50% of the school day)</td>
<td>the bilingual programmes vary from one grade to the next</td>
<td></td>
</tr>
</tbody>
</table>
explore and communicate about academic subjects
• students are not corrected extensively for non-native-like use of the L2 – too much correction will discourage use of the language
• IPs are often situated in a separate area of the school so that students and teachers can use the L2 in class, in the hallways, at lunchtime, etc.

other, usual form is 50% of the subjects being taught through the medium of L2 at the lower secondary level and reach a full immersion at the upper secondary level
• teachers need not necessarily be native speakers, but should have an excellent communicative competence in the language that serves as medium of instruction (it is sufficient to take a teacher of geography, for instance, who is at the same time a language teacher)
• bilingual schools require a specific methodology that has to be developed separately in each model of bilingual education

be taught in the L2, others in the mother tongue on the basis of the specific topic
• some teachers prefer to introduce new concepts in one language and use the other to revise them later
• CLIL teachers should be experts in the content area and should have a good command of the foreign language
• in case a content teacher isn’t skilled in the FL, it is desirable to develop initial co-operation between non-language subject teachers and language specialists to ensure the positive outcomes of the CLIL programme

Table 1: Differences in second/foreign language acquisition

As the table declares, learners are fully immersed in the target language for a certain period of time in immersion programmes, both in and outside the class. Immersion programmes are successful in helping student’s proficiency in language; as a result much emphasis is placed on communication skills. Immersion programmes are typical for countries were another local or international language is considered to be important. The benefit for a learner is that this second language is spoken in the immediate environment of the learner, who has thus good opportunities to use the language by participating in natural communication situations. On the other hand, CLIL is a tool for teaching and learning content and language at the same time. Therefore, in CLIL programmes the goal is not only in communication skill but also in listening, writing and reading skills. We may consider that the best approach for our educational context is CLIL because the goal in schools is not to teach a foreign language as a native language like immersion does.

Immersion programmes are not so widespread in Slovakia as in other countries, like Canada, Spain or Estonia. On the other hand, bilingual education mostly occurs in secondary schools which teach all content in Spanish, French, English or other foreign language. All these programmes are usually preceded by intensive language preparation.

CLIL teachers
Teachers who tend to implement CLIL classes should be aware of methodological changes required in this approach because it differs from the way of learning languages, as well as from the way they have been trained to become a regular teacher. Some departments of foreign languages at universities in Slovakia have already included CLIL methodology in their portfolio but there is little or none possibility to practise it during initial teacher training.

According to Marsh, the teachers of content should have sufficient linguistic competence to be able to pass on academic content in a target language as well as an in-depth knowledge of their own subject. Unfortunately, recent studies show the lack of adequate foreign language knowledge of content teachers who want to use a foreign language as a medium of instruction. It
may lead to initial organizational problems. In case, a content teacher acquires adequate level of linguistic competence, they face to other great challenge that is the change in favour of a methodology that emphasizes the use of activities that promote the linguistic competence of students with a communicative end goal, and whose objective is not to teach “things”, but to teach to understand, retain and use. A second problem might be that content teachers usually have a tendency to help students increase their knowledge of the language by providing linguistic explanations, which results in the content lesson becoming a language lesson, thus consuming time needed for the transmission of content (Pavón & Rubio, 2010). So the new role of CLIL teachers involves a complete change in the pedagogical strategy applied in the classroom which may sometimes be difficult to achieve. As the first step that should be taken into account should be the change from the instructional to participative classes. It means to teach the content the way to make students gain understanding of content through its manipulation and use. Secondly, lessons should include not only teacher-student interaction, but CLIL teachers should try to encourage student-student interaction through collaboration and cooperative work. Finally, teachers should not forget to include to CLIL classes BICS (Basic Interpersonal Communicative Skills) and CALP (Cognitive Academic Language Proficiency). BICS are language skills needed in social situations. It is the day-to-day language needed to interact socially with other people. English language learners employ BIC skills when they are on the playground, in the lunch room, on the school bus, at parties, playing sports and talking on the telephone. Social interactions are usually context embedded. They occur in a meaningful social context. They are not very demanding cognitively. These language skills students usually develop within two or three years of education in the target language. On the other hand, CALP refers to formal academic learning. This includes listening, speaking, reading, and writing about subject area content material. Academic language acquisition is not just the understanding of content area vocabulary. It includes skills such as comparing, classifying, synthesizing, evaluating, and inferring. Academic language tasks are context reduced. Students need time and support to become proficient in academic areas. This usually takes from five to seven years (Cummins, 1994).

It may be a hard job to find an ideal CLIL teacher in Slovakia. Teachers in primary and secondary schools had an opportunity to enrol on a language course, first, provided by National Institute for Education, which offered a two-year foreign language course. The aim was to achieve a communication level of teachers from A2 up to B2 level (according to SERR) depending on initial language knowledge of each teacher. More information about this project is available on http://www.educj.sk/buxus/generate_page.php?page_id=1

Then, the same institution established a free course for teachers interested in implementing CLIL approach to schools. It is available only for teachers in primary schools in Slovakia (http://www.statpedu.sk/sk/Vyskum-overovania-sutaze-a-vzdelavacie-aktivity/Experimentalne-overovania/Sucasne-projekty/Didakticka-efektivnost-metody-CLIL.alej).

In Slovak schools we may find a various structures of collaboration between subject and language teacher, in case a subject teacher has little or none knowledge of a foreign language:

<table>
<thead>
<tr>
<th>Structure of collaboration</th>
<th>Roles of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject teacher and FL teacher teach separate lessons. Subject teacher teaches in L1; FL teacher teaches in FL but orientates the lesson towards the language and content of the subject</td>
<td>in this form of collaborative CLIL, the subject teacher teaches in L1, because s/he has not adequate L2 competence, and the language teacher teaches subject contents in L2, according to the subject syllabus followed by the subject teacher</td>
</tr>
<tr>
<td>subject teacher and FL teacher teach together in the same lesson. Subject teacher teaches in</td>
<td>language and subject teachers teach cooperatively in the same lesson, with the</td>
</tr>
</tbody>
</table>
L1, FL teacher in FL | subject teachers teaching part of the lesson in L1 and the language teacher going over the material in L2
---|---
subject teacher and FL teacher teach together in the same lesson. Subject teacher and FL teacher teach in FL | language and subject teachers teach cooperatively in the same lesson, with both teachers teaching in L2, the language teacher helping learners with the language of the subject
subject teacher teaches in L1 with written materials in the FL | the subject teacher and learners talk in L1, with written materials in the FL
subject teacher speaks in L1, but can read, write and understand student talk in FL. Students listen to teacher in L1, but can read, write and talk in FL | the subject teacher teaches in L1, but the learners talk, read and write in L2. This occurs when the teacher is not confident in oral English, but understands it, while learners are sufficiently fluent
FL teacher teaches subject content in FL lesson | this is conventional content-based language teaching, conducted by the language teacher without reference to a subject teacher
subject teacher teaches alone in the FL | the subject teacher teaches in FL. This is by far the most common form of CLIL in schools in which levels of a learner and FL teacher are sufficiently high to learn and teach the subject effectively

Table 2: Structures of collaboration between subject and language teacher

**CLIL material for teachers**
Unfortunately, there is no single or general template for preparing and planning CLIL lessons but it should include 4 Cs framework, as defined by Coyle (2007). The integrative nature of CLIL provides an opportunity for taking not only a dual-focused but also a multiple-focused approach and these interrelationships of content, communication; culture and cognition are summarized in the 4Cs framework for CLIL (see the figure below).

![4 Cs Framework](image)

Coyle’s 4 Cs framework has become one of the central models of the CLIL approach. It shows the relationship between content (subject matter), communication (language), cognition
(learning and thinking), and culture (developing intercultural understanding). What each part of this framework includes is available in the lesson plan below. The global goal of the lesson plan is to develop spontaneous talk within the topic *What are ecosystems?* for 4th grade. The timing is for 2 lessons.

### Model lesson No 1: What are ecosystems?

| **Aims** | - to present the content of the unit,  
- to introduce the concepts of *Ecosystem* and its main features,  
- to make learners aware of and build on prior knowledge of ecosystems and living things,  
- to help learners understand that learning can be achieved in a second language,  
- to help learners understand that keeping a record of new words is important (their very own ‘top word chart’). |
| **Criteria for assessment** | - teacher, peer- and self-assessment processes will be used to assess how well learners:  
- understand ecosystems,  
- distinguish between different types of ecosystems,  
- recognise and classify living things,  
- identify how animals adapt,  
- construct and use a *KWL* chart (what I *know*, what I *want to know*, what I *learned*),  
- contribute to and use the classroom vocabulary chart. |
| **Teaching objectives (What I plan to teach)** | **Content**  
- introduction of the topic,  
- what ecosystems are,  
- features of ecosystems,  
- animal adaptation.  
**Cognition**  
- provide learners with opportunities to understand the key concepts and apply them in different contexts,  
- enable learners to identify living things in specific ecosystems,  
- encourage knowledge transfer about living things and predictions using visual images,  
- vocabulary building, learning and using,  
- arouse learner curiosity – creative use of language and learner questions. |
| **Culture** | - identify living and non-living things from the ecosystems of their own country and other countries,  
- become aware of the importance of respecting the environment (especially the fact of wasting too much water),  
- understand that they can learn, no matter which language they are using. |
| **Communication** | **Language of learning**  
- Key vocabulary: *plants, ecosystems, living things, non-living things, pond, savannah, grass, bushes, dry places, wet places, animal adaptation…*  
**Language for learning**  
- Ask each other questions: *What do you know about…? Can you tell me something about …?*  
- Classifying: *the different elements/animals in an ecosystem are…*  
- Comparing and contrasting: *The animals living in a savannah are bigger than the ones living in a pond.*  
- Other: *How do you spell …? What does … mean?* |
**Language through learning**
- Distinguish language needed to carry out activities,
- Retain language revise by both the teacher and learners,
- Make use of peer explanations,
- Record, predict and learn new words which arise from activities.

**Learning outcomes (What learners will be able to do by the end of the lessons)**
- to demonstrate understanding of the concept of ecosystems and its related features,
- to distinguish between living things and non-living things,
- to demonstrate that ecosystems include the places and the living things that inhabit them,
- to describe how and why animals adapt,
- to classify information,
- successfully engage in visual matching between concepts and images,
- to interpret visual information,
- to use language creatively,
- to ask and respond to *wh*- questions about their work,
- to use a class vocabulary record of new words.

Slovak CLIL teachers also have a quite good support with methodological materials. Professor Silvia Pokrivčáková from Faculty of Education, Constantine the Philosopher University in Nitra, in cooperation with teachers in primary school Oravská cesta in Žilina, published an on-line book for teachers in primary schools in 2011, within subjects Art, Mathematics, Informatics and Science (on-line books are available on http://www.klis.pf.ukf.sk/sk/clil). Books offer selected topics from national curriculum in particular subjects and adapted to pupils’ foreign language knowledge.

Three years later, the National Institute for Education in Bratislava, published the special dictionary of Slovak, English and German words used within CLIL lessons in Mathematics and Science lessons (Menzlová Beáta - Slovensko-anglicko-nemecký glosár odborných termínov obsahovo a jazykovo integrované vyučovanie v primárnom vzdelávaní CLIL ISCED).

At present, teachers willing to apply CLIL approach have several possibilities to participate on some course or study programme focused on implementation of CLIL to schools, offered by universities, National Institute for Education, or by pedagogical and methodological centres.

**Professional teacher competences in CLIL**

A CLIL teacher can face several problems before and while implementing CLIL into education/classes. Pavón and Rubio (2010) acknowledge a set of CLIL application problems that classify into some categories: a) structural – related to organization and curricular sequencing; b) linguistic – related to basic competence of teachers and students; c) attitudinal – attitudes of the staff responsible for teaching. Some teacher competences are needed more in pre-phase of CLIL implementation and some are deployed more during the phase of implementation. Hurajová (2013) suggests two main sets of professional teacher competences in CLIL:
1. pre-CLIL set
2. CLIL implementation set

**Pre-CLIL set**
- *Theoretical knowledge* – essential insight into theory about CLIL approach, its basic principles, CLIL principle application into practice, didactics of foreign language teaching
- *Communication competence* – awareness of BICS and CALP vocabulary at communicative level in a target language
• **Presentation competence** – CLIL teachers should present CLIL implementation process for all stakeholders (students, parents, school management) to avoid their frustration in implementation phase

• **Curricular competence** – awareness of designing CLIL classes / lectures /activities, which school subject to choose, which content of the subject to design into CLIL

**CLIL implementation set**

• **Planning competence** – awareness of planning particular activities, vocabulary, tasks, assessment system, CLIL materials and time management for CLIL classes

• **Communication competence** – communicative level of target language to be confident enough for CLIL classes in target language

• **Distinguishing competence** – awareness of very balanced CLIL classes as regards BICS and CALP vocabulary not to overburden students and allow them to have time to learn and understand the content in target language

• **Organizational competence** – awareness of choosing proper CLIL forms according to students’ and teachers’ level of target language, according to level of teachers’ confidence to speak and lead CLIL classes in target language; teachers can choose to lead only CLIL activities that take only a few minutes on daily, weekly or monthly basis or they can decide to lead CLIL classes in the chosen school subjects

• **Cross-curricular competence** – awareness of involving the previous facts, knowledge students have learnt in other school subjects that is connected to the presented content to help them understand it better in target language

• **Language-Scaffolding competence** – awareness of designing CLIL forms with active learning through doing, not to transfer knowledge passively, to simplify content in target language or to adopt target language to students’ level of target language to help them track of new content knowledge in target language better and easier

• **Assessment competence** – awareness of providing efficient feedback on students’ performance in CLIL classes, to set a fair assessment system to evaluate progress both in content and in target language

• **Reflection and Self-reflection competence** – awareness of reflecting students’ needs, students’ difficulties, CLIL materials advisability, to be able to self-reflect teacher’s actions and deliver new, better, more appropriate and efficient CLIL classes / lectures / activities.

All mentioned competences of pre-CLIL and CLIL implementation sets are displayed in figure 1a and 1b below. Most of these competences were discussed with CLIL teachers in Primary level of education in Slovakia which of them they perceived to be enhanced and fostered.

Hurajová (2013) declares that most of the CLIL teachers participated in the questionnaire were not trained before CLIL application into education. She adds that despite the fact, that the teacher from the case study conducted within the doctoral thesis was trained she missed knowledge basis for practical CLIL implementation into CLIL classes. Gondová (2012) believes that CLIL teachers might benefit from having more information about and practical experience of CLIL and learner-oriented methods which was indicated in the teachers’ answers in her study. Hurajová (2013) thinks that CLIL teachers might feel low confidence at target language especially if they are non-language subject teachers. Pavón and Rubio (2010) state that lack of adequate knowledge of target language creates unease among teachers. They add that this unease among teachers in Andalusia in several cases has led to the suggestion that it would be better to train foreign language teachers as experts in content. They do not agree with such proposal as they think that this idea is a mistaken view on CLIL approach. We can add that optimal situation for potentially efficient CLIL implementation would be if there were non-language subject teachers with adequate level of target language trained in didactics of foreign language teaching. Regarding Presentation competence for CLIL teachers, the teachers participated in the questionnaire in Hurajová (2013) study marked this competence to be
enhanced. As they did not initiate CLIL implementation at schools, they were forced to bring it into practice because of School Management. They did not present what CLIL learning environment mean for all stakeholders. We think that Presentation competence can help CLIL teachers to get parents’, students’, colleagues’ and School Management support which is very important to set an effective CLIL learning-teaching environment. Mayer (2010) thinks that CLIL teachers need to embrace a new paradigm of teaching and learning and they need tools and templates that help them plan their lessons and also create or adapt their materials. Gondová (2012) finds that the teachers in her study feel a strong need for CLIL materials that would reflect the specific requirements of Slovak Primary and Secondary schools. She adds that the teachers do not feel confident to write any language materials and would welcome any materials that would make planning lesson easier.

Figure 1a: pre-CLIL phase set of professional competences

Figure 1b: CLIL implementation phase set of professional competences
Slovak teachers who would like to start CLIL application into education or they are in the process, they can be inspired by CLIL materials available in these links, they are not instant CLIL lessons:

- [http://www.isabelperez.com/clil/clicl_m_6.htm](http://www.isabelperez.com/clil/clicl_m_6.htm)
- [http://e-clil.uws.ac.uk/?option=com_content&view=article&id=47&Itemid=62](http://e-clil.uws.ac.uk/?option=com_content&view=article&id=47&Itemid=62)
- [http://www.teachingenglish.org.uk/teaching-teens/resources/clil](http://www.teachingenglish.org.uk/teaching-teens/resources/clil)
- [http://www.gempublish.com/?page_id=256](http://www.gempublish.com/?page_id=256)
- [https://grahamworkmanprimary.wikispaces.com/Primary+CLIL+websites](https://grahamworkmanprimary.wikispaces.com/Primary+CLIL+websites)

Both authors of this chapter are involved in ERASMUS+ project (2015-SK01-KA201-008937) called Transnational exchange of good CLIL practice among European Educational Institutions with major aim to design a web platform with examples of good CLIL practice of CLIL teachers from the participated countries (Spain, Sweden, Latvia and Lithuania). Hurajová (2013) observes that the teacher from case study in her doctoral thesis made mistakes when she was speaking target language. The mistakes were morphological, syntactical and also pronunciation was weak. However, the students understood the instructions and the students who spoke in target language had better pronunciation than the teacher. To avoid time-stressing situation while CLIL implementation, CLIL teachers should recognize the amount of BICS and CALP vocabulary involved into one CLIL activity / lecture / class to allow students to have enough time for consolidating vocabulary in target language. Also the CLIL teachers stated that they need more time for those subjects that are taught in CLIL environment to cover the subject's curriculum. Some CLIL teachers mentioned that students are overloaded with target language and they can lose motivation to learn it. If something like this happens especially at Primary level of education, it is desired to slow down and reduce either frequency or CLIL classes or amount of the presented content in target language or both of them. In such cases, CLIL teachers also provide Language or Content Scaffolding. The term "scaffolding" was first mentioned by Jerome Bruner to talk about the way young learners are assisted in learning gradually before their caregivers withdraw their support (Nashaat Sobhy, Bersosa and Crean, 2013, p. 257). Hammond and Gibbons (2001) note that in scaffolding, the provider of the scaffolds plays the role of the expert; the xpert closes the zone of proximal development as the expertise passes on from teacher to student. CLIL teachers should have a good command of Scaffolding both Language and Content one. Some hints how to scaffold either content or language in CLIL environment you can find here:

- [https://www.youtube.com/watch?v=glXxcspsCk8](https://www.youtube.com/watch?v=glXxcspsCk8)
- [https://www.youtube.com/watch?v=bmWdB9KsGyI](https://www.youtube.com/watch?v=bmWdB9KsGyI)
- [https://www.youtube.com/watch?v=Se6a9Q_37t4](https://www.youtube.com/watch?v=Se6a9Q_37t4)
- [https://www.youtube.com/watch?v=G6TBZD11130](https://www.youtube.com/watch?v=G6TBZD11130)

We think that EFL /LT are used to Language scaffolding. They use a lot of scaffolding techniques to support their learners to understand the meaning of presented vocabulary or dialogues. That is the competence non-language subject teachers might miss as they might not as aware of didactics of foreign language teaching than language teachers. If we consider CLIL as a dual educational approach with no preference for content or language, the mission of dualism can be fulfilled by active cooperation between EFL / FL teachers and non-language subject teachers. The situation in CLIL teaching can be shifted to a higher level in case there are special didactic courses provided for non-language subject pre-teachers while they are studying at universities. Non-language subjects pre-teachers could be trained in target language from
language skills and didactic aspects in order to deliver modern CLIL teachers for all level of education. Currently, we are wholly dependent on cooperation among teachers and professional effort to design CLIL courses that could be institutionalised and accepted by national, local and professional authorities.

**ESP /EFL teachers in CLIL environment at tertiary**

Situation with CLIL learning-teaching environment at tertiary is described in the Chapter 13 Tertiary CLIL. One of CLIL forms in higher education are ESP courses that meet study programmes requirements regarding specific vocabulary and in some cases specific skills in target language. Enormous effort to internationalise higher education presses University, Faculty authorities to integrate subjects and the whole study programmes taught in a foreign language mostly in English. Savas (2009) describes characteristic of a successful ESP teacher who has a willingness and ability to learn, has some knowledge of the academic world, is able to work well in a team, can listen to and motivate students, has highly developed critical thinking and thoughtful and intelligent way of looking at the world. Language teachers are trained to provide language courses more from linguistic perspective rather than content aspect. Savas (2009) adds that ESP teachers are generally much less informed about the content of what they are expected to teach than even their students, who have been studying their subjects all through their school years. It seems that if they are forced to teach what they are unfamiliar with. Savas (2009) goes further and states that as ESP teachers do not know the content knowledge of the field their students are studying they are not competent in the language in which this content has been encoded, either. In short, he thinks, that ESP teachers are also novice learners of academic English. Chen(2000) holds that the language teachers should not be expected to posses sophisticated content knowledge, but basic concepts are needed to design an ESP syllabus that backs up the content course. Venkatraman & Prema (2000) present their findings from a questionnaire in which they asked respondents – students who is responsible to teach them the language of Science and Technology in English. 10,2% of students declared that it is duty of subject teachers; 15,6% of students thought that English teachers are responsible for that and most of the students 74,2% stated that it is responsibility of both subject and English teachers. Cummin & Swain (1996) present perhaps the greates innovation pertains to the teachers’ new understanding and application of the difference in practice between BICS and CALP. Cummins’ research has had a profound effect on teacher-training policy and is producing a new breed of teacher aware of the great need to teach thinking skills alongside language and content knowledge (Hillyard ...). The two models represented in figure 2 and Figure 3 show the essential skills a teacher must develop in order to design suitable materials in their own context.

Hillyard (2011) claims that language teachers must be proficient, preferably at C2 level of CEFR or holding a Certificate of Proficiency in English (CPE) from the University of Cambridge. She adds, that CLIL teachers need to be effective in the language of teaching, explaining, giving instructions, eliciting techniques, the language of classroom management, and the language of learning activities. They must be comfortable in using English at all times in the classroom and never resorting to the mother tongue except in special circumstances. She thinks, that CLIL teachers should be trained in lesson planning, lesson preparation, translating plans into actions, ensuring outcomes, understanding of second language attainment levels, promoting cultural awareness and interculturality, applying knowledge about second language acquisition, having knowledge about cognitive and metacognitive processes and strategies in the CLIL environment.

More about cognitive and metacognitive strategies in learning and language learning you find [here](#) and [here](#).
Conclusion
According to Crandall (1998), in many countries students are increasingly expected to participate in English-medium classrooms for at least some of their academic and professional careers. Parents would like their children to be educated in English at Primary and Secondary level of education to prepare them for studying at more prestigious universities, colleges in order to get employed. This outer pressure is manifested in increasing number of schools around all levels of education that involve English study programmes, curriculum into education. New trends in learning call for shifts in pre-service teacher education. To ensure quality of CLIL environment at Primary, Secondary and Tertiary level of education, new modern CLIL teachers are required. We recommend establishing new courses in higher education for content and for language pre-service teachers to allow them to become CLIL teachers. They could take such course alongside with their compulsory study programmes to enhance their qualification after graduating. For language teachers – essential content subject courses to get basic insight into the subject field and for non-language subject teachers – didacticy and language skill oriented language courses.
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**References**


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9 Maximising the value of CLIL through teacher education and development

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Objectives
By means of a review of the international research literature, this chapter outlines the various benefits of Content and Language Integrated Learning (CLIL). After discussing Malta as a case study of a country where CLIL is gradually being implemented through teacher training, this chapter explores the necessary teacher education and development provisions that need to be in place in order for pre- and in-service teachers to be fully equipped with the knowledge, skills and beliefs necessary to effectively harness CLIL’s potential.

The value of CLIL
CLIL is a term coined in 1994 by David Marsh, who helps to define it as “a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language” (Coyle, Hood & Marsh, 2010, p. 1). A teacher may choose to place emphasis on either one but language and content remain interconnected.

Many countries in Europe and beyond are seeking to enhance young people’s proficiency in a second and foreign language by means of CLIL. Dalton-Puffer and Nikula (2014) define CLIL as “an educational approach where curricular content of subjects such as biology or history is taught to students through a language that is neither their first language nor the dominant medium of instruction in the respective education system” (p. 117). Since its emergence in the 1990s, CLIL has revolutionized language teaching and learning in Europe and is now a staple part of primary, secondary, and tertiary education in a range of countries. CLIL is influenced by an educational philosophy that places emphasis on “the process rather than on the product, the learning by doing approach and the quest for relevant and meaningful activities with an apparent non-linguistic goal and a problem-solving character” (Acosta Corte, 2012, p. 622).

However, Cenoz (2013) points out that most CLIL research devotes “attention to language rather than content [and] reflects the general trend in Europe where CLIL has attracted mainly scholars in Applied Linguistics, English language teacher educators and practitioners. This does not have to be seen as a problem because research is needed from different perspectives and the language learning perspective is very relevant in an increasing multilingual and multicultural world” (p. 389).

The link between CLIL and multilingualism is a significant one given that as an approach it does not entail the imposition of just one language to the exclusion of all others. Whilst learning content subjects, students are encouraged to improve their proficiency in the target language/s. Internationally, this is most usually English, however, it does not mean that in CLIL contexts where English is being used the learning of other languages is pushed out of the curriculum. In fact, Ruiz de Zarobe (2013) argues that “despite the hegemony of English as a global language, CLIL has been conceived to enhance language competence and communication in an evergrowing multilingual society” (p. 233). Moore and Dooly (2010) conclude their study on interaction in CLIL classrooms by saying that “although the shift in European higher education toward teaching nonlanguage subjects through the medium of a foreign language would appear to favor monolingual practices and be detrimental to local languages, our data reveal that participants’ plurilingual repertoires can flourish in classroom interaction, creating a favorable framework for performing a range of activities that would seem to enrich the collective learning process. Such activities include metalinguistic reflection, problematizing and negotiating nonlinguistic knowledge, and constructing appropriate discourse from the point of view of the
participants” (p. 77).

The fact that the target language in the majority of CLIL classrooms around the world is English is probably a result of language-in-education policies that seek to endow young people with competence in the global language. Ruiz de Zarobe (2013) explains that “despite implementation differences in the international scenario when responding to CLIL, a common goal will also be found to apply throughout the different contexts: most countries try to find a coherent answer to the need for language competence and communication in this globalized world, with the knowledge of languages as a key factor for job opportunities and promotion” (p. 233). Nonetheless, participating effectively in a globalized world requires more than just competence in English. It is for this reason that language-in-education policies should aim to expand young people’s linguistic repertoire as fully as possible by consolidating the learning of other languages in addition to English.

CLIL has been shown to lead to enhanced language proficiency. In her review of CLIL research in Europe, Pérez-Canado (2012) found that “significantly higher [target language] levels have been reported for CLIL tracks than for conventional language classes” (p. 329). When Moore (2011) compared CLIL and mainstream L1 learners in terms of collaboration as demonstrated in turn-taking patterns, she “found that not only were the CLIL learners collaborating more, they were also collaborating more effectively” (p. 545). Some of the reasons for this could be that “CLIL learners are actively employing enhanced interactive collaboration as a means to improve L2 talk” and that they “are becoming better communicators all-round – even in their L1” (Moore, 2011, p. 545). Méndez García and Pavón Vázquez (2012) describe how “the CLIL programme in Andalusia is positively and profoundly affecting the linguistic and cultural profile of the teachers and learners involved” (p. 589). In particular, “students tend to work harder and better with the foreign language; they are reported to exhibit higher language awareness and to have a less inhibited response to its use” (Méndez García & Pavón Vázquez, 2012, p. 589). Moreover, CLIL “presents an enormous potential when it comes to understanding concepts and notions which are not self-evident in the vocabulary and linguistic patterns of a given language, but which are better understood by means of another linguistic code” (Méndez García & Pavón Vázquez, 2012, p. 589). Pérez-Canado (2012) reports that “students with average [foreign language] talents and interest have also been shown to benefit from CLIL instruction, so that this sort of program seems to make language learning more accessible to all types of achievers” (p. 330). It is clear that as an approach CLIL can lead to substantial improvement in language proficiency and this explains why it is implemented widely in various educational systems throughout the world.

Besides showing that CLIL is responsible for developing learners’ language competence, various studies have found evidence of additional benefits. These include increased motivation in CLIL classrooms (Mérisuo-Storm, 2007; Lasagabaster & Sierra, 2009; Lorenzo, Casal, & Moore, 2010). Hunt (2011), in fact, points out that “Learners...responded well to the CLIL lessons; the majority enjoyed the lessons, the activities and the resources; they were clear about the learning objectives and felt that they made progress; and they liked learning through another language” (p. 377). Despite acknowledging the need to study a series of individual and contextual variables, Doiz, Lasagabaster and Sierra (2014a) indicate that CLIL students are more motivated than EFL students. In addition to motivation, “CLIL is liable to provide learners with the instruments to make significant gains in knowledge about otherness, to develop intercultural attitudes and skills and to achieve some level of critical cultural awareness so that their own social practices and motivations are viewed as one, and only one, possible way of interpreting and making sense of the world” (Méndez García, 2013, p. 282). Such non-linguistic outcomes are fundamental as they facilitate the language learning process and enable learners to develop a positive attitude towards the learning of not only the target language but even other languages they might come across within and outside of school.

The Maltese context

In Malta, the National Minimum Curriculum (Ministry of Education, 1999) recommended that at primary level English should be used to teach mathematics, science and technology while at
secondary level English should be used to teach these and other technical subjects. However, when the National Minimum Curriculum was superseded by the National Curriculum Framework (Ministry of Education and Employment, 2012), the latter omitted these recommendations and failed to include a language-in-education policy. The latter is a policy that expresses the beliefs and attitudes of a society or institution in relation to the value of languages in education, doing so via an official document or in more tacit ways (Liddicoat, 2013). Farrugia (2013) explains that in Malta there exists a "debate on the appropriate use of language for mathematics and other academic subjects for which Maltese technical language has not been established officially, due to the traditional dependence on English for these subjects" (p. 573). This ongoing debate pits those in favour of using English for the teaching of technical and other subjects against those who champion the use of Maltese for the teaching of such subjects. The former argue that using English is beneficial because it facilitates the learning of the second language, discourages code-switching, supports progression to academic levels where English is the medium of instruction, and embraces the participation of growing numbers of non-Maltese speakers in the classroom (Farrugia, 2013). Those against the idea of using English for the teaching of other subjects claim that the L2 discourages learner participation, causes difficulty in understanding technical subjects, creates discomfort for teachers who lack confidence in speaking English, and undermines the status of Maltese as a living language (Farrugia, 2013).

A language-in-education policy based on empirical evidence gathered from the Maltese context and taking into account relevant international research findings would help to allay some of the above concerns and guide teachers in their efforts to enhance learners' English language proficiency. Evnitskaya and Morton (2011) affirm that "Greater understanding of interaction in CLIL classrooms can surely contribute to the much needed effort to improve teacher preparation for CLIL" (p. 124). Similarly, more research is required in relation to how English is being used in primary and secondary classrooms in Malta as this will feed into teacher education and development. Currently, many content teachers in Malta are using the L2 to teach a variety of subjects without fully exploiting this opportunity for language teaching purposes, as would happen in CLIL. Research would also help to determine how to implement CLIL more effectively. Talking about CLIL in Australia, Turner (2013) points out that prior to a programme's implementation it is "important to gain community support for language learning. This includes both parental support and the support of relevant education authorities, administrators and teachers" (p. 403). For this reason, CLIL should be incorporated into a language-in-education policy that while informed by solid research is drawn up in consultation with the main stakeholders. Once it is ascertained that CLIL is the right approach to adopt in trying to develop learners' competence in English then it is essential that provisions be made for the teaching of Maltese and other languages so that they are allowed to thrive and enrich learners' linguistic repertoire. Moreover, the implementation of new educational policies and approaches must be accompanied by adequate training for the instruments of change within the classroom – teachers.

In recognition of the value of CLIL for teachers in Malta, in 2014 a training programme was developed so that all primary school teachers can gradually familiarize themselves with this approach. This training is meant to enable them to teach different subjects in English while exploiting the teaching of content to develop their students' language knowledge and skills. In order for CLIL to become fully entrenched in the Maltese educational system, this training programme will need to be extended to secondary school teachers as well as teacher-trainees.

**Teacher education and development**

Teacher education and development consists of training programmes aimed at pre- and in-service teachers that focus on enhancing subject knowledge and pedagogical skills. Moreover, these programmes seek to develop teachers' beliefs and attitudes as well as their language awareness and proficiency. If an educational system or institution adopts CLIL as an approach, teachers need to be provided with training on how to use it effectively in the classroom. Training
Methodology

CLIL is not just about using the target language to teach non-language subjects. Showing teachers how to exploit content lessons in order to teach language is crucial given that CLIL can help develop learners’ proficiency and metalinguistic awareness. Lasagabaster and Sierra (2010) maintain that “the future needs of CLIL programmes demand a more planned course of action concerning both teacher formation and in-service teacher support” (p. 371). They consider it “necessary to provide future teachers with training not only in the specific subjects but also in the methodology that will allow them to teach these subjects effectively in a foreign language” (Lasagabaster & Sierra, 2010, p. 371). Moate (2011) affirms that CLIL can present “a valuable opportunity for teachers to reconsider their established pedagogical practice. For this reconsideration to lead to enhanced practice teachers need a pedagogical blueprint to guide decision-making and a community ready to offer this support” (p. 344). Reporting on the implementation of CLIL at a Spanish university, Aguilar and Rodríguez (2012) found that teachers appreciated the opportunity to practise and improve their English fluency through CLIL but were not interested in receiving CLIL training. For this reason, Aguilar and Rodríguez (2012) recommend that CLIL training should be tailor-made according to teachers’ specific needs. This would perhaps help to convince them that such training “can enrich the learning and the teaching experience, and that they can incorporate strategies that are not excessively demanding (in terms of time or effort)” (Aguilar & Rodríguez, 2012, p. 194). Koopman, Skeet and de Graaff (2014) found that CLIL “teachers’ rationales for their language related classroom actions suggest a lack of a theoretical basis” (p. 134) and for this reason they recommend that prospective teachers ought to be provided with training on L2 pedagogy. As part of this training it would be extremely helpful if teachers were provided with a good grounding in the focus-on-form approach. This is the act of making learners aware of the form of a language feature as part of communicative language practice. Long and Robinson (1998) point out that “during an otherwise meaning-focused classroom lesson, focus on form often consists of an occasional shift of attention to linguistic code features...triggered by perceived problems with comprehension or production” (p. 23). Focus on form is distinguished from focus on forms, which is the attempt to teach learners discrete grammatical points. Training CLIL teachers on form-focused instruction seems to be necessary given that a review of CLIL studies shows that learners’ “pronunciation, syntax, writing (accuracy and discourse skills), informal and nontechnical language, and pragmatics remain largely unaffected, perhaps owing to an insufficient focus on form in CLIL classrooms” (Pérez-Cañado, 2012, p. 330). Such pedagogical training is fundamental given that CLIL requires practitioners to act as language teachers when delivering content lessons.

Assessment literacy

Developing CLIL teachers’ assessment literacy seems to be necessary for them to operate more effectively when designing and using various kinds of assessment. Assessment literacy is defined as “the ability to design, select, interpret, and use assessment results appropriately for educational decisions” (Quilter & Gallini, 2000, p. 116). According to Coombe et al. (2009), “without a higher level of teacher assessment literacy, we will be unable to help students attain higher levels of academic achievement” (p. 15). Providing teachers with adequate training in assessment is crucial, especially since such training has been associated with an improvement in student outcomes (Timperley, Wilson, Barrar, & Fung, 2007). De Luca, Chavez and Cao (2013) argue that “pre-service teacher education has a critical role to play in promoting assessment literacy in beginning teachers and in providing a foundation for teachers’ continued learning about assessment throughout their careers” (p. 123). In-service training should build upon teachers’ knowledge and skills in relation to assessment and should consist of hands-on involvement rather than just being made up of reading material and brief training sessions (Black, Harrison, Hodgen, Marshall, & Serret, 2011, p. 463). Besides equipping CLIL teachers
with the necessary knowledge and skills to design and use assessment effectively, training should also seek to develop their beliefs and attitudes in relation to assessment. Enabling teachers to reflect on their beliefs is crucial if they “are to differentiate their initial ideas about assessment from the ideas they are being asked to accept, to challenge them and to integrate aspects of these new ideas into a new set of beliefs” (Vandeyar & Killen, 2006, p. 44). Hence, in order to adequately develop teachers’ assessment literacy it is important to target their knowledge, skills and beliefs.

**English language proficiency**

English language proficiency is an individual’s ability to use English in a competent manner. In a seminal article on the nature of language proficiency, Harley, Cummins, Swain and Allen (1990) suggest that the “emphasis on communication in language teaching is expressed in attempts to develop students’ sociolinguistic and discourse competencies in addition to their grammatical competence” (p. 8). Proficiency incorporates usage of English for a variety of purposes in different registers and domains. L2 training is even more necessary in the case of CLIL teachers, given that most often CLIL lessons are the preserve of non-native English speaking teachers. Lasagabaster and Sierra (2010) point out that “A high percentage of the teaching staff in immersion programmes is made up of native speakers who have an excellent command of the language of instruction, whereas this is not usually the case in CLIL programmes” (p. 371). However, when Llinares and Lyster (2014) compared immersion teachers with CLIL teachers they found that the latter “seemed to be more conscious of the language aspect, using didactic recasts and avoiding conversational recasts” (p. 191). One of the explanations they give for this is that “the teachers were non-native speakers of English and, as learners of English themselves, were perhaps sensitive to language issues” (Llinares & Lyster, 2014, p. 191). This confirms an earlier study by Diniz de Figueiredo (2011), who found that “teachers’ bi/multilingual skills were used to help students build metalinguistic strategies” and they acted as role models of successful language learners thus challenging “the ideological assumption that native speakers are the only or the best models for language learners” (p. 428). Language training is paramount given that it helps teachers who happen to be non-native speakers of English to operate more effectively in the classroom by exploiting the knowledge, skills and attitudes they developed as L2 learners.

**Teacher language awareness**

CLIL teachers need to be provided with training aimed at developing their teacher language awareness (TLA), which can be defined as a teacher’s understanding of the mechanisms of language. According to Andrews (2007), this consists of “an appropriate base of knowledge and understanding about language (in particular, the target language) and how it works” by means of which “the teacher is able to provide the precise amount of knowledge in a form that creates no barriers to comprehension” (p. 7). TLA is considered a vital part of practitioners’ professional competence. Their knowledge about language enhances the language teaching and learning experience by enabling them to adequately address students’ needs. It also has the potential to improve teachers’ language proficiency. TLA training plays a significant role in equipping teachers with the necessary knowledge base and confidence for them to engage in effective language teaching practices.

**Conclusion**

The main value of CLIL is its potential to enhance students’ English language proficiency in a highly engaging manner. CLIL enables them to learn different subjects in English while exploiting their engagement with content to develop their language knowledge and skills. CLIL provides students with more hours of exposure to and practice in English on a daily basis. However, to maximize the value of CLIL it is paramount that teachers are provided with the necessary training at pre- and in-service levels. This training should not just be restricted to building teachers’ knowledge of methodology but should aim to develop their assessment
literacy, English language proficiency, and language awareness. It is only by targeting these different areas of competence that CLIL teachers can be equipped to operate effectively in the classroom.

References


10 Fundamental ELT techniques and strategies for CLIL practitioners

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Contextual background: Emergence of CLIL

Thanks to significant advances in science and technology since the 20th century, our world has become increasingly globalised and inter-connected, bringing every one of us unprecedented opportunities – be it personal, educational, cultural or business – to, for instance, live in and travel to different countries, exchange views with people belonging to different communities, or simply be in touch with and know more about different parts of the world. Merely having the knowledge of our own first language, therefore, may not suffice, for this may not be able to keep us up-to-date and/or enable us to survive in a place with or interact with others who speak a language completely distinct from ours. While it is virtually impossible for us to learn all the languages existing in the world, learning one or two additional languages may be a more viable, manageable and cost-effective option. Yet, in most circumstances, this does not mean that we pick a language randomly. To increase the chance of engaging in successful communication with people from diverse language background, it is wise to select those which are widely-spoken by people across geographical locations, like English and Spanish. In other words, to venture into a foreign territory and participate in global communication, there emerges a need for a common language on which all interlocutors can mutually rely (see Seidlhofer, 2005 for a concise introduction of the concept “lingua franca”).

This need calls for immediate attention, leading to direct and important implications for our education system, that is, equipping our students with such an additional language so as to allow them to engage in successful communication in the global arena. Very often, this additional language is English since it is a dominant international language in such areas as business, law and academic studies (Graddol, 2006). Therefore, for the sake of convenience, unless otherwise specified, the additional, target, second or foreign language referred to in this article is English. It is imperative that the task of developing students’ competence of a second language be dealt with in a timely fashion without any delay. As a result of this, and coupled with other socioeconomic and geopolitical factors, bilingual education – the use of at least two languages (usually the mother tongue and a target language) as the medium of instruction for the teaching of academic content subjects “in part or all of the school curriculum” (Cohen, 1975, p. 18) – has quickly become one of the most, if not the most, welcomed, favoured and well-supported systems and forms of education worldwide (García, 2009) among many different stakeholders like the government, teachers, parents and students due to its organic nature.

In the last few decades, the widespread adoption of bilingual education around the globe has given rise to a range of models and practices such as immersion, content-based instruction (CBI), language across the curriculum (LAC) and content and language integrated learning (CLIL) (e.g., Lightbown, 2014; Mehisto, Marsh, Frigols, 2008). Each and every one of these diverse forms of realisations has its own rationales behind, and carries unique characteristics and considerations like curriculum, learning and teaching needs, levels of students, resources available and so on. While attempts have been made to delineate these approaches and argue that there are different theoretical and pedagogical frameworks underpinning them (e.g., see Lasagabaster Sierra, 2010; Pérez-Cañado, 2012), many scholars consider them synonymous (e.g., Coyle, Hood, Marsh, 2010; Mehisto et al, 2008), with CLIL being an “umbrella” term or “overarching concept” (Dalton-Puffer, Llañares, Lorenzo, & Nikula, 2014, p. 217). Although those approaches do originate from and represent different research orientations and traditions, with a closer scrutiny, it is not difficult to notice that whatever they are called, the core notion remains essentially the same: it is dual-focused – learning discipline-specific knowledge
alongside the development of the target language without sacrificing any content and/or language learning objectives.

In other words, CLIL is all-encompassing: a pedagogical approach can be regarded as CLIL so long as (i) its underlying belief recognises that “second language content teachers are language teachers” (Met, 1998, p. 56), and (ii) its practice of teaching academic content subjects carries the instructional goal of simultaneous enhancement of content and language, with an explicit attention to the academic language which helps convey academic concepts via “language-supportive’ methodologies” (Marsh & Frigols, 2007, p. 34). One should not mistake CLIL for “English as the medium of instruction” (EMI), another model and practice of bilingual education gaining popularity. EMI is defined as “[t]he use of the English language to teach academic subjects in countries or jurisdictions where the first language ... of the majority of the population is not English” (Dearden, 2014, p. 2). Unlike CLIL, EMI does not necessarily involve an overt focus on language (i.e., language scaffolding) in content teaching. In the more extreme scenarios, it might well be like a translated version of the teaching one would deliver in the mother tongue. Figure 1 below illustrates visually the relationships between EMI and CLIL in the simplest manner. Please note, however, that it is far from complete.

![Figure 1: Relationship between CLIL and EMI](image)

When describing a content teaching methodology with an explicit attention to language, I personally prefer the label “CLIL” largely because the name itself is straightforward and precise, clearly spelling out the essence of the educational approach: content and language are integrated together as one entity and are taken care of in the learning/teaching process explicitly. The term is nothing fancy but down-to-earth; the meaning is so transparent that even someone not involved in the field (e.g., parents, school administrators and government officials) can still understand, albeit roughly, what the practice is about by just referring to the name.

**Focus of the chapter**

Although the fundamental concept of CLIL – teaching content subjects with and through another language – has been around for a few decades, only until recently has it regained momentum and attracted unprecedented widespread implementation in a variety of settings around the world. Quite a few studies reveal that putting CLIL into actual practice is indeed quite challenging (e.g., see Banegas, 2012; Pavón Vázquez & Rubio, 2010); in some educational contexts, one such challenge is related to the lack or unavailability of guidelines and/or teacher training regarding how to CLIL (e.g., Martyniuk, 2014; Söderlundh, 2013). It is noted that many schools, especially in the last decade, “are eager to implement CLIL but do not have appropriately trained staff” (Georgiou, 2012, p. 500). Some of the CLIL teachers I have worked
with have also expressed similar views and identified insufficient CLIL training as a major obstacle hindering their daily CLIL teaching. Being content experts, they are familiar with the subject matter and the pedagogy of teaching content; yet, they have little knowledge of second language learning and teaching, such as language acquisition theories and processes, and teaching strategies which can be deployed to effectively and systematically incorporate language in their teaching. To teach disciplinary matter in a foreign language can be a challenge for some; to teach with and through another language is likely to be a struggle and torture for many, especially those who have never received any proper CLIL training. This is an unfortunate circumstance, for CLIL teacher training is considered to be critical to the success of any CLIL programmes (e.g. Coyle, 2009; Hillyard, 2011; Mehisto, 2008); failure to provide so is doomed to “failure” and poor execution of CLIL (Georgiou, 2012, p. 500), contributing to “a ‘lost generation’ of young people’s learning” (Coyle et al., 2010, p. 161).

As CLIL teacher training is of extreme importance when implementing CLIL, the issue outlined above cannot be overlooked. It might be less of a problem in contexts where there are a strong culture of collegial support and collaboration and resources available to organise professional development courses and workshops for CLIL teachers. However, in resource-lacking educational establishments where collaboration among colleagues is not commonplace, the impact can be far-reaching. It is in this type of situation which I have worked closely with some CLIL teachers. They have neither received any formal or proper CLIL training nor been given any support from the school and/or the education department; yet, they have been asked to do CLIL in their content-area subjects (e.g., history and biology). I feel there is an urgent need for a remedy and fundamental change, putting an end to this undesirable situation as soon as possible so that the dual-focused goal of CLIL can truly be accomplished. Therefore, some fundamental English language teaching (ELT) principles and techniques have been introduced and demonstrated to them in the hope of saving them from CLILphobia: the feeling of panic, struggle, frustration, inconfidence and insecurity when doing CLIL without any/much concrete support and guidance.

The aim of this chapter is to introduce readers, especially CLIL teachers working in similar situations described above or ELT teachers who need to collaborate with CLIL teachers, to some basic yet powerful ELT principles and techniques which have been proved rewarding to the CLIL teachers I have worked with. Through my observation and sharing from the CLIL teachers, merely knowing the content-teaching methodology does not lead to success in CLIL teaching, but an additional set of toolkits: second language teaching skills. They agree that CLIL requires unique pedagogical and scaffolding methodology to address the linguistic challenges students may face and incorporate language instruction into content teaching (see also Chadwick, 2012; Llinares, Morton, & Whittaker, 2012). While it is possible for discipline-specific teachers to figure out and acquire the distinctive CLIL strategies while conducting and reflecting on their lessons, it is simply unrealistic to expect every one of them being able to do so automatically and promptly without any assistance.

It should be noted that the techniques covered in this chapter are by no means exhaustive, prescriptive and ground-breaking. Mainly, they hope to raise one’s awareness of second language acquisition and learning, stimulate his/her thinking, discussion and reflection of his/her CLIL teaching, and familiarise himself/herself with some good language learning and teaching practices. It must be stressed, however, that these techniques are not ultimate replacement for well-structured professional CLIL teacher training for the long-term and healthy implementation of CLIL programmes; instead, they are intended to “quench one’s thirst”, that is, solving such problems as a lack of helpful guidelines, resources and proper training for CLIL practitioners for the short-term, at this transitional stage of massive CLIL implementation.
CLIL in Hong Kong

Before examining and discussing the fundamental ELT techniques for CLIL teachers, it may be worthwhile to understand the sociolinguistic situation and implementation of CLIL in the region where I have experimented with the strategies presented in this chapter – Hong Kong.

In Hong Kong, the vast majority of the population (nearly 90%) is ethnic Chinese and speaks Cantonese as their first language (Census and Statistics Department, 2012). It is, therefore, hardly surprising that the mainstream media are dominated by written Chinese and spoken Cantonese despite the fact that English has been declared the official language for more than a century. When Hong Kong was a British colony, English enjoyed a prestigious status in domains like education, business, government and law (Luke & Richards, 1982); those who possessed a high command of English proficiency were highly valued and considered elites and upper-class (ibid). This situation remains largely the same even after China’s resumption of Hong Kong’s sovereignty more than a decade ago (Lin & Perez-Milans, 2012).

There are broadly two types of secondary schools in Hong Kong: EMI schools and Chinese-medium (CMI) schools. Given the higher economic value and social status attached to English, many parents try their best to send their children to the former, regardless of their language proficiency and learning ability, in the hope that they can develop a higher English proficiency, thus a better prospect and competitive edge in the workplace, than the CMI counterparts. As a result, EMI schools are more preferred and highly sought-after (Li, 2002) whereas CMI schools are considered “second-class” (Morrison & Lui, 2000, p. 447). Quite a few research studies, nevertheless, have consistently demonstrated that: (i) most students entering secondary schools have insufficient English to follow the curriculum (Butler, 2005), (ii) low-ability students are best taught in their first language (Yu & Atkinson, 1988), and (iii) “[t]o be educated in English, even for the best students, clearly involves some sacrifice in learning” (Choi, 2003, p. 679). To satisfy the parental demands for EMI schools and societal needs for proficient English speakers for business and international communication while counteracting the negative consequences brought about by English-medium education, Education Bureau (the education department in Hong Kong) has introduced the educational initiative CLIL in recent years and encouraged its adoption in secondary schools.

Realising that each school has its unique circumstance and not every school has the capability and conditions to implement EMI or CLIL, the government has granted each secondary school the autonomy and flexibility to determine its school-based medium of instruction policy and whether or not to adopt CLIL when they decide to teach their content subjects in English (see Education Bureau, 2010). Because of the highly flexible and dynamic nature of CLIL, diverse practices have emerged. For example, some schools may do CLIL in all content-area subjects while some in one or two selected subjects only (e.g., history and integrated science); some may CLIL one unit of one subject (e.g., water cycle in geography) each semester while some all subjects for a few weeks. Whatever CLIL realisation it is, the only requirement is that the students and teachers possess the capability to respectively learn and teach in, with and through a second language. Since CLIL arrangements may differ across schools or even within the same school, to be best of my knowledge, there have not been any official statistics documenting the situation and extent of CLIL implementation in Hong Kong. In spite of the active promotion of CLIL by Education Bureau since its introduction in Hong Kong, CLIL is still in its infancy. At this moment, unfortunately, CLIL does not seem to be widely well-received by teachers, especially the content teachers. Many do not see themselves having the responsibility to promote their students’ language abilities nor feel confident and certain regarding how language can be integrated into their teaching instruction (Leung, 2013)\(^1\). Also, CLIL is largely confined to secondary school settings; it has not yet gained immense popularity among primary schools or post-secondary institutions.

\(^1\) Similar concerns have also been identified in studies conducted in other countries (e.g., see Díaz & Requejo, 2008; Gierlinger, 2013; Hunt, 2011).
Similar to many parts of the world, if a person wants to be an ELT teacher in a primary or secondary school in Hong Kong, under most circumstances, he/she is required to have undergone some vigorous pre-service ELT teacher training (e.g., CELTA, CertTESOL or Postgraduate Diploma of Education) before the commencement of any teaching duties. In addition, quite unique to Hong Kong, English teachers are required to meet the Language Proficiency Requirement set forth by Education Bureau (see Education Bureau, 2015), demonstrating that their English proficiency has attained a certain level appropriate for language teaching. This benchmark criterion, however, applies only to language teachers. Non-language teachers teaching content subjects in English, on the contrary, are not required to meet a similar requirement to certify that their English is up to standard. So long as their IELTS Academic score reaches Band 6 (Competent User) or above, they are regarded as meeting the requirement for conducting English-medium teaching, possessing the ability “to communicate the subject content to students intelligibly in English” without any “adverse impact on students’ acquisition of the English language” (Education Commission, 2005, p. 108). Content teachers in Hong Kong are also required to undergo teacher training before becoming registered or licensed teachers. However, the content of the programme mainly centres around curriculum design, pedagogical content knowledge and educational psychology; when compared with the training offered to language teachers, practical teaching techniques and strategies seem to play a subsidiary role only, not to mention how to deliver content lessons in a foreign language effectively and successfully. Thus, it is not uncommon for content teachers to feel that they are not well-prepared for the everyday learning and teaching in an EMI or CLIL classroom.

**CLIL-applicable fundamental ELT techniques**

To rectify and mitigate this undesirable situation and truly realise the dual-focused goal of CLIL, CLIL teachers’ methodological repertoire needs to be expanded by the inclusion of some basic, hands-on and easy-to-apply language teaching strategies so as to provide linguistic scaffolding to their students while carrying out their daily CLIL teaching. These strategies are familiar to essentially every ELT teacher as they are those common techniques ELT practitioners frequently and regularly employ. Similarly, if ELT teachers need to establish a working relationship with CLIL teachers, the strategies introduced here may give them some direction regarding what assistance may deem valuable, after considering the needs of their colleagues and students.

One common and effective way of structuring an ELT lesson is to divide it into three stages: pre, while and post: that is, what the teacher do before, during and after introducing the core content. All these three stages should not be ignored and must be present in every successful lesson, for each stage performs its unique functions (see Harmer, 2007). The techniques presented in this chapter will also be organised and discussed a similar fashion (except the post-lesson phase) for easy reference, for a CLIL lesson can conveniently be structured in the same way too. However, from my and co-workers’ experience, properly attending to language in the first two stages seems to be sufficient enough and more effective, the last stage will therefore not be discussed in this chapter.

**A. Pre-lesson**

Very often, for reasons such as to save time and increase the lesson pace, this stage is absent from the lessons delivered by inexperienced CLIL teachers. However, the success of a CLIL lesson depends highly on this due to the fact that this pre-lesson stage serves three major purposes: first, it aims to arouse students’ interest in what they are going to learn; second, it helps prepare and orient students (psychologically) to what is coming; and third, drawing on

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2 During the training, in addition to enhancing his/her language proficiency and pedagogical content knowledge, he/she receives instruction in some relatively general yet practical educational aspects such as how to plan a lesson, ask effective questions, conduct formative assessment and cater for learner diversity. This kind of teacher education is often deemed useful and necessary to prepare pre-service teachers for the challenges ahead (Agudo, 2014; Trent, Gao, & Gu, 2014).
students’ previous experience and background knowledge, the carefully-designed activities carried out during this stage help teachers assess how much their students know and do not know about the topic. It is, thus, of vital importance to give some thoughts as to how students’ schemata can be activated and an affective learning environment fostered so that learners can feel safe when taking risks and participate as freely as they want. Two common strategies are often associated with this stage: (1) use of realia and multimedia resources (e.g., videos, images, sounds and graphs), and (2) creation of a scenario for inductive inquiry.

(1) Realia and multimedia resources
Realia are real-life objects used in classroom instruction which provide students with immediate understanding of what a particular item is. They are useful in building students’ key vocabulary of a wide range of topics such as apparatus (e.g., test tube, tripod and forceps) and different types of materials (e.g., leather, canvas and suede). Once they can see or even touch the object, they are likely to remember it more vividly when it is mentioned or discussed during the while-teaching phase.

Multimedia resources are similar to realia in that CLIL teachers can use them to pre-teach key vocabulary in an efficient manner. What is more, using the resources as a stimulus, teachers can generate some discussion with their students or ask their students to discuss in small groups some related questions. Two examples from two different subjects are provided in Table 1 below as an illustration. According to my experience, it is often best to begin with students identifying the issue featured in the multimedia resources to ensure that everyone is certain of the issue under discussion. The second question may then tap directly into the students’ life (e.g., asking for their previous and/or relevant experiences). From the third one onwards, the questions can be slightly more abstract and distant from the students’ everyday life; questions requiring higher-order thinking are encouraged too. During the discussion, useful key terminology or expressions can be introduced and pre-taught in a contextualised manner.

<table>
<thead>
<tr>
<th>Geography</th>
<th>Topic: Flooding (Video)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>What is the problem featured in the video?</td>
</tr>
<tr>
<td>2.</td>
<td>Have you ever encountered any flooding in your neighborhood? If so, share your experience with your group members.</td>
</tr>
<tr>
<td>3.</td>
<td>What are the possible causes of flooding?</td>
</tr>
<tr>
<td>4.</td>
<td>What areas on Earth are likely to suffer from flooding? Why?</td>
</tr>
<tr>
<td>5.</td>
<td>What can be done to prevent flooding from happening again?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Biology</th>
<th>Topic: Cloning (Picture)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>What is the issue featured on the magazine cover?</td>
</tr>
<tr>
<td>2.</td>
<td>Have you ever thought of cloning yourself? Would you like to do so?</td>
</tr>
<tr>
<td>3.</td>
<td>How is cloning possible? What process does it involve?</td>
</tr>
<tr>
<td>4.</td>
<td>Is cloning ethical?</td>
</tr>
<tr>
<td>5.</td>
<td>How may cloning contribute to an improvement in human life?</td>
</tr>
</tbody>
</table>

Table 1. Using videos for classroom discussion

(2) Practical scenarios for inductive inquiry
To bring varieties to classroom tasks and activities, another effective means of activating students’ schemata is the creation of a practical scenario, whether fictional or non-fictional, for inductive inquiry. This, to some extent, is similar to the strategy outlined above, but the major difference lies in the additional process of inductive reasoning. Instead of teachers explaining the new theories and concepts, students are encouraged to work in small groups to discover the knowledge on their own. The scenario will require students to draw on their background knowledge, daily experience and/or current understanding of the subject matter and share their thoughts regarding to the problem presented to them, and explain and justify their reasoning.
Table 2 below shows two sample scenarios.

<table>
<thead>
<tr>
<th>Physics</th>
<th>Topic: Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario: Two objects (one heavier and one lighter) are released from the roof of a building at the same time at the same height. Does the heavier object fall faster than the lighter object, or vice versa? Click here for an illustration.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economics</th>
<th>Topic: Price elasticity of demand</th>
</tr>
</thead>
</table>
| Scenario: You are a meat lover. You cannot live without having meat for lunch and dinner. You are aware that from next week onwards, the price of pork will be raised. What would you do if the price of pork were increased by:  
(1) 2%?  
(2) 5%?  
(3) 10%?  
(4) 30%?  
(5) 50%? |

Table 2. Practical scenarios for inductive inquiry

These tasks are student-centered and communicative. Students are engaged in authentic language use when expressing their thoughts. Their job is to make an educated guess and explain their reasoning based on what they know about the topic. When students are explaining their answers, teachers can assess how familiar they are with the concepts, and provide them with the necessary language support, for instance, how to express cause-and-effect relationship (e.g., because of air resistance). This kind of task not only hones and stretches students’ creativity and critical thinking, but also develops their ability to express a wide range of language functions (e.g., comparing, contrasting and describing hypothetical scenarios).

B. While-lesson

While-lesson stage is the core part where CLIL learning and teaching take place, and usually takes up the majority of the class time. Before proceeding to this main phase, it is important to ensure that students have sufficient “warm-up” in the pre-lesson stage (e.g., activated their schemata, learned some basic content-specific vocabulary and developed the necessary background knowledge for content comprehension). In other words, students should be ready for taking in new information regarding the subject matter. When presenting or co-constructing content knowledge together with students, CLIL teachers may make use of the teaching methodology they are familiar and comfortable with (e.g., direct teaching, demonstration, cooperative learning and guided discovery). While content knowledge is explicitly taught and dealt with, in well-delivered CLIL lessons, the academic language which is used to express the complex and abstract academic ideas and concepts should also be focused on simultaneously. This can be done using a host of strategies, such as tabulation and think-pair-share.

(1) Tabulation

To enable students to notice the language form of some frequently-occurring language functions (e.g., causal relationships), teachers can make use of tables to systematically and visually tabulate the sentence pattern and then highlight the different components present and their corresponding role in the sentence structure. These, however, require a sufficient number of sample sentences so that the pattern is salient enough for learners to make a discovery and generate a “formula”. Two examples are provided in Table 3 and Table 4 below.
Due to poor diet, an unhealthy lifestyle and insufficient exercise, excessive drinking, and long working hours, stroke sufferers are getting younger. The circulation of blood will be affected, causing a temporary blood shortage in the brain. The pancreas of an individual may become damaged. Serious social concern over health problems has arisen.

<table>
<thead>
<tr>
<th>Due to</th>
<th>Cause (noun phrase)</th>
<th>Effect (clause)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor diet</td>
<td>stroke sufferers are getting younger.</td>
<td>the circulation of blood will be affected, causing a temporary blood shortage in the brain.</td>
</tr>
<tr>
<td>Unhealthy lifestyle and insufficient exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive drinking</td>
<td></td>
<td>the pancreas of an individual may become damaged.</td>
</tr>
<tr>
<td>Long working hours</td>
<td></td>
<td>Serious social concern over health problems has arisen.</td>
</tr>
</tbody>
</table>

Table 3. Using due to to show cause-and-effect relationships

Acidic solutions have one extra electron that is unstable, whereas alkaline solutions need one electron to remain stable. A substance that yields electrons to something else is called a reducing agent, whereas a substance which gains electrons is termed an oxidizing agent. Covalent bond forces are directional forces, whereas ionic bond forces are non-directional forces. Organic compounds consist of carbon compounds, whereas inorganic compounds primarily contain elements other than carbon.

<table>
<thead>
<tr>
<th>Property or feature of an item (clause)</th>
<th>whereas</th>
<th>Property or feature of an opposite item (clause)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidic solutions have one extra electron that is unstable</td>
<td></td>
<td>alkaline solutions need one electron to remain stable.</td>
</tr>
<tr>
<td>A substance that yields electrons to something else is called a reducing agent</td>
<td>whereas</td>
<td>a substance which gains electrons is termed an oxidizing agent.</td>
</tr>
<tr>
<td>Covalent bond forces are directional forces</td>
<td></td>
<td>ionic bond forces are non-directional forces.</td>
</tr>
<tr>
<td>Organic compounds consist of carbon compounds</td>
<td>whereas</td>
<td>inorganic compounds primarily contain elements other than carbon.</td>
</tr>
</tbody>
</table>

Table 4. Using whereas to show contrast

From my experience, it is best to put the obligatory punctuation mark in a separate column as well to draw students’ attention, so that they will have a higher chance of remembering it when constructing their own sentences. If it is not made explicit, it is probable that the punctuation mark may well be overlooked. Another point to note concerns the row shaded in grey. It is essential in helping students decode, process and memorise the sentence structure. Students need to consciously know the constituents making up that type of sentence. When identifying the different components, it is recommended that metalanguage (e.g., grammatical terminology) be avoided.

(2) Bloom’s taxonomy

Another useful set of toolkit is Bloom’s Taxonomy, which classifies questions into six different levels: remembering, understanding, applying, analysing, evaluating and creating (Krathwohl, 2002). The first three require a lower level of cognitive processing, whereas the last three require a higher level. The questions belonging to the former typically tap into students’ ability to recognise what is known and deal with factual information (i.e., lower-order thinking skills). In contrast, the questions belonging to the latter concern students’ ability to produce something new and handle complex ideas and arguments (i.e., higher-order thinking skills) (click here for more details of the six different levels). In a CLIL lesson, ideally, there should be a range of question types which involve thinking processes of various depths. Bloom’s Taxonomy, therefore, provides a systematic framework for CLIL teachers to design and plan their questions. It should be noted that these different types of questions are not only limited to the written assignments and assessment questions, but also day-to-day teacher questioning in the classroom. Table 5 and Table 6 present some examples of lower-level questions and higher-level questions respectively.
<table>
<thead>
<tr>
<th>Science</th>
<th>Remembering</th>
<th>What is &quot;fair testing&quot;?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Understanding</td>
<td>Is a magnet a conductor or non-conductor? Why?</td>
</tr>
<tr>
<td></td>
<td>Applying</td>
<td>How can Newton's Law of Motion be used to explain this phenomenon?</td>
</tr>
<tr>
<td>Humanities</td>
<td>Remembering</td>
<td>What are some causes of flooding?</td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
<td>How is a capitalist economic system similar to and different from a socialist economic system?</td>
</tr>
<tr>
<td></td>
<td>Applying</td>
<td>How can the Three Gorges Dam in China help flood control?</td>
</tr>
</tbody>
</table>

Table 5. Lower-level questions

<table>
<thead>
<tr>
<th>Science</th>
<th>Analysing</th>
<th>What conclusion can be drawn from this experiment?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluating</td>
<td>How effective is this material in protecting heat loss?</td>
</tr>
<tr>
<td></td>
<td>Creating</td>
<td>What would happen if gravity suddenly disappeared?</td>
</tr>
<tr>
<td>Humanities</td>
<td>Analysing</td>
<td>What are the underlying assumptions that economies of scale can be achieved through merger?</td>
</tr>
<tr>
<td></td>
<td>Evaluating</td>
<td>Is there a better solution to solve global warming?</td>
</tr>
<tr>
<td></td>
<td>Creating</td>
<td>Think of a strategy which can solve the traffic congestion problem during peak hours in the city centre.</td>
</tr>
</tbody>
</table>

Table 6. Higher-level questions

Having these different levels of questions in mind, CLIL teachers can better cater for learning diversity. If, for example, a student has not been performing very well, without the help of any peers, the teacher may just want to ask him/her a lower-level question instead of a question that requires his/her ability to analyse, evaluate or even create. Not only do higher-level questions require more complex cognitive processing in terms of content and logic, but also demand more sophisticated language use to express those complex thoughts. For instance, when asked to imagine what would happen if gravity suddenly disappeared, a student should have a good command of Type 2 conditional sentences and comparative structures in order to convey his/her message clearly. To scaffold students to answer higher-level questions, it is important that CLIL teachers consider well in advance the necessary language (vocabulary and sentence patterns) involved in the answers.

(3) Think-pair-share

In a CLIL lesson, language plays a pivotal role. Without an attention to language, little real learning will take place. In other words, both the teacher and students need to actively involve in the use of language. In a context where the majority of students remain silent when asked a question, either because they lack confidence to express their views or because they indeed do not know the answers, the think-pair-share strategy is of tremendous help. This gives students an opportunity to interact with a partner or in small groups to come up with the answer to the question, promoting peer interaction, peer learning and an authentic use of language for communicative purposes.

This is extremely easy to set up and implement. After asking a question, be it a lower-level or higher-level question, allow every student a minute or two to quietly and individually think of some basic phrases and/or preliminary ideas. If the question is rather complicated, ask the students to jot down their thoughts on a piece of paper. When most of them seem ready, tell the students to share, compare and discuss their ideas with their classmate(s). Sufficient time should be given to this stage so that it encourages negotiation of and for meaning to take place, which is crucial for the development and acquisition of a second language (Ellis, 1997). While the students are having their discussion, the teacher should visit each group and observe whether or not any assistance in terms of content and language should be offered. When the
answers of every pair/group have taken shape, the teacher can then do a whole-class sharing of ideas, giving feedback on students’ responses and clarifying any misconceptions. More details can be found on this site.

**Concluding remarks**

The techniques illustrated in this chapter are fundamental to a lesson with a language focus. They are informed by extensive research and have been proved successful in ELT lessons. They may not come at a disposal automatically for inexperienced teachers. Thus, it is strongly recommended that CLIL teachers who are not familiar with the strategies and would like to experiment with them leave sufficient time to carefully plan their lesson ahead of time in order to incorporate language work. Certainly there are still many techniques worthy of adopting. It is hoped that this chapter will spark some initial discussions and thinking among CLIL teachers regarding the effective ways of incorporating language in a CLIL lesson.

**References**


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11 CLIL lesson planning

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Introduction
Since the present days are highly dynamic and rapidly changing, as well teaching and learning of foreign languages would necessary adapt to these changes. Output to language teaching should be a preparation for life in the new Europe without borders. The aim of education should not only broaden a cultural horizon of a man, but also provide an opportunity to acquire knowledge and skills required by an international labour market. The basic communication competences include the ability to use and communicate at least in one of internationally used languages; therefore, teaching of at least one foreign language should become a common and essential part of basic education. The condition for achieving this ability within the education is the need for the introduction of integrated approaches in the process of language learning/teaching. CLIL method is a suitable method because the content of non-language subject is presented by the target foreign language.

The core of the CLIL method
It is becoming increasingly difficult to ignore the fact that content and language integrated learning has become the trendy approach of bilingual education. In recent years, CLIL is gaining more importance across Europe and Slovakia as well in terms of number of schools implementing and in numbers of related studies done in this field (Bozdoğan & Kasap, 2015; Pokrivčáková, 2013). CLIL as well as any other approach is specific for the educational and specific methodological principles. It is a tool in promoting learner understanding of a foreign language. It is one of the crucial added-value propositions of bilingual education: rather than a simplistic approach to teaching in a foreign language, there is an emphasis on the integration of subject and language learning. According to Mehisto, Marsh and Frigols (2008, p.29) five important core features can be listed as follows:
- multiple focus,
- safe and enriching learning environment,
- authenticity,
- active learning,
- scaffolding.

By drawing on the concept of multiple focuses, Mehisto Marsh and Frigols (2008) have been able to show that emphasis is put on integration of different subjects and planning learning through cross-curricular themes and projects. Above all the importance of focusing attention to knowledge of the subject matter in language classes and to a language in subject matter classes has to be considered. Here, the teacher should be an encouraging element or a learner and provide support in reflection on one’s progress in learning.

If learners are expected to succeed they need to be confident in language use as well as in subject knowledge. Confidence is seen possible only in a safe and enriching environment. In general, communication in a target language and repetitive activities and tasks help to reach the goal of confidence. As an example for a meaningful communication there should be good quality input evenly distributed from the beginning to the end of a class. Wolff (2007) agrees with active collaborative work of learners; moreover promotes an appropriate learning environment.

Learner-centred approach, as CLIL is regarded to be, belongs to the active learning methods because teachers act as facilitators and all the work involvement and thinking is put on learners. Work in pairs and groups lowers learners’ distress of failure and on the other hand develops the motivation and the co-operative work helps to achieve language, content and learning outcomes.
Active learning efficiency was proved in many researches among which we can mention that of Rotgans and Schmidt (2011), who investigated how situational interest developed over time and how it was related to academic achievement in an active-learning classroom.

Studying in a foreign language is a demanding task even more challenging though is creative and critical thinking. CLIL methodology enhances systematic building on a learners' previous knowledge that is possible when scaffolding is applied. A term scaffolding was originally used to refer to teacher talk that supports pupils in carrying out activities and helps them to solve problems. Examples include simplifying tasks by breaking them down into smaller steps, keeping pupils focused on completing the task by reminding them of what the goal is, showing other ways of doing tasks. Scaffolding also includes support strategies for writing. Examples are the use of substitution tables and writing frames. Scaffolding is temporary support which is gradually taken away so that learners can eventually work without it. It provides the support learners need "to take another step forward and not just coast in comfort" (Mehisto, Marsh & Frigols, 2008, p.29).

Think!

1. What is the balance of the teaching focus between content and language?
2. Are CLIL programmes common in other countries, and do all countries adopt a similar approach to implementation?
3. Why to use CLIL? Give some pluses and minuses

CLIL planning

When teachers face each new lesson there is a feeling of uncertainty with regard to what they have to do. This usually means that teachers need to plan what they want to do in their classrooms. A unit plan is a series of related lessons around a specific theme (Farrell, 2002). Planning lessons is the result of a complex planning process that includes the yearly, term, and unit plans. A daily lesson plan is a written description of how students will move toward attaining specific objectives. It describes the teaching behaviour that will result in student learning. Richards (1998) as cited by Farrell (2002, p. 31) says that "lesson plans are systematic records of a teacher's thoughts about what will be covered during a lesson". Further he adds "lesson plans help the teacher think about the lesson in advance to resolve problems and difficulties, to provide a structure for a lesson, to provide a map for the teacher to follow, and to provide a record of what has been taught. As can be understood he underlines the significance of lesson planning for language teachers. In this sense, lesson planning could be defined as the daily decisions a teacher makes for the successful outcome of a lesson.

The lesson planning process is of vital importance for the successful development of the class (Salaberri & Sánchez, 2012). Not many teachers enter a classroom without some kind of plan. Lesson plans are systematic records of a teacher's thoughts about what will be covered during a lesson.

To be prepared to implement CLIL into the teaching, the theoretical background has to be transformed into practice. It includes not only partial planning of the lessons but rather a long chain of steps for this approach to be efficient. Above all it requires effective planning and usage of alternative ways, patience, professional support and a great amount of time. All lesson plans must have measurable objectives. CLIL has profound methodological implications in terms of planning, teaching strategies and particularly on the teacher's role. Indeed these factors may decide upon the successful or unsuccessful final result of a CLIL lesson. CLIL lesson requires a precise and extensive preparation. First, the teacher has to decide in great detail which content is going to be taught and also has to define the English parts of the lessons.
Coyle, Hood and Marsh (2014, p.49-70) divide a process-oriented method required for effective CLIL planning into six stages:

1. **Concept of CLIL**
   When the idea of CLIL implementation to a school occurs it is necessary to set up a team of language teachers, subject teachers and school management to conduct ideas and visions and jointly agree on overall goals. By drawing on the concept of planning, Coyle shows that priority is to reach goals through discussion and brainstorming; these goals might "increase learner engagement" (Coyle, Hood & Marsh 2014, p.50) or "develop confident learners who use the CLIL language spontaneously in a range of settings" (ibid).

2. **CLIL in context**
   Once the vision has been completed focus should switch to practice implication. The author recommends consideration of special needs a particular school has, either it is a location of school, its specialization regional and national policies, and type of school. Above-mentioned issues play an important role in determining the type of CLIL appropriate for different context.

3. **Planning a unit**
   This stage describes the 4C’s conception for planning a lesson, which should be a core of every CLIL lesson. 4 C’s stands for: Content, Communication, Cognition, and Culture.

4. **Preparing a unit**
   Once the teaching objectives and outcomes have been decided upon all the experience acquired in traditional teaching has to be combined with the methodology of CLIL approach in order to achieve these aims.

5. **Evaluation and monitoring**
   The importance of this stage lies in understanding the process of teaching in the classroom and the ability of the teacher to use observed acumens for future lesson planning (ibid 2014).

6. **CLIL community**
   Communicate ideas and experience provides support while dealing with new challenges and difficulties.

Planning a CLIL lesson might be a challenge for a teacher in early stages and so it is recommended to prepare for a lesson intensively and not to overload one in order to achieve perfection. "As confidence grows and as issues from specific contexts are addressed, then those involved become better prepared to explore tensions between visions or ideals and the realities of classroom contexts" (Coyle, Hood & Marsh, 2014, p. 48).

CLIL planning requires a change of the traditional concepts of the lesson planning. The urgent problems in Slovakia seem to be:
- The majority of teachers working on CLIL programmes are not adequately trained.
- Most current CLIL programmes are experimental.
- Subject teachers may be unwilling to take on the responsibility.
- CLIL is based on language acquisition, but in monolingual situations.
- There is little evidence to suggest that understanding of content is not reduced by lack of language competence.
- Some aspects of CLIL are artificial.

CLIL teachers dealing with lesson planning need to accept that planning for primary education learners is different from planning for secondary school learners. Even stronger emphasis is put on communication, active listening, fluency is preferred over accuracy with exception of pronunciation, activities are equally allotted for all learning styles and teacher implemented physical activities such as TPR method (Pokrivčáková, 2008). Planned work is always much more effective than unplanned work; therefore one of the most important things you need to do while planning is to identify your aims and objectives. You need to know what it is you expect your student achieve, what it is he/she will know or will be able to do at the end of the lesson (e.g. see more Brewster, online).
CLIL practice is much more effective when coordination between the language teacher and the subject teacher takes place so a lesson plan would work much better if this coordination took place and an English language teacher could present the basic vocabulary and required language structures. In case coordination between the subject teacher and the English language teacher is not possible, some necessary language support for the students – (scaffolding) and for the subject teachers might be needed.

To design a lesson plan reflecting fundamental essence of CLIL it is advised to follow the steps proposed by experts in this field. CLIL stands on two basic pillars and that of content and a language. The prime rule is that content, a topic, and a theme lead the way, as suggested by positioning the word content before the subject. The language takes a crucial role in this approach; however it only functions as a medium or tool by which the content is presented (Mehisto, Marsh & Frigols, 2008).

**Teaching objectives and learning outcomes**

First of all, teaching aims or objectives and learning outcomes for both language and content should be considered. By teaching objectives we encounter information and knowledge teachers intend to teach. Objectives are described as brief, clear statements that describe the desired learning outcomes of instruction; i.e., the specific skills, values, and attitudes students should exhibit that reflect the broader goals. Learning outcomes, on the other hand identify what the learner will know and be able to do by the end of a lesson. Bentley (2009) proposes learning outcomes, should be measurable and achievable at the same time, to help the teachers as well as learners to have a clear idea of what goals are to be achieved.

Coyle (2005, p. 4) claims that it is crucial to reflect in CLIL lesson that the content of the topic guides the language. Moreover, two important factors should be remembered as follows: teaching objectives and learning outcomes. Broadly speaking, all educational purposes can be defined in one of two ways - What it is intended that the teacher will do – a teaching objective and What it is intended that the student will have learnt, or will be able to do, as a result of a learning experience - learning outcome.

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**Model activity 1**

Subject: Weather  
Unit: Changes in the Weather  
Teaching Objectives:  
✓ to understand what a cloud is  
✓ how it is formed  
✓ to define the various types of clouds – esp. Stratus, Cumulus, Cumulonimbus, and Stratus clouds.

Learning outcomes:  
At the end of a lesson a learner will be able  
✓ to describe what clouds are made of  
✓ design and draw clouds’ poster

(adapted from Sneed, 2015)
The 4Cs Framework

A CLIL lesson is therefore not a language lesson neither is it a subject lesson transmitted in a foreign language (Straková, 2013). The 4Cs framework developed by Coyle is the key principle for lesson planning as well as material planning. The model consists of four main components and its integrative nature “offers a sound theoretical and methodological foundation for planning CLIL lesson” (Ramiro & Perez, 2010, p. 3). For a lesson to be successful all four components should be combined. According to Coyle (2005, p. 5) 4Cs represents

**Content** - subject with its themes and topics and “acquisition of knowledge, skills and understanding” (Coyle, 2005, p. 5). Gondová (2013) claims that content should be interlinked with everyday life. Students consequently should learn facts not through the theoretical information but rather from practice reinforced by theory. She further recommends K-W-H-L question method: What do you know about it? What do you want to learn?; How do you want to learn it?; What have you learnt?

**Communication** - learning of a language is supported by communication but emphasis is put on language as a tool for communication Accuracy does not interfere with fluency, although present (Coyle, 2005). Whilst rich input is a vital quality a CLIL lesson is manifested when the student is in the centre of the learning process. Lock-step mode should be reduced to minimum and student-student, student-group, group-group communication put forward. To be a witness of such communication teacher has to offer appropriate scaffolding in the form of academic vocabulary, language structures and activities practicing interaction.

**Cognition** - in CLIL cognition does not mean simple transfer of information from a teacher to a learner or memorizing offered knowledge. It rather involves higher order thinking skills, and encourages learners to develop personal ways of understanding (Coyle, 2005).

**Culture** - or awareness of cultural aspects obliges learners to broaden their knowledge about other unknown cultures. To do so, Gondová (2013) recommends work with authentic materials. From a language point of view she adds that cultural differences help students to choose appropriate language in culture related situations.

In a CLIL lesson, all four language skills should be combined, i.e. receptive ones: listening is a normal input activity, vital for language learning; reading, using meaningful material, is the major source of input; as well as productive ones: speaking focuses on fluency and accuracy is seen as subordinate and writing is a series of lexical activities through which grammar is recycled. CLIL lessons demonstrate integration of a language and both receptive and productive skills; emphasis on reading and listening: functionality of a language, meaningful contexts; language is approached lexically rather than grammatically and crucial focus on learners styles within planning tasks types.
Model activity 2: Continents and oceans

Teaching objectives
✓ To identify continents and oceans.
✓ To find information of features of continents and oceans.
✓ To locate every continent and ocean in a map.
✓ To understand different classification of continents

Learning outcomes
students will be able to:
✓ Identify continents and oceans (understand)
✓ Locate continents and oceans in a map (understand)
✓ Do a graph of continent sizes (apply)
✓ Use comparatives and questions sentences (apply)
✓ Do a conclusion about how many continents are (evaluate)

4Cs reflection
Content
✓ Continents and oceans.

Cognition:
✓ Identify continents and oceans.
✓ Locate continents and oceans in a map.
✓ Classify continents into sizes.
✓ Draw a graph for continents sizes.
✓ Complete a definition of continents.
✓ Read a text and answer the questions.
✓ Evaluate different opinions of how many continents there are.
✓ Write a report about continents and oceans.

Communication
Language of learning
✓ Present tenses (affirmative and question sentences)
✓ Past tense
✓ Comparatives and superlatives.
✓ Where, when, why, what, which, how?
✓ Preposition
✓ Essential vocabulary

Language for learning:
✓ Strategies for reading and understanding a text.
✓ Strategies to improve classroom talk. Describing locations.

Language through learning:
✓ Vocabulary Books Internet Web.

Culture
✓ To understand that there are different explanation of how many continents there are.
The CLIL pyramid

Meyer (2010) developed the CLIL pyramid for visual support and representation of the 4Cs framework for lesson and material planning. The four components, content, communication, cognition and culture are the core elements positioned in four corners of the pyramid base. By drawing a line from each corner we would form a fifth point above the base and complete the CLIL pyramid. That of Meyer (2010) is divided into four layers, which represent the process of lesson and material planning.

The base and at the same time first level is topic or content selection. The prime idea is to focus on a particular subject needs, aims and outcomes. Second level includes "study skills" and "input-scaffolding". Firstly learning styles and learning skill have to be carefully considered and evenly distributed throughout the unit or lesson. Drawing on "input scaffolding" we encounter various tables, charts or maps. Depending on our intention to develop content it is important to decide what kind and how much of input has to be offered to students. Task design at the third level has to fulfil two criteria: develop higher order thinking skills and trigger communication and cooperation among students. The top of the pyramid is left for final product– poster, presentation or debate. The CLIL workout also “determines how much and what kind of output-scaffolding is necessary” (Meyer, 2010, p.24).

Practical reflections in lesson planning

CLIL is a learner centred approach what changes the role of a teacher from that of a controller of the learning process to that of a facilitator. It puts demands on teacher to monitor “the development of a unit and evaluating the processes and outcomes” that are “integral to the teaching and learning process” (Coyle, Hood & Marsh, 2010, p.67). Coyle further claims that it “focuses on understanding classroom processes as they evolve to gain insights which inform future planning (ibid, 2010, p. 67).

In Slovakia, however, Internet seems to be one of the leading inspirations for teachers due to fact that no ready CLIL portfolios of lesson plans have been issued. If this is the case it takes a lot of time to produce expectable lesson plans for each lesson that have to fulfil certain criteria. Mehisto (2012) provides such criteria sectioned into 10 fundamental focus areas.

Make progress visible. Progress can be achieved in cautious planning. In general, language, content and learning skills have to be broken down into smaller unit and "long term and short term planned outcomes" (Mehisto, 2012). The students as the key element must be introduced to the set goals. It is believed that students need first know and understand the goal in order to achieve it. Above all only stimulating, inspiring and thought-provoking tasks lead the way to an achievable learning outcome.

Promoting academic language proficiency. No one can expect learners to acquire whole academic or scientific language in one go. It also has to be broken down and introduced systematically. Materials should, therefore, reflect step-by-step advancement leading to short and long-term learning outcomes. The teachers and educators, consequently take the burden to provide students with logical and systematic academic language introduction. It can be achieved supposing students’ attention is drawn to various language forms such as specific vocabulary, connectors, words with different meanings, and functions are in preference. Haynes (2007) approves with such revelation and adds that time and gradual introduction to a language plays a key role.

Encouragement of learner’s autonomy and learning skills. Learner autonomy is not an inherited skill but rather it is a skill requiring lots of directed practice. Teachers seem to be mediators of language learning who gradually pass whole learning responsibility to students. Being an autonomous learner means the ability to direct one’s own learning. It is a long-term process supported by students’ intrinsic motivation and teacher leadership. Well-designed materials should above all indicate the path an autonomous learner needs to take in problem-solving tasks. Consequently, materials should help the learner to gather and improve the skills found necessary to deal with assignments. It might include tips on how to complete a given assignment. Mehisto (2012) recommends pair brainstorming, finding ways how to handle
difficult texts or suggesting reading a text for different purposes.

**Assessment.** Any type of assessment, self, peer or other, mirrors learner's progress and achievements in learning process. It can reflect accomplished content or language objectives or progress in learning skills.

**Creation of a safe learning environment.** Materials overloaded with information, demanding and inappropriate language level might cause more distress for learners in all aspects and trigger a tense atmosphere. This rarely is a bonus in the learning environment, therefore when creating materials teachers should bear in mind to create safe working atmosphere. It is recommended to provide needed scaffolding if a topic is too demanding for content to be understood. Tasks demanding an answer of how the learner feels and suggesting how to cope, suggesting strategies, providing navigation and support add on the learner's confidence and positive attitude towards learning (Mehisto 2012). Human beings naturally look for safety and so is the case with students, who need to feel secure before taking any risk. The risk in this context is a language barrier they need to overcome (Cimermanová, 2013).

**Cooperative learning.** It is thought that two important criteria for defining cooperative learning must be taken into consideration only then cooperative learning can be understood. The first one positive interdependence recognizes each member of a group as a contributor to the group. In fact, learners work in a chain where one learner is dependent on another in order to complete a task. The second one individual accountability suggests that learners are concerned not only for personal learning but also need to feel responsibility for the learning of others. Concerning CLIL materials if essential vocabulary and discourse patterns are provided, it opens doors to learners' communication and cooperation (Mehisto, 2012).

**Authenticity.** It deals mainly with a target language which needs to be incorporated into materials in such a way it not only provides authentic language but also urges learners to use it. The tasks should be oriented predominantly on everyday language, information from media and suggested Internet research to develop the topic. Personalization seems to be another tool for authentic materials. Learners might be required to present projects on how to prepare a typical meal, prepare for some competition, and learn how to measure the height of a tree without climbing it and many other tasks requiring personal involvement (Mehisto, 2012).

**Fostering critical thinking.** CLIL materials are not based on straightforward repetition of the learnt facts or recollection of those facts. In contrast, exercises are oriented to a higher order of thinking - creation, evaluation, analysis, application and understanding (Mehisto, 2012).

**Scaffolding** belongs to the number of criteria obligatory for planning either a lesson or a teaching material. Scaffolding in CLIL provides necessary support for the learners principally in three aspects, language, content and learning skills. An offered model for conveying the meaning is given to the learners on purpose. Once they are able to apply it into practice vision of a successful user of the language encourages them for further learning. One of the most common exercises to scaffold language is brainstorming related to the topic. Brainstormed words might be noted on the board, which helps learners to talk about the topic more freely and develop conversation. Other examples include description of an unknown word, providing synonyms or antonyms of less common words. Similarly, content support should make the learning easier, simpler and more enjoyable. We can use various animations, charts and tables. In fact, sectioning texts into more paragraphs gives a clearer idea. Furthermore, each paragraph having its own subheading highlights the most important sections and develops the topic. When the text is demanding underlined key words direct the learners' attention to the strategic facts.

**Meaningful learning** encloses the circle of criteria developed for creating a learning material. It is the general truth that interesting and meaningful knowledge tends to be memorized as one might regard it as information necessary for the future development and application in life. Therefore, learners' personal interests, life and life of community should be reflected in CLIL materials. Features as hands on activities including poster making, projects or experiments followed by meaningful communication, both illustrate interaction between content needed for language acquisition and the language needed for subject development” (Dale & Tanner 2012, p. 12).
**Important**

A useful lesson plan involves understanding of more than just what is going to be taught - the objectives and how it will be taught - materials, equipment, and activities. The followings also need to be thought about:

- **Sequencing:** Do the activities move logically so learners are progressively building on what they already know? Do the activities flow well? Are transitions between activities smooth?
- **Pacing:** Are activities the right length and varied so that learners remain engaged and enthused?
- **Difficulty:** Do the learners have enough skill and knowledge to do the planned activities? Are the instructions clear?
- **Responding to individual differences:** Do the activities allow for learners of varying proficiency levels to receive extra attention they might need, whether below or above the norm? Are all students actively involved?
- **Monitoring learner versus teacher talk:** What is the balance between learner talk and teacher talk? Does the lesson allow a time for learners to interact, producing and initiating language?
- **Timing:** Was the amount of time allotted for each part of the lesson sufficient? If the planned lesson finishes early, is there a backup activity ready? If the lesson wasn’t completed as planned, how can the next class be adjusted to finish the material? It is important for the teacher to evaluate how the lesson went at the end of each class period.

- What went well/wrong? Why?
- What did not go as planned? Why?
- If I had it to do over again, what would I change?
- What have I learned about my students that I can account for in future lesson planning?

Remember a lesson plan acts as a guide for a class session. It sets an objective of the lesson and marks out the route (activities for each stage of the lesson). It is an aid for both novice and in-service teachers. Novice teachers should write down the details of each activity. Experience will guide how detailed a lesson plan needs to be. Sharing the plan with learners keeps both the teacher and the learner focused on where, how, and when they arrive to the final point.

Questions and areas the teacher should consider when planning CLIL lessons:

- Subject Content and Language area
- What will the children learn?
- Time
- Identify the key words and phrases essential to teaching this particular lesson (scaffolding)
- Teacher and learner activity, phases of a lesson
- Tasks for Assessment of Subject Content and Language Content
- What resources will I use? How will the class be organised?

Useful links:

http://www.teachingenglish.org.uk/teaching-teens/resources/clil
http://mon.uvic.cat/clil/teaching-support/planning-lessons/example-lesson-plans/
http://www.macmillaninspiration.com/new/resources/web-projects
http://www.onestopenglish.com/clil/what-is-clil/free-sample-material/
http://www.klis.pf.ukf.sk/sk/clil/141-metodickie-materialy-pre-vyuvanie-ikov-1-stupa-z-prostrednictvom-metodiky-clil-
http://forolenguas.edurioja.org/unidades/cicloagua_mariamoliner.pdf
http://lifelonglearningteachers.blogspot.sk/2012/05/clil-lesson-plan-solve-problem.html
and many more…
Think!
1. What is important within planning a CLIL lesson?
2. Why is scaffolding important?
3. Give some examples of teaching objectives and learning outcomes

Model activity 3
(inspired by Baldwin, 2010)

Topic: Healthy eating
This activity aims to develop primary pupils’ understanding of healthy, balanced eating and provides practice of basic food vocabulary and the present simple tense. It also has cross-curricular links to PE.

Content objectives:
- Balanced eating

Language objectives:
- Lexis – food
- Grammar – present simple (and possibly quantifiers)
- Skills – speaking and writing

Preparation
Prepare the worksheet for each pupil. Alternatively, to save paper, draw/project one large copy on the board and tell students to copy it.

Procedure
- With pupils in groups, give them one minute to think of as many types of food as they can. The group with the most is the winner.
- Tell groups to read out their lists and add any that they hadn’t thought of to their lists.
- Tell pupils to put their foods into two lists – healthy food and unhealthy food. At this stage, don’t tell them if they are right or wrong.
- Give out the worksheet to pupils and tell them to match the labels to the correct part of the pyramid, working individually.
- Check as a whole class and explain the concept of the pyramid – food at the bottom is the most important and food at the top the least important/healthy.
- Tell pupils to think of more food which fits into each group on the pyramid and write it on, using their list of food from stage 3 to help.
- Tell pupils to think about their eating habits and write what they usually eat in a day (using the present simple and possibly quantifiers), e.g. “I eat lots of rice, some vegetables like carrots and cabbage…”. You may need to give an example first.
- Pupils compare their eating habits and see who the healthiest eater in their group/class is.

Extension
Pupils can write out a good daily diet based on the food pyramid, either in class or for homework. They could even keep track of what they eat over one week to see how healthily they really eat.
Worksheet 1 (modified)

Put these labels on the pyramid:
1. Milk, yoghurt and cheese group
2. Fats, oils and sweets group
3. Vegetable group
4. Bread, cereal, pasta and rice group
5. Fruit group
6. Meat, poultry, fish, dry beans, eggs and nuts group

Useful links:
https://clilnutrition.wikispaces.com/Unit+Planning
# Model activity 4  
(acc. to Butkovičová, 2015)

| DATE |  |
| CLASS |  |
| SUBJECT | Science |
| TOPIC | Vertebrates and invertebrates |

## Content objectives
- By the end of the lesson learners will:
  - be able to differentiate vertebrates and invertebrates
  - be able to classify vertebrates

## Language objectives
- practice phrases: It is a/an .../ It has got....
  identify pronunciation of new words

## MATERIALS
Black-board, chalk, flash cards, worksheet

## PROCEDURE

| TIME |
| INTRODUCTION | Greeting, introduction |
| STAGE 1  
Slovak language | Motivation- interesting things from the Animal Kingdom  
97% are vertebrates  
- there belong animals with various length – from long 8mm fish discovered in 2004 to the sperm whale – the largest of vertebrates  
Dinosaurs belonged to vertebrates – these were the largest ones that have ever lived in our planet  
+ questions: What other vertebrates do you know? /big/small/  
What do you know about dinosaurs? |
| 5 |
| STAGE 2  
Switch working language to English | From the motivation elicit the terms vertebrates and invertebrates.  
Let students recall all they know about vertebrates and compare how they differ from invertebrates |
| 5 |
| STAGE 3  
English language | Use flash cards- animals, ask: What is this? Name all the animals.  
Each child pins an animal on the t-shirt. All the animals that belong to vertebrates/ invertebrates/ have four legs/two legs come to the front. |
| 10 |
| STAGE 4 | Read the text, use intonation, mimics, gestures. Students have their own text and follow. Divide students into groups of three. Start the competition. The first group to fill in the worksheet wins. The winners are marked 1. |
| 20 |
| FOLLOW UP/ HOMEWORK | Make a poster: choose 5 animals and describe them  
1. It has got / hasn’t got the backbone/ internal skeleton  
2. Where does it belong- vertebrates or invertebrates |
| 5 |

## Notes
VERTEBRATES AND INVERTEBRATES

There are two kinds of animals in the Animal Kingdom - vertebrates and invertebrates.

**Vertebrates** have got backbone and internal skeleton. They can be small and big. Small vertebrate is a [image] and the big one is an [image]. Vertebrates are classified into 5 groups: fish, amphibians, reptiles, birds and mammals. **Fish** live in the water. Their skin is covered in scales [image] and they have got fins [image] to swim.

**Amphibians** can live in water and on land. Their skin is wet and they don’t have scales. Frogs are amphibians. **Reptiles** have scales. Snakes, turtles or crocodiles are reptiles. **Bird’s** body is covered in feathers (a feather). They have got wings and can fly. **Mammals** have got skin or fur [image] and their babies drink milk. **Invertebrates** haven’t got backbone or internal skeleton [image]. They can be very small like a lady bug [image] or very big like an octopus [image]. Insects [image] are the largest group of invertebrates.

1. How do we classify vertebrates?

![Diagram of vertebrates classification]

**B** _ _ _ _

**M** _ _ _ _ _

**R** _ _ _ _ _ _ _ _

**A** _ _ _ _ _ _ _ _ _ _

**F** _ _ _
### 2. CIRCLE VERTEBRATES WITH RED AND INVERTEBRATES WITH BLUE:

<table>
<thead>
<tr>
<th>HORSE</th>
<th>FROG</th>
<th>LADYBUG</th>
<th>GRASSHOPPER</th>
<th>DRAGONFLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAIL</td>
<td>JELLYFISH</td>
<td>STARFISH</td>
<td>RABBIT</td>
<td>FISH CROCODILE</td>
</tr>
<tr>
<td>OCTOPUS</td>
<td>JELLYFISH</td>
<td>STARFISH</td>
<td>EARTHWORM</td>
<td></td>
</tr>
</tbody>
</table>

### 3. WRITE VERTEBRATES OR INVERTEBRATES:

- Animals with backbones are ..........................................
- Animals with no backbones are ..........................................
- Boys and girls are ..........................................
- Insects are ..........................................

### 4. READ AND CIRCLE THE CORRECT WORD

*Vertebrates/ invertebrates* have got an internal skeleton.

*Frogs/ butterflies* are invertebrates.

Fish have got *fins/ scales* to swim.

Reptiles have got *skin/ scales*.

Frogs are *mammals/ amphibians*.
**Model activity 5**  
(Sepešiová, 2013)

**Subject:** VLASTIVEDA_CLIL  

**Content Objective:**  
- learners will be able to recognize products of nature and human creation;  
  to organize their knowledge in a simple system;  
  to show examples.  

(note – a teacher continuously helps them to express themselves)  

**Language Objective:**  
- learners will memorize new vocabulary connecting with living and not living things;  
  practice and repeat a phrase ”It is/It isn’t ..."  
  use vocabulary in an unfamiliar context;  
  predict from the unknown text  

**Affective objectives:**  
- learners will accept the opinions and cooperate with other members  

**Psychomotor objectives:**  
- learners will practice fine motor skills  

**Materials:**  
- textbook, worksheets, real objects.

### Procedure

**Introduction:** Repeating a previous topic - Svet okolo nás (World around us)  

**Motivation**  
Activity 1: Presenting  
Start a lesson reviewing a topic World around us – what they know, what they see , what they have at home, what they need ... (2-3´)  
Activity 2: Match the pictures  
Individual work: Pupils are given worksheet 1 and they should match the words with appropriate pictures (3´)  
Pair work: peer evaluation – checking the answers  
Check: a teacher says each word and uses a phrase It is a/an..., pronounces it correctly, pupils repeat and check matching (4´)  

**Content topic:** The world around us – natural and man-made (15´)  

**Guidance**  
A teacher writes on the board (central position) – World around us and draws two branches – natural with two sub-branches - living - not living, and a branch - man made, gives them the prepared handouts of a mind map so they would be able to complete. The pupils come one by one and add words they choose from the box (ready printed words/pictures from the groups natural/man made). If they do not know, we ask for help others or a teacher may help.  

**Pair work:** The pupils work together /worksheet 2/ and choose the correct answer – is a thing living or not living; later they should decide either it is natural or man-made and add initial letter N – MN.  

**Check:** with all class - lockstep, problematic answers must be explained  
The pupils together with the teacher’s support try to discuss how a man influences nature, what the differences between living a not living and man-made things are – summarising e.g. what living things need – energy, breathe, movement, reaction – the teacher should illustrate/mime... the pupils have got worksheet 3, the teacher reads the text, afterwards the pupils within the groups of 4 try to pantomime
**Practice**

Group work: The pupils cut the pictures and glue them to the correct category / worksheet 3/ (5’)

Individual work: The pupils choose and circle the correct answers yes/no – check – peers /worksheet4/ (5’)

*What have we learned today?* Conclude the info about the world around us – the pupils give some examples of *natural living* and *not living things, man-made thing*, they can use their mind map; tell what living things need. (3’)

Homework: Based on the info form the lesson, they will draw/glue pictures and fill the words.

---

**Worksheet 1**

**Task 1**

**Direction:** Match the words with the pictures

<table>
<thead>
<tr>
<th>goat</th>
<th>pencil</th>
<th>paper</th>
<th>car</th>
<th>tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>potato</td>
<td>book</td>
<td>rose</td>
<td>shoe</td>
<td>worm</td>
</tr>
</tbody>
</table>

**Task 2**

*Is it Living or Non Living?*

Directions: Are they living things or not living things. Write the words into living things or not living things part:

<table>
<thead>
<tr>
<th>Living things</th>
<th>Non living things</th>
</tr>
</thead>
<tbody>
<tr>
<td>a car</td>
<td>a tree</td>
</tr>
<tr>
<td>a rose</td>
<td>a goat</td>
</tr>
<tr>
<td>a worm</td>
<td>a pencil</td>
</tr>
<tr>
<td>a shoe</td>
<td>a paper</td>
</tr>
<tr>
<td>an ipod</td>
<td>a book</td>
</tr>
<tr>
<td>a dvd</td>
<td>an eagle</td>
</tr>
<tr>
<td>a potato</td>
<td>a shark</td>
</tr>
</tbody>
</table>
### Task 3

**Living and Non-Living Things**

All living things must get energy from their environment. They move, breathe, remove waste, grow, react to the environment, and reproduce.

Examples: 

- = living
- = not living thing

**Directions:** Cut out the pictures at the bottom and glue them below.

<table>
<thead>
<tr>
<th>Living things</th>
<th>Not living things</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="turtle.png" alt="Turtle" /></td>
<td><img src="computer.png" alt="Computer" /></td>
</tr>
<tr>
<td><img src="sunflower.png" alt="Sunflower" /></td>
<td><img src="clock.png" alt="Clock" /></td>
</tr>
<tr>
<td><img src="butterfly.png" alt="Butterfly" /></td>
<td><img src="dog.png" alt="Dog" /></td>
</tr>
<tr>
<td><img src="phone.png" alt="Phone" /></td>
<td><img src="person.png" alt="Person" /></td>
</tr>
<tr>
<td><img src="factory.png" alt="Factory" /></td>
<td><img src="stoplight.png" alt="Stoplight" /></td>
</tr>
</tbody>
</table>
Task 4: Is it a living thing?

Directions:
Look at each picture. Think about what a living thing needs and does. Circle Yes or No to answer Is it a living thing?

yes no   yes no   yes no   yes no

yes no   yes no   yes no   yes no

Homework

Directions:
My living and Not living things booklet. Draw a picture and finish a sentence. Example:
A shark is living.  A car is not living.

My pictures

A ................... is living.  A ................... is not living.

A ................... is living.  A ................... is not living.
Model activity 6
(inspired by Pinkley)

CLIL Science Lesson: Magnification

Content Objectives
✓ to understand magnification and distortion
✓ to describe properties of mirrors and water
✓ to understand the role of light in magnification and distortion

Science Process Skills
✓ to compare and contrast properties of mirrors and water
✓ to develop a hypothesis
✓ to observe an experiment to see if water can act like a fun house mirror
✓ to describe a sequence of events
✓ to determine cause and effect
✓ to take notes and record data

Language Objectives
✓ to ask and answer questions
✓ to use content-related and scientific vocabulary
✓ to use the language of speculation and cause & effect

Learning Strategies
✓ to access prior knowledge
✓ to ask for clarification
✓ to predict
✓ to collaborate cooperatively
✓ to draw conclusions

Vocabulary
act like distort newspaper smaller bend distortion outwards spoon big drop plastic step(s)
bigger enter procedure stick cause experiment reflect surface change fishbowl report tall clear
fun house short text curve(d) light size water direction magnification slow down distance mirror
small

phrases: Can water act like a fun house mirror? If so, why?
What will happen?
I think _______ will happen because ________.

Procedure

1. The teacher begins by reminding students of a rhyming poem they read yesterday about a trip to the Fun House and the different mirrors there. She holds up illustrations and repeats the poem as students listen. Then she has them repeat the poem with her as she points to the corresponding pictures. She asks questions about the mirrors: How many mirrors are in the Fun House? Are they all the same? How are they different? What effect do the mirrors have? The class discusses the poem, illustrations, and answers questions.

2. The teacher passes around a large, shiny metal spoon. Students look at their reflections in the back of the spoon. The teacher encourages the children to say how the spoon is like the Fun House mirrors in the poem: the children’s reflections are distorted, just like the reflections in the mirrors.

3. Next, the teacher poses the research question: Can water act like a fun house mirror? If so, why? She has the children gather around as she conducts an experiment. A page from a
newspaper is covered in transparent plastic. She carefully drops ONE large drop of water in
the centre of the clear plastic. (The curved drop acts as a lens.)
4. Holding the drop of water on the plastic about an inch or so above the newspaper, she invites
the children to look down through it. What do they think they will see? What do they see?
5. The teacher allows students to experiment with single drops of water of different sizes held
at different distances from the newspaper. What do they observe? How does the text change
each time? Students report their observations in small groups.
6. Next the teacher holds up a clear fishbowl full of water. She invites the children to predict
what will happen when a student holds the fishbowl in front of his face. The students call out
their predictions and then they watch as the student holds the fishbowl in front of his face.
The teacher asks if the boy’s face is bigger or smaller, and explains that the water has
magnified and distorted his face. All the students take turns holding the fishbowl up to their
faces and describing the results.
7. Last, the teacher puts the fishbowl about half full of water on the desk and puts a stick at an
angle into the water. Students look down into the bowl. The teacher asks if the stick looks
different, and if so, how and why. Students in pairs work out their ideas and then share them
with other pairs.
8. The teacher writes any of their ideas that have relevance on the board, and then explains,
using gestures and board drawings to scaffold her explanation: As light enters the water, it
slows down. If the surface of the water is curved, it bends the light in a new direction. The curve
of the water sends the light outwards, and as it gets bigger, it causes magnification. Students
listen to the explanation again, repeating the key ideas out loud. Then they retell what
happened in pairs, and finally, write a summary report using sentence frames the teacher
writes on the board.
9. For reinforcement and family involvement, the teacher assigns replication of the experiment
with a spoon and a glass of water at home, followed by a written report. Through content-rich
instruction such as the science lesson above, students learn and use language in an immediate
and meaningful way. The target language is the vehicle through which they meet social and
academic needs, employ learning strategies and critical thinking skills, and expand and
display their knowledge of curricular content.

Conclusion
Returning to the beginning it is possible to state that one out of the most significant aspects
affecting CLIL lesson planning is preparing for the education process which requires appropriate
training in CLIL method along with appropriate language qualification. Upon these two aspects,
which function as pillars, one can possibly build a CLIL lesson with all its necessities.

Even though a wide choice of prepared plans and activities are available online, teachers who
are unfamiliar with CLIL methodology have problems using the activities and tasks correctly.
The main difficulty could be summarized as a not effective use of methods and organizational
forms. Teachers also need to use more activating methods aimed at students’ autonomy and
natural desire to explore through language. Teachers with lack of training also fail to accept new
role of “a facilitator of the learning process” and habitually put them to the role of controllers.

While planning and setting objectives, cognition processes very often stay at the level of
remembering and understanding only rarely involved analysing or creating are involved. The
communication element must be presented and should offer opportunities to use the working
language; however its limitations could be seen in individual organizational forms where
practice is minimal. Teachers’ rich input was often absent. The culture element is regarded as
the most critical in CLIL and depends on topics. Sometimes it is impossible to include it in a
lesson.

Developing appropriate CLIL plans or adapting existing ones require three core competences:
competence in a target language, target subject and CLIL methodology. Nevertheless, the
language competence could be possibly improved with appropriate language courses aimed
especially for teachers of CLIL. Further possible problems could be also eliminated by better cooperation with a language teacher. Ensuring language competence is mastered is tremendous in CLIL teaching. Lastly, knowledge of methodology for integrating both language and content is at the top of all competencies. Simply understanding how CLIL works can give teachers the necessary knowledge of how to prepare CLIL lessons to achieve global goals.

References
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12 Selecting, adapting and creating CLIL materials

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Objectives
Each CLIL teacher needs to create CLIL materials because of the lack of these materials on the market. The objective of this chapter is to clarify which objectives need to be met in CLIL materials, and which principles should be incorporated in them. We will also focus on the role of language in CLIL lessons, and particularly on the stages which help learners formulate their preconcepts, construct their new knowledge, and develop not only their subject-specific knowledge but also their cognitive, meta-cognitive and communication skills.

Introduction
Recently, CLIL has been very successful in Slovakia, and the number of schools implementing CLIL has been increasing. There is evidence that the level of language skills CLIL students achieve is higher than that of their counterparts, and moreover, they also achieve very good results in subjects which they study in L2. However, it is necessary to realize that “embracing the CLIL approach does not automatically lead to successful teaching and learning. To truly realize the added value of CLIL teachers need to embrace a new paradigm of teaching and learning and they need tools and templates that help them plan their lessons and create/adapt materials” (Meyer, 2010, p. 13).

Despite the popularity of CLIL, CLIL teachers need to face many difficulties because there are not enough CLIL materials to teach from, or methodological resources which would broaden teachers’ skills in creating CLIL materials and their understanding of integrating content and language in CLIL lessons.

Creating CLIL materials using the 4Cs framework
Many researchers and theoreticians agree that the construction of CLIL materials should be based on Coyle’s 4Cs Framework (Coyle, Hood & Marsh, 2010, p. 53-65), more information here.

The abbreviation 4Cs stands for content, cognition, communication and culture, and all these components should be integrated in CLIL lessons. Learning in CLIL should be personalized and students should have enough space to construct their own knowledge and understanding of the subject matter (content). In this process they develop not only their lower-order thinking skills (remember, understand, apply) but particularly their higher-order thinking skills (analyse, evaluate, create), as well as their metacognitive skills which help them gain more insight into their own learning (cognition). Therefore, it is important that the new knowledge is not transferred to them, but they are given many opportunities to construct it independently from the teacher. In order to achieve this objective, it is essential that students are scaffolded in understanding the subject matter and the language used in the materials, as well as in verbalizing subject-specific issues using their own interpretation.

Materials adjusted to students need to help them achieve communication objectives, which in CLIL context means that students become able to understand (listen and read) and produce (speak and write) texts of various length on subject-specific topics; in other words they acquire the academic language. The teacher should not be the only source of information for students; they should be given sufficient space to gain information from various materials independently from the teacher. Thanks to rich input in both L1 and L2 (e.g. different kinds of texts, videos, DVD materials, animations, web-quests, pod-casts, graphic organizers, maps, etc.) which students process independently from the teacher, they become aware of a variety of academic functions which native speakers use in order to express meanings in academic contexts. However, teachers usually need to draw students’ attention to these functions to enhance students’ awareness.
In addition to being able to work with the input independently, students should also be given sufficient space to use the language in various interactive tasks so that they can proceduralize their explicit language knowledge and develop both their speaking and writing skills. From this point of view, it is fundamental that students interact with each other because learning is a social process and learners learn best in interaction with each other. Such interaction enables them to construct their own knowledge, develop their cognition and acquire speaking skills (in both languages).

In order for learning to be meaningful, students need to meet cultural objectives as well. When talking about culture in CLIL settings, we don’t only mean arts, customs, festivals, national food, etc. but we talk about culture in a wider sense of word. We also mean meanings and values people accept in various surroundings in which they use a language.

**Meeting CLIL criteria**

When selecting, adapting or creating CLIL materials, it is necessary to adopt some criteria. High-quality CLIL materials are cognitively demanding and challenging for learners because they need to master the subject matter in L2 and L1. This “excessive cognitive load can be avoided by incorporating enhanced scaffolding and other learner support mechanisms to help students reach well beyond what they could do on their own. Quality learning materials help students build a sense of security in experimenting with language, content, and the management of their own learning. In addition, quality CLIL materials are highly integrative and multilayered and they help increase the likelihood that both content and language learning will be meaningful” (Mehisto, 2012, p. 17).

Mehisto (2012) suggests that quality CLIL materials should satisfy the following criteria:

- make the learning intentions (language, content, learning skills) & process visible to students;
- systematically foster academic language proficiency;
- foster learning skills development and learner autonomy;
- include self, peer and other types of formative assessment;
- help create a safe learning environment;
- fostering cooperative learning;
- seek ways of incorporating authentic language and authentic language use;
- foster critical thinking;
- foster cognitive fluency through scaffolding of a) content, b) language, c) learning skills development helping student to reach well beyond what they could do on their own;
- help to make learning meaningful.

More information concerning the criteria for creating CLIL-specific materials is available on the **CLIL Cascade Network** which also includes some **CLIL materials** and gives teachers an opportunity to share materials they have created.

**Language requirements in CLIL classes**

In CLIL, the development of cognitive skills is one of the objectives and “core elements of CLIL, i.e. tasks, output, and scaffolding have to be balanced in such a way that various cognitive activities are triggered” (Meyer, 2010, p. 21). In other words they have to enable the development of lower- and higher-order thinking skills of the learner. This development is hardly possible without the development of learners’ L1 and L2 language skills. As H. Vollmer (2008, p. 273) points out “every learning involves language learning or is language learning at the same time ..., therefore, is of overriding importance also in subject learning.” From this it follows that language development is essential for the whole curriculum process.

In order to be able to access the new content, learners need to acquire the language of learning and the language for learning (Coyle, Hood & Marsh, 2010, p. 36-38, 59-63), i.e. the language they need to understand and talk about the new content, and the language they need to accomplish the tasks assigned by the teacher. “In CLIL, priority is given to satisfying the
demands of the curriculum of the content subject. Yet language is needed to transmit the concepts of the content and to enable the exchange of thoughts and ideas between teachers and students and among students” (Hönig, 2010, p. 33). It is necessary to realize that we are not talking about everyday English but about academic language students need to master to talk about subject-specific topics. They need to learn how to use a variety of language functions to be able to define, compare, classify, analyse, describe, draw conclusions, evaluate, hypothesize, predict, give information, explain, etc., which also helps them develop their cognitive skills. Of course, this language is new to them (in both L1 and L2), and they need to be scaffolded to use it.

When selecting, adapting or creating CLIL materials, one needs to keep in mind that students need to use language to gain and/or display their knowledge and understanding of the subject matter. Therefore, it is essential to think about how students will gain the needed information independently from the teacher, and how they might be given opportunities to interact with each other and be able to use the target language in meaningful tasks.

From the point of view of learner’s language development, whole-class interaction controlled by teacher’s questions is not sufficient because students’ answers are usually very short, known in advance and as such do not make it possible to personalize language, and do not contribute to language development. The nature of the input, the task as well as the output decides whether learners will construct their own knowledge, acquire the target language in meaningful tasks and in the interaction with each other gain language skills.

In CLIL teachers need to meet the requirements set by the integration of the content and language because CLIL is “an approach which is content-oriented but at the same time language-sensitive” (Wolff, 2005, p. 17). During the learning process students need to gain language skills which enable them “to fill the gap between what they might want to say (content competence) and what they are able to say in the foreign language (language competence)” (Bach, 2000, in Hönig, p. 39). In teacher-led lessons bridging this gap is not a problem because all students are asked to do is to answer teacher’s display questions. However, if students are required to construct their own knowledge using various materials in the foreign language, the gap becomes much wider and scaffolding becomes a must.

Language work in which CLIL students are involved in should include receptive processing of various texts, which emphasizes the process of understanding concepts used in various materials and exploiting them for the information they include. On the other hand, students must also have as many opportunities as possible to use the language they need to speak about the subject matter in English so that they master the functional academic language.

When preparing CLIL materials, teachers need to think carefully about activities students will do before processing the chosen material (pre-reading or pre-listening activities), tasks they will do while working with the text (during-reading or during-listening activities in which students gain new information and develop their receptive skills and reading literacy), and finally tasks which they will do after reading or listening activities and which will make it possible for them to develop higher-order thinking skills and productive language skills (speaking and writing). This procedure needs to be followed with all materials regardless of whether they are used in L1 or in L2.

Designing CLIL learning materials

When talking about learning or teaching materials, researchers usually refer to various texts and tasks or anything that helps students learn (Tomlinson, 2011, p. ix). They include information and knowledge which may be presented in various ways and help learners achieve the intended learning outcomes. “Quality learning materials do more than just communicate information. They promote critical and creative thought, discussion and learner autonomy. At the same time, quality learning materials help students recognise the limitations of their current thinking and learning. They help students to understand when they need additional information and help. They also promote mutual understanding in social situations in order to contribute to joint problem-solving” (Mehisto, 2012, p. 16).
Since there is a lack of CLIL materials, CLIL teachers need to select CLIL materials from the existing resources, adapt them so that they meet the needs of their students or they must actually become materials designers and create materials themselves. These are considered to be important competences of CLIL teachers.

**Varied input**

When selecting materials, it is necessary to evaluate them first from the point of view of the content and age appropriacy. It is necessary to make sure that the materials cover the content which is included in the curriculum, and have been designed for the same age group. The input provided by the materials should be as rich and varied as possible to accommodate various learning styles, and help students develop their language skills. It should include not only reading texts, but also radio broadcasts, various materials from the internet, such as youtube videos, films, internet articles, podcasts, powerpoint presentations, blogs, visuals, etc. They are authentic and up-to-date, and therefore attractive for both the students and the teachers.

According to Fürstenberg and Kletzenbauer (2012), another advantage of these materials is that the teachers who feel insecure about their English consider them as a good way of providing students with ‘authentic’ and ‘correct’ language. Moreover, thanks to them students are exposed to a variety of accents, rates of speech and expressions, which supports them in assimilating the content and the language better.

**Adjusting the materials**

When selecting materials for CLIL lessons, the teacher needs to decide, which of them will be offered in L1 and L2. We would like to stress that translation or doing the same tasks in both languages are not desirable. Regardless of the language, the activities should follow one another sequentially.

Learners need to learn gradually how to deal with text complexity so that they become proficient readers. The development of reading literacy does not only concern language teachers – on the contrary it applies to all content areas, and subject teachers are also responsible for the development of students’ comprehension skills and their reading literacy.

Most materials which can be found on the internet have been written for native speakers and therefore, often need to be simplified for CLIL learners. However, they should not be simplified too much and the difficulty needs to be dialled up gradually because students need to know that they are learning something new and making progress both from the content and language point of view. If students are taught skills and learning strategies such as questioning, making inferences, paraphrasing, tracing an argument, they are able to deal with quite demanding texts and gradually become independent readers.

After a material has been chosen, the teacher needs to decide about its purpose, clarity, demands it puts on the background knowledge of the students, and language difficulty. Each material which is used in a lesson needs to have a purpose. The teacher must know exactly what objectives it enables students to achieve, and whether it is possible to write tasks which go with it and make it possible for students to develop their higher-order thinking skills.

When considering the clarity of the text, we need to think about its organization and check if it will be easy for students to trace the thoughts expressed in it. To make it easier for students to comprehend the text, one can use completed graphic organizers, e.g. outlines, labelled diagrams showing procedures, problem and solution maps, Venn diagrams, concept definition maps, word clusters maps, cause and effects maps etc. Graphic organizers help learners understand the organization of the text and its main ideas before starting listening to or reading the text. There are many examples [here](#).

The understanding of the text also depends on the background knowledge which learners have. This includes their knowledge of the world, but also their knowledge of various genres of texts. Therefore, before they begin working with a text, it might be useful to activate students’ schemata (background knowledge) and give them some space to discuss their pre-concepts in pre-reading or pre-listening activities.
The next step is the analysis of the language level of the material. If it is too difficult from the language point of view, it is necessary to simplify it. In written texts, it is possible to
- shorten sentences and use simple language structures; for levels A1, A2 it is necessary to avoid using complex sentences if they are not part of the language structure students need to use to do the task, e.g. if they are expected to hypothesise in one of the after-reading activities, keep these structures in the text;
- replace high-level general vocabulary (ask a language teacher for help);
- avoid idiomatic expressions and phrasal verbs.

In addition to that, the teacher can also simplify the text by
- breaking it into short sections and using bullets;
- highlighting key words;
- writing notes (headings) on the margin.

Another aspect to consider is the identification of the learning skills students might need to deal with the material; e.g. scanning, writing a laboratory report, searching for some information on the Internet; etc. Materials chosen for a module should cover all language skills and make it possible for students to develop both receptive and productive skills. If this requirement is not met, the teacher should think about how easy or difficult it is to create tasks which will enable students to practise the skills.

**Stages of the learning process**

After the material has been chosen, the teacher needs to decide what tasks students will do with it and how they will be scaffolded in the learning process. Usually, the tasks are divided into three groups:

a) **pre-reading/listening tasks** which prepare students to deal with the material independently; motivate them and spark their interest; activate their schemata (pre-concepts); or help them understand some key vocabulary which appears in the material;

b) **during-reading/listening tasks** which help students understand the new knowledge, main ideas, important details, or specific information included in the text;

c) **after-reading/listening tasks** which enable students to use the new language of learning (subject-specific language) and language for learning, construct their own knowledge, deepen their understanding of the new subject matter, and use it in various problem-solving tasks.

When choosing tasks, it is essential to ask not only display questions to which the answers are known in advance, but also referential questions which enable divergent answers and encourage students to solve various problems. It is important that the development of lower- and higher-order thinking skills is balanced.

Ideally students should know which activities are compulsory and must be done by everyone, but they should also be given an opportunity to choose which other activities they will do. A variety of activities and the choice cater for the needs of learners with various learning styles and make the learner differentiation possible. Moreover, this also encourages students to think about their own learning, the objectives they want to achieve, their strengths and weaknesses, and it also makes them assess their own learning.

**Pre-listening/reading activities**

One of the objectives of the activities students do before listening to or reading a text is to find out what their pre-concepts are or to activate their schemata. There are lots of activities which make this possible, and they can all be done either in L1 or L2. One of them is the **True/False** activity. Students are given some statements and they need to decide if they are true or false. They are encouraged to discuss them in pairs.
For example, before students read a text about why we have days and nights, they might be asked to do the following task:

<table>
<thead>
<tr>
<th>Before reading</th>
<th>Statements</th>
<th>After reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>T/F</td>
<td>The Sun does not move.</td>
<td>T/F</td>
</tr>
<tr>
<td></td>
<td>We have day and night because the Earth spins.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is night-time when the Sun goes behind the clouds.</td>
<td></td>
</tr>
</tbody>
</table>

Another example is a **KWL chart**. In pairs students think about what objects they can see in the night sky and what they know about them, and make a list of their ideas in the first column. This is then discussed with the whole class. The teacher writes the ideas on the board but does not correct any misconceptions. Afterwards students are asked to think about what else they would like to learn about the objects, i.e. they ask questions about the new topic. This activity helps students learn how to plan their own learning objectives. Again, all the ideas are written on the board so that students know about each other’s thinking. The third column may be filled in at the end of the lesson or after they have finished the module:

**PW:** First, think about what you can see in the sky and what you know about the objects and write it down in the first column.

Then write down in the second column what else you would like to learn about the objects you can see in the night sky.

<table>
<thead>
<tr>
<th>What I know</th>
<th>What I want to learn</th>
<th>What I have learned</th>
</tr>
</thead>
</table>

To find out what pre-concepts students come with, they may also be given a graphic organizer (e.g. a **Venn diagram**) which is partly filled in or empty. Students’ task is to write down all that they know about the topic. For example, they might be asked to compare planets and moons and write down what they have in common and how they are different. Afterwards they read a text or watch a video to confirm their ideas.

Asking students to predict what the text is going to be about is another strategy which develops learners’ skills and scaffolds their learning. Students may be asked to use pictures, illustrations, charts, headings, highlighted words, or some sentences chosen from the text to predict what the content of the text. They may also be asked to read the title of the text and the first paragraph and make prediction on the basis of the information included there.

Another example of a preparatory activity is pre-teaching some vocabulary. Students first listen to the new key expressions and repeat them. Then they are asked to read definitions of some of the words and decide which of the words they stand for.

In order to find out what students’ pre-concepts are and to activate their vocabulary, they might also be asked to describe a picture or to label it, e.g. the picture of solar system or the globe.
Listen and repeat:

sunrise  day  axis  sunset  anticlockwise

What is the word? Choose from the words above.
1 an imaginary line through the centre of an object ..............................
2 in the opposite direction to the movement of the hands of a clock ..............................
3 the time when the sun appears in the sky in the morning ..............................

During-listening/reading activities

During-reading or during-listening activities include tasks which students need to do while they read or listen to a text. In these tasks they usually need to transform the information from one code to another using various graphic organizers, problem solving tasks, or answering various kinds of questions.

It is important that the task is set before listening or reading because it gives students the purpose for reading/listening and helps them focus on the most relevant aspects of the material:

1) Questions about the meaning of the text. Learners listen to or read a text and answer questions concerning it.
2) Multiple matching
   a) Students match descriptions to pictures, e.g. descriptions of objects they can see in the sky with their images.
   b) Students listen to or read several texts and match statements they can read in the task to the text(s). E.g. they listen to three texts about stars, planets and moons and match the statements to the texts.
   c) Learners match headings to paragraphs.
   d) Learners match questions and answers.
3) Completing notes or graphic organizers: Learners read/listen to a text and have to complete notes in a table, scheme or chart. This task is very similar to real-life tasks and therefore authentic. Examples of graphic organizers are here and here.
4) True/False statements: on the basis of the text, students need to decide if the statements are true or false. They should also be encouraged to underline the evidence for their decisions in the text.
5) Editing: Students are asked to find factual differences between two texts. They may be asked to listen to a text or watch a video and afterwards read its summary and find differences between the recording/video and a text the learners can read.
6) Sequencing: This task is very good for teaching various procedures. Students are asked to put parts of a text or pictures in the correct order. They can first do it before they read a text and in this way they activate their schemata. Afterwards they check their answers while reading the text.
7) Marking the text: Ask students to read the text and while reading it ask them to tick off (✔) those pieces of information which are known to them, and write down a plus (+) next to those parts of the text which include new information. More mature readers can also be asked to write down a minus (-) next to those parts of the text which they do not understand or find confusing, and/or a question mark (?) next to those parts of the text where they would like to gain more information. This way of
reading makes learners focus on the meaning of the text. After they have done the task, they discuss what they have marked with their peers first. The new information, as well as problems and missing information, can also be discussed with the whole class.

8) Strategy 3 - 2 - 1 ([https://www.readingquest.org/strat/321.html](https://www.readingquest.org/strat/321.html)): students are asked to read a text and write down three things they have found out, two interesting things and one question they still have. This activity can easily be modified depending on the character of the texts, and students might be asked to write down three similarities, two differences and one question.

It is important that students read texts silently and after they have decided about their answers they should discuss them with their peers. In the discussion they clarify various problems and misunderstandings, learn from each other and construct their own knowledge. If they listen to a text or watch a video, they should be allowed to listen to it twice and discuss their answers both after the first and second listening.

**After-listening/reading activities**

After students have discussed the meaning of the text and checked its understanding, they might exploit it for its vocabulary. At this stage, it is necessary to draw students’ attention to the target vocabulary which in CLIL situation usually includes language of learning (terminology and the language needed to discuss the new subject matter). This can be done using a variety of vocabulary learning activities. More information [here](p. 39-44). Many inspirational materials can also be found on a page of [Smart Exchange](https://www.readingquest.org) where there are lots of IWB lessons, or one can choose from a variety of [vocabulary activities](https://www.readingquest.org) offered on the Internet. In the process of vocabulary learning, students need to become familiar with vocabulary learning strategies. Some of them are mentioned [here](https://www.readingquest.org).

It is necessary to keep in mind that at the after-reading stage students should be given a chance to *use* the new vocabulary in some meaningful activities. For example, after they have read and discussed texts about various sky objects, they might be asked to compare them in pairs:

**Check your learning: Complete the table. If you want to find more information, use the internet.**

<table>
<thead>
<tr>
<th></th>
<th>Stars</th>
<th>Comets</th>
<th>Man-made objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In orbit around</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familiar object</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light</td>
<td></td>
<td>Light</td>
<td>reflect</td>
</tr>
</tbody>
</table>

GW/3: Using the table, compare the objects that you can see in the sky. Make at least five sentences.

Examples:

*Stars are made up of .....*, **but planets ................**.

*Planets orbit stars, while moons ................*.
Students need to be scaffolded if we want them to do such tasks because some of them might not know the language structures they need to use to be able to carry out the task. In the task above, they have to compare the objects, therefore they are offered some language of comparison which they can imitate when doing the task. In this way we make sure that everyone is able to do the task and everyone will succeed. Of course, strong learners can also use other structures, not just those which are offered to them. These tasks are done in pairs or in small groups so that as many students as possible have a chance to use the language.

Scaffolding may also be done in other ways:

a) asking questions which students can use in their answers; e.g. Mathematic (word problems):

A television and a computer that we want to buy cost a total of €1,208. The computer costs €559. How much does the television cost?

b) Presenting sentence stems students can use in their answers; e.g. passives used to describe scientific processes: Minerals are made from ..... and are used for ..... .

Students can also be scaffolded when they need to use vocabulary. For example, if they are asked to label a picture they might be allowed to decide if they want to have a wordlist to choose from or not. Of course, the wordlist helps learners to be more successful than they would be if they did not have it.

In other tasks one can use various manipulatives (objects) which reach visual, kinesthetic and tactile learners and help them develop their cognition, reasoning, critical thinking, and interpersonal and intrapersonal intelligences. They give students a hands-on experience which shapes their thinking and learning.

On the Internet it is also possible to find many games which promote learners’ thinking skills, e.g. here and here. They are very useful because they support learners’ independent thinking and enable multidirectional communication. In this way learners are prompted to learn from each other not just from the teacher.

Language scaffolding is often needed if we want students to work in small groups in which they have to use language for learning. For example, if students need to express their opinion, it is necessary to give them some expressions they might use to do it:

**Expressing opinion**

- In my opinion...
- I believe that...
- I guess....

In groups they often need to ask for clarification; therefore, it might be useful for them to give them the following phrases:

**Clarification of meaning**

- What do you mean?
- Say it again please.
- I don’t really understand (what you mean).
- What does orbit mean?

In this way students acquire the language they need to be able to operate in a foreign language environment while working in groups.

After listening/reading tasks also include various problem solving tasks, discussions, role-plays, inquiry activities, written assignments, etc. in which students use the language to express
their own ideas; not just repeat what they have read or heard in a text or from the teacher. These tasks develop students’ higher-order thinking skills, such as evaluation, creation or analytical thinking. Because some of these tasks may be too difficult for some learners, it might be a good idea to prepare several of them and ask students to choose which of them they want to do. In this way learners are differentiated, and their learning needs are taken into consideration:

Choose which of these questions you are going to answer. Do at least two:

1) Find out the number of the moons orbiting the planets in the Solar System.
2) Explain why we can see the Moon.
3) Why are Uranus and Neptune not called ‘naked-eye’ planets?
4) How do we use GPS?

(Reynold, 2013, p. 53)

In addition to the tasks mentioned above, the Internet offers many reading strategies which include two or all three of the stages (pre-, during- and after-reading tasks). Even though they are usually referred to as reading strategies, they can easily be adapted for listening texts as well, and can be used with any of the material which we have at our disposal.

Among the best known strategies are

- **SQ3R**: Survey, Question, Read, Recite, and Review;
- **PLAN**: Predict, Locate, Add, and Note;
- **KWHL** ([here](#) and [here](#));
- **RAP**: Read, Ask, Paraphrase;
- **REAP**: Read, Encode, Annotate, Ponder ([here](#) and [here](#));
- **Critical Reading**

Many more strategies can also be found [here](#) or [here](#).

To sum up, CLIL is based on constructivist principles, therefore it uses learner-oriented methods to enable students to construct their own knowledge and thus achieve the objectives. Learning materials should enable the development of all main components of CLIL – content, cognition, communication and culture – following some specific criteria. During the learning process students should activate their schemata, discuss their pre-concepts, gain information from a variety of sources, be involved in tasks in which they can investigate, observe, make conclusions, compare, analyse, evaluate, etc. All these activities need to be carried out so that they give students an opportunity to acquire not only subject knowledge, but also cognitive and interactional skills.

References


13 Technology-enhanced CLIL classrooms

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Objectives
Digital competence, as one of the European key competences for lifelong learning (European Parliament and the Council, 2006) has long been on the agenda of educational policy makers. ICT integration to foreign language teaching methodologies is practiced at all levels and for all language skills. CLIL, precisely, stands as a successful form of subject oriented language practice and helps develop multilingual societies. This chapter aims to outline the research and practices where CLIL meets technology providing examples and working links to resources.

Terminology and literature review
To briefly recap, Nikula (2015, p. 11-12) highlighted that the content orients CLIL classroom rather than language and tasks are mainly subject-specific. CLIL teachers approach language implicitly; hence, it remains as a means to interact between the teacher and students. At one end of this practice, scaffolding plays a vital role; the scaffolding strategies teachers administer include establishing and achieving learning goals, considering student needs, eliciting answers through supporting questions, motivating and praising students. At the other end, task and project based learning forms the basis for face to face, online and blended models. The close relationship between CLIL form and task-based learning eases the integration of tasks and hands-on activities as defined by Ellis (2013, p. 9-10), tasks require detailed planning, use of authentic language for communicative purposes and practicing of language and cognitive skills. Task-based language learning and teaching with technology have been considered complementary and approached from theoretical and practical aspects (Thomas & Reinders, 2010). Technology integrated tasks with clear guidelines which students can perform ubiquitously attract students attention and enhance their motivation. The end products published and peer reviewed online contribute to autonomous learning and hence improve their self-confidence.

As of note to the terminology, a comprehensive CLIL glossary can be found on the website of Cambridge English compiled based on the Teaching Knowledge Test (TKT) contents and British Council that emerged from the CLIL Essentials course.

CLIL in Turkey
Research on CLIL in Turkey is quite limited. Teaching a foreign language and learning content through an additional language have long been discussed within the framework of national educational policies. The relevant research in Turkey focuses more on Content-based instruction (CBI) (Arslan & Saka, 2010; Kızıltan & Ersanlı, 2007) than CLIL (Bozdoğan & Karlıdağ, 2013) concentrating on the theme-based model and its implementation. CLIL is by far practiced through participation in the international projects (eclil.net, aecil.eu and projectclil.tr.gg). Both CBI and CLIL studies mostly took place at the higher education institutions and reported positive perceptions of students and teachers with increased motivation.

Very recently, Language in Focus - LIF2015 conference hosted a CLIL Symposium to discuss the recent practices and the study as a project report by Yılmaz and Şeker (2013) included CLIL and ICT integration and the positive perceptions of young learners.

Technologies in CLIL
Technological advances and innovations are now indispensable part of educational policies all around the world. In language education, specifically CALL (Computer-assisted Language Learning) emerged to meet the needs of learners. Though it initially faced some resistance from teachers, teacher trainings helped them gain the awareness, confidence and necessary
competences. Twenty-first century learners are not only exposed to computers as tools of technology, tablet PCs and mobile phones are now more than just communication tools. Mobile learning (m-learning) is a recent area of investigation for researchers to see how mobile phones can be used for educational purposes. While, mobile-assisted language learning (MALL) refers to mobile phone use in practicing a foreign /second language. The literature on MALL displays a tendency to work on vocabulary practicing either through SMS or mobile apps (Duman, Orhon & Gedik, 2015). Regardless of the technological tool, successful implementations are directly linked to digitally competent teachers having enrolled in ICT teacher training courses and their preparedness to welcome such tools into their classes.

According to the European Commission’s report (2014, p. 27) on CLIL and CALL, they both bring positive impact on language competences producing more successful outcomes from CLIL practices. CALL is observed to lessen learner anxiety, boost their motivation and provide a contextualized learning atmosphere harmonized to inter-cultural content. Research on CALL is far from announcing concrete language learning outcomes; some of the ways with specific contributions are chat (computer-mediated communication), online audio and visual multimedia resources, electronic dictionaries, computer-assisted pronunciation training (CAPT), intelligent tutor systems and game-based learning.

The EC report (ibid., p.28) groups the criteria for successful implementation of CLIL and CALL as: teacher training with proper pedagogical design, effective adoption and integration; teaching approaches including selection of online materials, adoption of student-centred learning; and learning processes with references to constructivist tools and games-based tools.

Nevertheless, there still remains evidence based studies on CLIL and ICT combination. A project report on ICT integration to CLIL classrooms (Wojtkowicz, Stansfield, Connolly & Hainey, 2011) highlights the survey results collected from CLIL practitioners who perceived such an incorporation highly positive and list the lack of resources as the most difficult aspect. The CLIL practitioners put more emphasis on the language competencies of students rather than their ICT skills (p.6). Hence, there is a call for further studies providing clear guidelines and web-based materials with language practice and support.

Technology integration to CLIL classes can be simply observed as using PowerPoint presentations (Tragan, Marsol, Serrano & Llanes, 2015) and viewing YouTube videos. However, the technology changed the roles, a shift was for instance seen in preparing PowerPoint to practice vocabulary from the teacher to the students every week in a computer lab session (ibid, p. 5).

As an example of subject specific implementation, Binterová and Komínková (2013, p. 95) used interactive whiteboard elements and mathematical programs, i.e. GeoGebra to deliver Mathematics courses in English at the elementary school level and reached positive outcomes in terms of student and teacher motivation and willingness.

Another example of CLIL blended course environment through Moodle included eXeLearning, HotPotatoes, Skype and Survey Monkey (Pellegrino, De Santo & Vitale, 2013). Durán and Cruz (2013) integrated JClic and Atenex to content-based units with stories using these ICT for activities like crosswords, matching, identification of things, and words in context. InGenio authoring tool and content manager used by Gimeno, Seiz, de Siqueria and Martinez (2010, p.3173) provides templates to create resources and learning activities in line with task-based learning. Ángel (2015, p. 3) conducted CLIL virtual laboratory sessions following the online routine of reading theory, watching an animation with subtitles, doing self-assessment and writing a laboratory report.

Examples of good practice and teaching tips for teachers

The topic CLIL and technology is widely found online with respects to providing a theoretical framework (eg. online journals like ICRJ and LACLIL), presenting projects and their outcomes including resources (eg. ICT-improving CLIL through technology and ECLIL European project building CLIL resources for language learning), using Web 2.0 tools like wikis (e.g. here] and blogs (e.g. here and here).
Additionally, the social bookmarking site Scoop.it includes numerous content on CLIL some concentrating on the ICT aspect such [here](#) and [here](#).

For those interested in mobile learning, the Pinterest selection on apps and tablets for CLIL as a product of a EU project presents a compilation of necessary tools [here](#).

The list of apps for Maths and Science ([here](#)) by the MOOC group of the Designing a New Learning Environment course can be listed as following:

**Maths apps:** Intro to Math, My 1st Tangrams HD, Numb, RedFish 4 kids, ArithmeTick, MathBoard, Ruler, Motion Math, Math Bingo, King of Math, Numerate: Count, Add and Subtract, Multi Measures HD, Fractals, Geometry Stash, Math Quizzer, iMathematics, Quick Graph, and Elevated Maths

**Science apps:** Molecules, Decibel 10, Wolfram Alpha, Scientific timer: Lab Timer, Science 360 from National Science foundation.

An interesting example of Music for CLIL used iWriteMusic app to compose and practice music can be found [here](#).

Express Publishing developed Explore our World CLIL Readers app for levels 1-6 that includes a variety of subjects such as the Solar System and Baby Animals.

Below you can find authentic examples of CLIL activities that has fully integrated ICT:

- **Webquests**
  - They are learner generated lesson formats including the parts of **Task, Process, Resources, Evaluation** and **Conclusion**.
  - [example 1](#)
  - [example 2](#), e.g. [here](#) (in Spanish) (Ángel, 2015)
  - [example 3](#)
  - An example on CLIL is [here](#):

  ![Example of a Webquest](questgarden.com:147/46/6/12825094536/index.htm)

- **Google for education**
  - Google recommends the following tools to be used together to meet your educational purposes:
  - **Google classroom** productivity tools for classrooms
  - **Gmail** e-mail service provider
  - **Google drive** cloud storage to store and backup
  - **Google vault** with eDiscovery services of email and chat archiving, legal holds, drive file search, email and chat search, export and audit reports.
  - **Google docs** web-based documents that you can create, edit and share
  - **Google sheets** spreadsheets that you can edit and co-edit
  - **Google sites** [here](#) and [here](#).
  - Additionally, **Google maps** and **Google Earth** can be easily linked to subject classrooms.
• **Glogster**
  A multimedia interactive poster where you can tell stories, present projects and make notes.

A poster on CLIL:

In my opinion, I think CLIL is very useful because it has many advantages: it gives more time to students to learn a language, provides a natural situation for language development (while learning other things), can boost students motivation and their hunger towards learning languages, etc. The problem I find is that in Spanish classes is quite difficult to put into practice, since, for example, there are few teachers with the level of English required to apply this methodology well.
• **Audacity**
  A voice recorder and audio editor. This software basically allows language learners to be exposed to a variety of audio resources and to practice pronunciation. Its use best fits to CLIL contexts as it facilitates task-based learning where students are given the chance to hands-on work to record, edit, convert and share the audio files.
  An example of speaking practice using Audacity is [here](#).

• **Screen capturing**
  - **Screencast-o-matic**
  - **Screenr**
  - **Jing**

  With a screen capture software you can capture videos, animations and images to be shared on the web. For instance, a teacher can record the changes on a particular task and upload the video to have learners watch the video again at their convenience.

• **ExELearning**
  An authoring application to create and publish educational interactive web content.

• **Tag cloud generator**
  A word cloud generator that highlights the most frequently used word in a given text. It is generally used as a brainstorming and warm-up activity to help learners guess the topic.
  - **Wordle**

  An example on CLIL definition:
- **Mindmapping generator**
  A mind map is the visual representation of ideas and topics to structure, organize and analyze the content in the simplest terms. In language teaching, mind maps are used in the form of note taking, brainstorming and presentation activities.

- **Bubbl.us**
  An example on dog breeds:

- **Popplet**
  An example on Facts about Earth
• **Timeline generator**
  Timeline generators help organize the content by date and time. The digital version allows users to create, collaborate and share their timelines that include videos, images, text, links, location and timestamps.
  - **Dipity**
    An example on the History of Technology

![History of Technology Timeline](image1)

• **Voice-based e-learning tool**
  - **Voxopop**
    The talkgroups help students to interact while developing their speaking skills. An example talkgroup on digital storytelling in EFL classroom:

![Voxopop Talkgroup](image2)

• **Book creator**
  - **Bookr** a tool to create online books using images from Flickr
  - **Story Bird** a website to create online books using image gallery
An example story on Mathematics

- **Moviemaker**
- **Collaboration tool** whiteboard:
- **Iclic**
  A set of computer applications that are used for carrying out different types of educational activities: puzzles, associations, text exercises, crosswords... (used by Durán & Cruz, 2013 to integrate the story “The three little pigs” and ICT in content based units)
  Making a puzzle

- **Atenex**
  (used by Durán & Cruz, 2013 to integrate the story “Charlotte’s Web” and ICT in content-based units)
• **Quiz maker: Kahoot**
  A game-based platform where you can prepare quizzes, surveys or conduct discussions. Here is an example from an online CLIL training session.

![Kahoot](https://cowork.kahoot.it/#quiz/0e6f78d8-6c-44f3-85f2-2503d638106d)

**ICT and Web 2.0**
This is a quiz that we are creating for a live session with our dear Bethlehemite English teachers.

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**Examples of recommended ready-made materials and sources**
Among the pool of CLIL lesson plans, those with ICT practices are as following:

- **Source bank 1**
- **Source bank 2**
  - Regional Geography - B1
- **Geography**
- **History**
- **Science/Geography**

**Additional websites with resources:**

- **FACTWorld**
  This forum supports teachers of CLIL in putting CLIL into practice through providing country reports, a journal (FACTWorld Journal), resources including links and articles.

- **OnestopEnglish**
  This site includes a section devoted to CLIL that covers *What is CLIL? Secondary, Methodology, Image Gallery, Young Learners, Vocabulary, Animations* and *CLIL Teacher Magazine (Your CLIL).*

- **Clilstore**
  An outcome of the European funded TOOLs project, Clilstore includes teaching units for CLIL based on the language learnt that are organized according to the language proficiency level. The texts are interlinked to the dictionary through Wordlink.
An example on living beings for English language learners at A2 level:

- **Bitesize** provides study guides for primary and secondary level students at many subjects. The resources are organized according to the [British education system](http://www.bbc.co.uk/schools/).

Other related websites are BBC Science, BBC History, BBC Nature and BBC Religion and Ethics and BBC schools ([http://www.bbc.co.uk/schools/0/](http://www.bbc.co.uk/schools/)).

- **Edheads** is a resource provider website with plenty of games & activities on science and math.
  An [example](http://www.bbc.co.uk/schools/) activity on simple machines for 2-6 grade students

### Multimedia and CLIL

To best provide authentic materials including visuals like photos and videos, teachers can refer to the following sites:

- **YouTube channels**
- Some selected YouTube channels that include videos on disciplinary areas, e.g. [Physics Education](http://www.youtube.com/physics), [EngChannel](http://www.youtube.com/engchannel), [ScienceChannel](http://www.youtube.com/sciencechannel), [National Geographic](http://www.youtube.com/nationalgeographic).

- **Documentary tube** allows viewers to watch full-length documentaries with categories such as history, art, health, economics, nature, sports, science and technology.

- **Teachertube** not only offers videos and audio, it allows users to view, upload, share photos and docs, create groups and classrooms.

- **Howstufworks?** Includes videos, shows and quizzes on subjects like science, technology, health, and environment.

- **TED Ed** video lessons target learners from elementary/primary level to college/university level in many subject areas, the website provides users to the chance to create their own lesson by selecting a video and customizing a lesson around it.

- **Smithsonian Education** provides educational resources to educators, families and students. For educators, the lesson plans are available on art &design, science &technology, history &culture and language arts. The lesson plans integrate ICT use to a great extent. For instance, the lesson plan named *What’s your problem? A Look at the Environment in Your Own Backyard* offers a downloadable lesson plan in the pdf format, a downloadable oral history interviewing guide and an online conference session recording available to view. Another lesson plan *Tale of a Whale and why it can be told* includes an online game.

- **Khan Academy**, in addition to the free online courses, offers videos and interactive exercises. The virtual learning environment gives the learners the opportunity to experience distance learning about their selected courses and subject areas.
PBS LearningMedia includes digital resources as tools like Lesson Builder, Storyboard, Quiz Maker and Puzzle Builder.

S-cool the revision website The website including subjects of Art, Biology, Business Studies, Chemistry, Economics, English Literature, French, Geography, History, Maths, Physics, Psychology, and Sociology.

Jefferson Lab particularly in relation to science education has sections of Teacher Resources, Student Zone, Games & Puzzles, Science Cinema, and Programs & Events.

Children's University includes interactive exercises and resources on History, Languages, Arts & Design, Science.

In conclusion, for the students of iGeneration some necessary pedagogical adjustments should cover the ICT use at all levels of education and as seen above numerous initiatives have already taken place. The resources have been transformed from coursebooks to online materials, websites, tools and apps. Many of the learning tools outlined above were referred in a trending list by Veselá (2012, pp.41-42) and the term CA-CLIL (Computer Assisted CLIL) was coined. Finally, the book by Dale and Tanner (2012) provides a comprehensive compilation of CLIL activities with a CD-ROM and makes plenty of references to technological tools. The abundance of literature on materials, teacher training and ICT tools simply present the recent trends in CLIL practices. All in all, regardless of the terms- e-CLIL or CA-CLIL, CLIL and technology combination seems to be a trending area of research and practice.

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14 Assessment in CLIL classes

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Objectives

The readers of this chapter will become acquainted with:

- the characteristics of evaluation, assessment and testing, both in general and in CLIL contexts;
- the uniqueness of assessment in CLIL classes: its key terms and principles;
- examples, links and hints useful for teaching practice.

Introduction

CLIL methodology is unique in integrating the content of a subject and a foreign language. This uniqueness is projected to the methods and activities used in CLIL classes, in organizing CLIL lessons, materials, lesson plans and, last but not least, assessment.

In order to understand assessment in CLIL classes, it is important to understand assessment in its broader sense and to become acquainted with some basic terms and taxonomy. Making a distinction between assessment, evaluation and testing is the first step that must be taken, since these three terms are rather confusing — they are often considered as identical or are misinterpreted. Much depends on the understanding and intentions of authors. For example, some authors use the term evaluation to identify the means of detecting learners’ progress and achievements, and thus directly supporting the learning process. Other authors, however, attribute these qualities exclusively to assessment. (Compare Williams, 2003; Rea-Dickens & Germaine, 2003; Ioannou-Georgiou & Pavlou, 2003; Gondová, 2010)

Therefore, for the sake of transparency, we decided to follow the clear concept offered by Ioannou-Georgiou and Pavlou (2003). The concept’s concrete aspects are developed below.

Evaluation, assessment and testing in terms of CLIL

Evaluation

Evaluation is a process of “gathering information in order to determine the extent to which an [educational] programme meets its goals” (Ioannou-Georgiou & Pavlou, 2003, p. 4). It means that evaluation is not primarily oriented to learners’ progress and knowledge; it uses tools such as tests, questionnaires, analysis and observations in order to identify the worth and merit of a teaching programme, particular methods, materials, teaching effectiveness, classroom atmosphere and teacher-learner and learner-learner relationships (ibid.).

According to Eurydice (2012), almost all European countries provide CLIL methodology in some schools or within some pilot projects. However, CLIL methodology entered many European countries as something new and unexplored, and its implementation required much research and evaluation. In Slovakia, there were several projects aiming to evaluate the effectiveness of CLIL methodology. One such was an experimental project lasting between 2008 and 2012, called ‘Didaktická efektívnosť metódy CLIL na prvom stupni ZŠ vo vyučovaní cudzích jazykov’. By implementing tools of testing and questionnaires in 12 Slovak primary schools, their analysis and interpretation, the CLIL methodology was evaluated as an effective means for developing all examined aspects of the target foreign languages (Menzlová, 2012).

Research conducted by Jexenflicker and Dalton-Puffer (2010) evaluated the impact of CLIL methodology on the writing skills of college students in Austria. In this case, the CLIL students outperformed their peers in control groups, not only in vocabulary and grammar but also in orthography, the communicative purpose of the text and pragmatic awareness.

Another example of evaluation can be found in Del Puerto, Lacabex and Lecumberri’s study (2009) testing the effect of CLIL on the intelligibility of English pronunciation and accent in 28 Basque-Spanish teenagers, 14 to 16 years of age. As for the results, the ”CLs’ pronunciation was
unanimously found to be more intelligible than NCLs' accent” (Del Puerto, Lacabex & Lecumberri, 2009, p. 71).

All the above-mentioned examples illustrate the essence of evaluation. This systematic process of data collection and data analysis is used by many European countries implementing CLIL into their educational programmes. Drawing on the learner-oriented data (e.g., the testing or observation results), it is possible to detect the real conditions of CLIL methodology, its effectiveness, strengths and weaknesses, which are valuable pieces of information for its further development.

**Assessment**

Although assessment is considered to be a part of evaluation, it is oriented to the learner (e.g., his or her knowledge, progress or achievement). It plays the role of a “tool for learning rather than the end of the learning process” (Williams, 2003, p. 34). This implies that it is not only focused on the final level of a learner’s knowledge, but that the process of its development is equally, or even more important.

Since CLIL methodology integrates the two phenomena of content and language, it is quite natural to assume that both aspects should be assessed. The key rule for assessment in CLIL classes is:

*The content that was taught in the L2 needs to be assessed in the L2 as well.*

(Massler, 2011, p. 121)

However, the teachers in CLIL classes should be aware of the subordination of language to content. Foreign languages serve as means of instruction, not as superior goals of CLIL education. If this is not acknowledged, the dominance of language could “lessen comprehension of subject knowledge, reduce participation in the classroom discourse, and lead to subject learning goals being compromised” (Kiely, 2011, p. 55). Therefore, despite the universality of the key rule, in some European states, e.g., in Ireland, Hungary and Austria, learners can choose the language in which they will be assessed (Eurydice, 2006). A general overview of the languages of assessment in European countries can be seen in Figure 1.

Particular traits of assessment are bound to the different types of assessment, and they can be divided as follows:
- formal vs. informal assessment,
- formative vs. summative assessment and
- holistic vs. analytic assessment (Hönig, 2009).

The difference between formal and informal assessment is in the manner of applying different assessment techniques, whether in CLIL classes or in ordinary ones. According to Navarete et al. (1990, p. 2), “informal assessment techniques can be used at any time without interfering with instructional time”. Such techniques occur in a more casual manner, during or after the lesson. The teacher can use verbal praise, facial expressions or gestures to assess a student's work and learning progress.

During a course or school year, special time is dedicated to formal assessment, e.g., after one thematic unit, in a mid-term assessment or a final assessment. Formal assessment implies formal techniques— tests, written exams or quizzes. They usually take a written form so they can be reassessed, recorded and preserved. This relates to the aim of the formal, usually summative assessment, which is to mark, grade or score the student’s knowledge, skills and learning progress (AEU, n.d.).
The most significant categorization of assessment relates to summative and formative types. **Summative assessment** has a much more “limited perspective with a focus on the ‘ends’ of learning in terms of what the learner has achieved at particular points” (Rea-Dickens & Germaine, 2003, p. 5). Thus, students are assessed through marks given for their learning outcomes, e.g., written/oral tests, projects or essays written during the semester or at the end of the school year. The marks correspond to specific classification scales. In Slovakia, there are five grade scales. Grade or mark “1” means that a learner’s performance is excellent; it conforms very closely to curricular standards. On the other hand, grade or mark “5” means that a learner’s performance does not meet the criteria stated in the standards at all, and the learner fails (Pokrivčáková, 2010).

The characteristic traits of summative assessment are displayed in Table 1.

<table>
<thead>
<tr>
<th>Summative assessment</th>
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</thead>
<tbody>
<tr>
<td>Summative: final, to gauge quality</td>
</tr>
<tr>
<td>Product-oriented: what has been learned</td>
</tr>
<tr>
<td>Judgemental: arrive at an overall grade/score</td>
</tr>
</tbody>
</table>

Table 1: Characteristics of Summative Assessment (adapted from arc.duke.edu, n.d.)

If assessment is to be **summative**, **product-oriented** and **judgemental**, there must be an explicit statement of WHAT is going to be evaluated and HOW.

When assessing his or her learners, the CLIL teacher must consider both the criteria for the content-subject assessment and the criteria for the foreign-language assessment, since there is still a lack of official documents and regularities governing direct assessment of learners in CLIL classes. Massler (2011, p. 122) explains that “this does not mean that content and language cannot be assessed in one task but rather involves having separate and clear criteria for each area; language ability and content knowledge”. In Slovakia, the CLIL teachers can draw on documents in which the subject of assessment (the “what”) and the general manner of assessment (the “how”) are specified:
Criteria for content-subject assessment are specified in documents issued by The Ministry of Education, Science, Research and Sport of the Slovak Republic in 2011: 1) *Metodický pokyn* č. 22/2011 na hodnotenie žiakov základnej školy 2) *Metodický pokyn* č. 21/2011 na hodnotenie a klasifikáciu žiakov stredných škôl. Moreover, individual schools elaborate their own educational programmes (based on ISCED 0-6), in which the internal guidelines of content-subject assessment are specified. Compare here and here.

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>LANGUAGE</th>
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</thead>
<tbody>
<tr>
<td>Criteria for content-subject assessment are specified in documents issued by The Ministry of Education, Science, Research and Sport of the Slovak Republic in 2011: 1) <em>Metodický pokyn</em> č. 22/2011 na hodnotenie žiakov základnej školy 2) <em>Metodický pokyn</em> č. 21/2011 na hodnotenie a klasifikáciu žiakov stredných škôl. Moreover, individual schools elaborate their own educational programmes (based on ISCED 0-6), in which the internal guidelines of content-subject assessment are specified. Compare here and here.</td>
<td>Criteria for foreign-language assessment are elaborated in Common European Framework of Reference for Languages, issued by the Council of Europe in 2001, as well as in school educational programmes based on ISCED (The International Standard Classification of Education). The original version (CEFR) and a Slovak version (SERR) can be found in the following links: [CEFR](in Slovak [SERR])</td>
</tr>
</tbody>
</table>

Table 2: Criteria for Content-Subject and Foreign-Language Assessment

The CLIL teachers must bear in mind the necessity of the assessment type conforming to the educational requirements of individual educational programmes, as well as requirements for general competency development, the curricula, teaching plans and standards (Metodický pokyn č. 22/2011).

In the documents dealing with "content", the subjects of assessment are the compliance of students’ learning outcomes with the requirements specified in the curriculum, as well as the acquisition of key competencies, diligence, personal development, respect for the rights of other people and behaviour in accordance with the school’s rules. High-school teachers can find very useful concrete steps for the assessment of individual subjects in Metodický pokyn č. 21/2011.

In contrast to summative assessment, **formative assessment** is process-oriented and diagnostic; key aspects are displayed in Table 2. Its key role is in helping a participant to form their own learning process, by the systematic collection of data providing information about their current level of learning (Trumbull & Lash, 2013).

<table>
<thead>
<tr>
<th>Formative assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Formative</em>: ongoing, to improve learning</td>
</tr>
<tr>
<td><em>Process-oriented</em>: how learning is going</td>
</tr>
<tr>
<td><em>Diagnostic</em>: identifies areas for improvement</td>
</tr>
</tbody>
</table>

Table 3: Characteristics of Formative Assessment (adapted from arc.duke.edu, n.d.)

According to Heritage (2007), the core elements of formative assessment can be illustrated graphically, as shown in Picture 2:

1. Identifying the “gap”
2. Feedback
3. Student involvement
4. Learning progression

Figure 2: Core Elements of Formative Assessment (Heritage, 2007)

In CLIL classes, this four-step diagnostic and progress-oriented process embraces:
- “development in foreign language competence,
- development in the content area,
- development of positive attitudes towards both the foreign language and content area,
- development of strategic competence in both the language and content,
- development of intercultural awareness and promotion of intercultural education” (Massler, 2011, p. 118).
Firstly, a gap between the current status of a student’s knowledge and the desired educational goal must be identified. There are many activities and strategies for carrying out this first step of formative assessment in the classroom. Via this link, you can find 60 concrete strategies compiled by Lambert (2011), which can also be useful in CLIL classes.

In terms of CLIL’s uniqueness, it is very important to identify whether the “gap” is caused by the lack of subject knowledge and understanding or by the failure of communication caused by insufficient foreign language acquisition. This requires offering some alternative ways of expressing understanding. Massler, Ioannou-Georgiou and Steiert (2011) recommend integrating hands-on activities and symbolic representations, such as pictures, pictographs, maps, diagrams, pantomimes, drama techniques or even using one's mother tongue. In Figure 3, there is an example of an alternative way of checking whether the learners can differentiate between edible and poisonous mushrooms. The biology CLIL teachers can assign this simple pictorial task to their primary learners. Instead of listing the English names of the mushroom (e.g., toadstool, parasol mushroom etc.), the learners are only required to circle the edible ones. This simple task enables the teacher to see whether the learners have acquired this practical knowledge or not.

Figure 3: Example of an Alternative Way of Identifying “Gaps” in Learners’ Understanding. Biology CLIL Lesson (Babocká, 2015)

The importance of identifying a language “gap” lies in the necessity of language skills in mastering the content (academic) knowledge. The language skills of CLIL learners are of two kinds:

A) BICS, or Basic Interpersonal Communicative Skills, which are necessary for communication in common social situations, e.g., requesting or apologizing. These skills are not inevitably bound to the CLIL environment; they are a basic part of each EFL or ESL course.

B) CALP, or Cognitive Academic Language Proficiency, comprises specialized language skills related to academic content (in subjects such as biology, history, geography, etc.). Specialized vocabulary forms the biggest part of CALP. Without CALP, learners cannot master the academic content; therefore, these skills should be a focus of language assessment in CLIL classes (Massler, 2011).

The information about the “gap” can serve as an important feedback for:
• the CLIL teacher determining whether the student has problems with content, language or both. Subsequently, the teacher can support the student and adjust the methodical procedures and activities to help him or her attain the learning goals;
• the student, for whom the feedback can be motivating and activate his or her effort in further learning.
• An interesting metaphorical understanding of the relationship between feedback and learning is provided by Race (n.d., p. 2), who compares feedback to "ripples on a pond". He says: "Imagine feedback bouncing back into the 'ripple' of learning. This keeps the ripple going, increases the intensity of the rippling, and deepens learning. If there were to be no feedback the ripple would tend to fade away and die out. The learning would vanish".

In order to maintain learning, feedback should have certain qualities. It should be:
• timely = the sooner the better,
• intimate and individual = it should be adapted to the personality traits and needs of an individual,
• empowering = it should always foster and consolidate learning,
• opening the doors = it should be concrete; when something is assessed as ‘excellent’, the learner should know exactly what is excellent and why,
• manageable = the teacher should differentiate between routine feedback and important feedback, managing it in a beneficial way (Race, n.d.).

More about the qualities and attributes of feedback can be found here.

Another feedback model is the so-called PIPS model; to learn more, click on this link and watch the video:

The student is always an active participant in the process of formative assessment. He or she cooperates with the teacher and other students in order to understand how their learning is progressing, what their strengths and weaknesses are and what action for improvement is necessary (Heritage, 2007).
Self-assessment is a beneficial way in which students can participate in the process of assessment. However, assessing one's own learning process, language or learning product is not easy, and even young learners should be helped to develop self-assessment skills. In this link you can see how it is possible to deal with this matter and guide children in self-assessment.

Another way of developing the self-assessment skills of CLIL learners is to motivate them to create their own learning journals. Their format consists of two parts, content and language, which are divided further into three sections, as is portrayed in Figure 4.

![Image of a computer screen with a mouse and a document]  
Figure 4: Example of 'My Learning Journal'

Learners can note down what they have learned or what they see as problematic after each lesson or even at home. By means of learning journals, students can see their own progress and detect the areas requiring them to work harder. Such information can be beneficial for the teacher, who can check the journals during or at the end of each semester.

Another option is using comparative self-assessment sheets oriented mainly towards content and foreign-language integration (Figure 5). A learner can compare his or her self-assessment with the assessments of their peers and the teacher, and find out whether it is objective.

The last element of formative assessment is always reflected in learning progression; step by step, the student approaches the desired educational goal (Heritage, 2007). More on the elements of formative assessment can be found here.

**Alternative assessment — portfolio assessment**

There is a special type of assessment, often classified as ‘alternative assessment’ (Huang, 2012), resulting from a combination of formative and summative aspects of assessment. In summative terms, a portfolio is product-oriented and judgemental because it comprises the results of a learner's work such as written work, projects, test results, essays, drawings, notes, etc. At the same time, it can be considered formative, because this collection of samples of a learner's work is purposeful,
systematic and ongoing. Self-assessment and peer-assessment sheets; teacher’s and parent’s comments are included in portfolio, too. This means that it maps the complex learning process and progress of a learner over a period of time so that it offers “a more complete picture of a child’s [learner’s] work and development than any other assessment technique” (Ioannou-Georgiou & Pavlou 2003, p. 9). The assessment of a portfolio is mainly through qualitative reports and the criteria for assessment are elaborated with the assistance of learners (Huang, 2012).

Nowadays, the teachers and learners can opt for a “pen and paper” portfolio, or they can try to create an electronic portfolio. The means for this method are available at eduClipper’s web page here. Click here to see the guidelines on how to make an electronic portfolio.

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content + Language</td>
</tr>
<tr>
<td>I can explain the terminology of the subject area.</td>
</tr>
<tr>
<td>I can communicate the content clearly in the foreign language.</td>
</tr>
<tr>
<td>I can use examples to support my understanding.</td>
</tr>
</tbody>
</table>

Figure 5: Example of Comparative Self-Assessment Sheet for CLIL Classes (adapted from hereoora.tki.org.nz)

The difference between **analytic** and **holistic assessment** can be characterized in terms of analytic and holistic approaches to a student’s work and marking schemes. While analytic assessment marks prescribed components of a final student’s product (e.g. an essay, test, or invention); the holistic form looks at the whole product and assesses it as a whole. Therefore, analytic assessment is more objective; it provides a more complex diagnosis of a student’s work (Rea-Dickens & Germaine, 2003). Both analytic and holistic assessments use **rubrics**. Rubrics are guidelines specifying the quality of the whole product or its components. Based on these guidelines, a student’s work or its parts can be assessed as **satisfactory, good or excellent**.

Figure 6 portrays an example of a holistic CLIL rubric. Mertler (2001, in Barbero, 2012, p. 50) characterizes it as a "kind of summative assessment as it requires the teacher to score the overall process or product without judging the component parts separately".
As the example of a holistic rubric (Figure 6) shows, the descriptors integrate both content (knowledge of the subject) and language (specific vocabulary). However, this does not apply to an analytic CLIL rubric, where the different parts of both phenomena are assessed separately, as shown in Figures 7 and 8.

Figure 6: Example of a Holistic Rubric (Barbero, 2012, p. 50)

<table>
<thead>
<tr>
<th>Scores</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Unsatisfactory</td>
<td>Student shows no knowledge of the subject and specific vocabulary.</td>
</tr>
<tr>
<td>2 Almost satisfactory</td>
<td>Student is lacking necessary background knowledge and uses specific vocabulary wrongly.</td>
</tr>
<tr>
<td>3 Satisfactory</td>
<td>Student has essential knowledge of the subject. He uses specific vocabulary correctly.</td>
</tr>
<tr>
<td>4 Good</td>
<td>Student shows a complete knowledge of the subject. He properly uses specific vocabulary.</td>
</tr>
<tr>
<td>5 Excellent</td>
<td>Student shows a complete and thorough knowledge of the subject.</td>
</tr>
</tbody>
</table>

Figure 7: Content – General Rubric (Barbero, 2012, p. 51)

<table>
<thead>
<tr>
<th>Score</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic:</strong> Concepts Classification</td>
<td>Identifies concepts, classifies them and formulates verifiable hypotheses on process / problem solving</td>
<td>Identifies concepts, classifies them and formulates hypotheses on process / problem solving</td>
<td>Identifies concepts, classifies them and formulates hypotheses on incorrect process / problem solving</td>
</tr>
<tr>
<td><strong>Principles Sequences</strong></td>
<td>Performs the procedures, collects and organizes data, makes appropriate conclusions</td>
<td>Performs the procedures, collects and organizes data, makes approximate conclusions</td>
<td>Performs the procedures, collects and organizes data, makes wrong conclusions</td>
</tr>
<tr>
<td><strong>Evaluation Creativity</strong></td>
<td>Evaluates the results obtained, compares them with the hypothesis formulated, and confirms the results</td>
<td>The results coincide only partly with the concepts and assumptions made</td>
<td>The conclusions have no relationship with the concepts and assumptions made</td>
</tr>
</tbody>
</table>
The analytic language rubric is oriented towards both accuracy and fluency of a learner’s language. By combining the content and language rubrics, the teacher can receive an overall picture of a learner’s output and focus on parts that require the most improvement. Another example can be found here. In today’s digital world, it is possible to create rubrics online. If you want to do so, just click on this link.

Testing

Testing is a way of collecting data and information for evaluation purposes. In order to do this, testing does not employ only standard tests but various means of data collection: questionnaires, interviews, observation, examination of documents and portfolios, exams, tests, and quizzes (Genesee & Upshur, 1999). According to these authors (ibid.), all these methods can be considered as “tests” if they meet the criteria of content, methods and measurement:

- **Content** = what a test measures. When the tests measure whether or not a learner has achieved the course objectives, we are speaking about achievement tests. This type of test is connected to diagnostic tests, the purpose of which is to diagnose the gaps in a learner’s knowledge as well as the causes of these gaps. The degree of possible application of a learner’s knowledge in the real world is measured by proficiency tests. The final but not less important category is that of placement tests, the role of which is to place learners into certain groups according to their knowledge and competence (Gondová, 2010).
  
  From another perspective, content may represent the subject matter of the test. For example, whether the test is about American history or the physiology of mammals, or whether it measures productive communication skills, both speaking and writing.

- **Methods** = the ways in which the test elicits the desired performance; for example, multiple choice examinations can be used for eliciting knowledge about American history or the physiology of mammals. On the other hand, a writing composition or an essay will be preferable for testing writing skills.

- **Measurement** = the scoring systems of the tests and frames of reference used for the interpretation of scores. In terms of the interpretation of test results, tests can be divided into norm-referenced tests, where the learner’s results are compared to those of their classmates. In criterion-referenced tests, the learner’s results are compared to set standards in order to find out whether and to what extent the learner has achieved these standards (Gondová, 2010).

  As for testing in CLIL, teachers often have to rely on making their own tests and corresponding materials since there is still a lack of ready-made tests for Content and Language
Integrated Learning. Alternatively, where they are available, they are created for different contexts and curricula (Steiert & Massler, 2011). Another option is to adapt the existing tests to an appropriate context; this, however, is very demanding and time consuming.

While this chapter deals with assessment in CLIL classes in general (not CLIL in biology or history classes etc., specifically), we draw attention to the concise list of recommendations for improving test-construction skills prepared by Indiana University Bloomington.

Creating online tests is another excellent and timesaving option. There are several portals providing this service to registered users for free (e.g. here, here, and here).

**Conclusion**

All three phenomena — evaluation, assessment and testing — are interconnected but still unique. They play an inevitable role in CLIL classes since they capture students’ attention, generate appropriate student-learning activity, provide timely feedback to which students pay attention, help students to internalize both content and language standards, generate marks or grades that distinguish between students and provide evidence for others outside the course (parents, teachers, researchers) that enables them to judge the appropriateness of the course’s standards (Gibbs 2003 in Surgenor, 2010).

This chapter was designed to introduce the main milestones of assessment to the readers (in-service or pre-service CLIL teachers) and draws on the general principles of assessment in education.

Although familiarity with these formal principles and criteria is essential and helpful, the crucial question asked by CLIL teachers is: how can we assess the learners in CLIL classes practically? To answer this question, we applied the general principles to CLIL’s specific terms and provided teachers with some practical hints in the form of examples, charts, pictures, web links, video links and links to useful documentation.

The answer to the question about assessment in CLIL classes is not definitive. The teachers must always bear in mind the uniqueness of their educational context, their school’s possibilities, the availability of material equipment and, mainly, the individualities of their learners. It means that the teachers still have to learn how to assess their learners. It is an ongoing process of looking for the best methods of assessment that meet the school context, the needs and requirements of the learners and, of course, those of the teacher. We hope that this chapter will help the teachers to find a route through this long-lasting process in a positive manner.

**Acknowledgements**

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**References**


15 Teaching presentation skills in CLIL

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Introduction

Teaching presentation skills (PS) is one of the areas of English for Specific Purposes (ESP) that have made their way from in-service management training (Ellis and Johnson, 1994) to higher education within the framework of ESP courses offered by business colleges and economic and finance faculties of universities. Nowadays, graduates of business studies are expected to attend and/or make presentations most probably in English on a weekly basis during their business careers. At the same time, a survey on job-experienced learners of business English (BE) found that BE teachers are also expected to be able to make a presentation (Mészárosné Kóris, 2009), which might be a frightening expectation to teachers lacking business experience. The chapter provides an introduction to teaching presentation skills, which in many respects is similar to skills-based EFL teaching, completed by a comparison of the presentation teaching methods of two teachers in the form of CLIL through the insider perspectives.

What is a presentation?

The presentation can be traced back to the age-old art of rhetoric which was defined by the illustrious ancient orator, Cicero as “speech designed to persuade” (Eidenmuller, n.d., Scholarly Definitions of Rhetoric section, para. 3). The definition of a modern presentation offered by one of the earliest sources on BE teaching, Ellis and Johnson (1994, p. 222) is as follows: “a pre-planned, prepared, and structured talk which may be given in formal or informal circumstances to a small or large group of people. Its objective may be to inform or to persuade”.

For the purposes of the present chapter, business presentations are relevant as they are the type of presentation that English teachers are most likely to teach in CLIL. Sazdovska (2009, p. 245) offers the following definition for teaching purposes: “A business presentation is an extended talk given formally, most often by an individual before a group of people who constitute an audience, with the aim of achieving a commercial advantage (e.g. sell products or services, inform about corporate changes or performance, raise company or brand awareness, etc.).”

The evolution and types of presentations

A look at the evolution of presentations shows a clear tendency of diversification. The political and philosophical speeches made in Ancient Greece can be considered the first presentations. Such presentations were made by Cicero, Socrates, Plato, Aristotle and their contemporaries in the form of discourse. In the Middle Ages another type of presentation, the educational presentation, emerged in two areas: theology and science; which meant reading out quotations from famous, well-known texts to prove credibility (Kovács, 1991). Modern presentations abound in types according to their content, aim and audience: political, educative, academic, scientific, popular scientific, business, theological, marketing etc. (Carrington-Musci, 1991; Kovács, 1991; Martin and Pemberton, 2003; Medgyes, 1995; Moore, 2002; Simons, 2004); the list is probably endless as even the mentioned ones have subtypes.

It is not only the context of a presentation that can vary but also the channel through which it reaches its audience. Presentations can be made live as well as through the internet, they can appear on television, video or DVD without the presence of the speaker (Sazdovska, 2009) or even in the form of a computer file in which case a presenter is not always necessary.

McGee (1999) is the only source to mention the length of a business presentation taking it between 2 – 30 minutes. He adds that, in his long experience, most presentations take 8 - 12 minutes depending on the situation, the amount of time the audience has and their position in the company hierarchy. The higher their position, the less time the presenter is given. Business
presentations are typically accompanied by visual aids, and other techniques to keep the audience's attention such as gestures and eye contact. The message of the presenter is usually reinforced through circling documentations like reports. McGee claims that the typical audience of a business presentation is a small group of not more than 16 people, sometimes the audience size is larger than that. McGee also underlines that business presentations have expected types of language, politeness, level of formality, often set phrases, format and behaviour, even a dress code relevant in the specified context. The small size of the audience is one of the factors that guarantee conformity to the norm.

**Group presentations**

When discussing presentations, sources usually refer to one presenter and several people in the audience. However, in some cases, for example in higher education (HE) classes with too many students compared to the little time available for practice, the setting is reversed: there are up to four or five people in a group of presenters and only one or two members in the audience representing the school. Even sources by professional business presentation trainers rarely mention group presentations; one of the few is Boyd (2003). Though what he can offer is just the usual list of do-s and don’t-s of business advisors that used to be published in printed form and appear nowadays on the internet, the list at least provides a starting point for HE students when having to prepare their first group presentation.

Németh (2006) describes group presentations at scientific or press conferences, conference workshops and round-table talks. In her definition, a group presentation is a session when a given topic is presented by several presenters. Such presentations have a specific code of conduct including all the presenters being present and visible during the whole event, they take their turns in a particular order according to their roles. The topic under discussion, the presenters' aims and appearance show homogeneity. The advantages of a group presentation are that it is more interesting and more respectable for the audience, it is more authentic both for the presenters and the audience; also, beside causing a pleasure of joint work, it largely diminishes presenter anxiety. The disadvantage is that group presentations might result in many more blunders than single person presentations. A typical example is the metacommunication of the presenters. A group presentation should be regarded as a carefully co-ordinated team effort implemented on stage, in front of the public, which can only be successful if the participants' cooperate. Their metacommunicative messages should be in unison, otherwise the whole group's work will be downgraded by the audience. Also, it is difficult to keep to the pre-arranged roles, time and content. Some presenters might talk too long, or digress from the topic, or say something that is not in line with the others' notions regarding content.

What business presenters can utilise from her description is that one should consider if the chosen topic is suitable for group presentation, the aims should be clarified, each presenter should be given a proportional role, there should be a group leader who introduces the presentation and the presenters and pays attention to all present as well as the time limits, there should be a choreography as to who says what in which order and for how long, and that special attention should be paid to questions. Presenters are also advised to prepare for answering questions; they must decide what they want to speak about in their own speeches and what they want to discuss only if it arises. It is vital to consider what questions might arise in terms of content; even in spite of thorough preparation, 20 to 30 percent of the questions might take the presenter by surprise. Also, it is important to clarify how the questions will be answered: one by one, collectively, collected in written form, collected before the session, etc.

**The genre of the business presentation**

The business presentation being a relatively new genre has been addressed by few studies. The communicative purpose is central to defining a genre, most genre studies elaborate on that aspect. Regarding business presentations, McGee (1999) explains their purpose from two angles. “The aim of the presentation, from the speakers’ perspective, is to inform or persuade. The aim from the listeners’ perspective, is to obtain information in order to make a decision at some
point in the future" (The business presentation as a speech event section, para. 1). The business people Pozdena (2010) interviewed for her research indicated that they follow a kind of seductive strategy to achieve persuasion called "selling themselves" (p. 60). They try to create an atmosphere in which the audience trusts the presenter so that the subsequent selling becomes much easier. Thus a gradual goal structure can be detected: appealing to the audience, establishing trust, selling a product or service.

Sazdovska (2009) in her intentionality model defines the context of business presentations as follows. The rationale, i.e. the context in the case of business presentations is comprised of the setting, the discourse community and the communicative purpose. The setting refers to the time and venue of the presentation together with the occasion of the presentation. The discourse community is made up of business people, most probably speakers of international English. Discourse communities are often established based on sharing a certain characteristic for example identical first language or geographic affiliation, in this case business people have an endeavour in common, namely profitability. The discourse community might have subgroups based on “familiarity, status, age, gender, nationality, religious or political affiliation” (p. 246). The communicative purpose is to achieve some economic benefit either in the literal sense, i.e. profit or in the non-literal sense, for example awareness raising, improving work standards, developing efficiency, etc. When preparing a talk, the so-called hidden agenda or an implicit aim such as achieving promotion, and the hidden audience, meaning the leaders receiving information indirectly, should also be taken into consideration. In Sazdovska’s model, these are also included in the communicative purpose.

The role of form and register

Presentations usually consist of two sections: a monologue, the main part of the presentation told by a single speaker and a dialogue part, i.e. the question-and-answer session at the end of the talk. These two parts need to be treated differently.

Thompson (1994) discussing dialogues versus monologues classifies business presentations as monologues where “the turn-taking machinery is suspended” (p. 59) and points out that monologues are close to written texts in that they are both carefully planned producing a textual whole and produced by one person. At the same time, monologues are delivered and perceived in real time, therefore, the listeners have little chance to retrieve the exact wording used; which makes presentations similar to discourse. Powell (1996) also compares the best presentations to conversations between the speaker and the audience. In this respect, similarity can be discovered to another ancient philosopher, Plato’s definition of rhetoric: “the art which treats of discourse” (n.d., para. 28).

At the end of the monologue section, presentations have a turning point and change into real dialogues, which causes additional difficulties to the presenter. The mode and register shifts, the rather formal monologue is followed by more or less informal questions and answers. The presenter’s exclusive leading role is challenged, his or her feeling of security provided by the pre-prepared nature of the monologue section is weakened or might even be lost due to the questions that audience members ask. The questions may partly be predicted by the presenter and prepared an answer for, however, the presenter’s strategic competence still needs to be activated to handle unforeseeable content and questioner personality.

The questions and answers session

Course books dedicated to presentation skills in English (for example Powell, 1996 and 2010) attempt to give an exhaustive list of possible types of questions a presenter might face (such as clarification, factual, opinion, difficult, hostile, etc. questions) and to teach techniques for tackling them. Probably, such lists are based on course book writers’ personal experiences as research has identified some question and answering types not treated in course books. Bereczky and Sazdovska (2005) analysed student presentations in a business college and identified a new type of question. The layered question, when the questioner asks a series of questions within a single turn, puts the presenter under pressure by straining the memory. The
layered question can take the form of narrowing focus, providing alternatives or posing a group of related questions. In an extreme case, they observed a question containing six subquestions. Such questions seem to be difficult for learners to handle, even for students who are at a near native level of proficiency. There is an obvious need to point this out to students and to instruct them to split a layered question into its constituents and answer each of the subquestions one at a time.

Furthermore, Bereczky and Sazdovska (2005) pointed out that not all types of questions treated in course books actually appeared in the question-answer session of the examined student presentations, namely unnecessary, irrelevant and personal questions did not occur. Also, they found that one of the phases of presentation explicitly taught by the course book their participants used was completely missing in the student presentations they analysed. The ending round of the question answer session is making sure the questioner is satisfied with the answer, typical expressions that can be used are “Does that answer your question?”, “Is that clear?” and “May we go on?”. None of these phrases appeared in the 17 presentations observed; in fact, the whole round was missing. The authors inferred that this round is not necessary since questioners usually give up the floor only if they are satisfied with the answer. The questioner’s “thank you” or “yes, I see” or even just a nod was a sign of questioner satisfaction to the presenters and they went on to take another question. The initial conclusion from the lack of the round was that course book materials should be adjusted, however, the phase probably has relevance when presenting in front of larger audiences than a classroom.

The practical side of teaching PS

Presentations are a new area for foreign language instruction; there are no universally accepted standards yet. The first books written on teaching PS in English addressing teachers and students of BE were published in the 1990s (Campbell, 1990; Comfort, 1995; Cotton and Robbins, 1993; Powell, 1996). PS is one of the areas of ESP that come from management training (Ellis and Johnson, 1994); even a few years ago PS was only taught to in-service business staff. In Hungary, undergraduate business courses did not use to provide any explicit instruction in PS; though they occasionally required students to make presentations on certain business topics (Kovács, 1991). One of the first attempts to instruct students in presenting in English was the experiment conducted at the University of Economics, Budapest, described by Kovács, where foreign language teachers made presentations on linguistic, cultural and business topics in the foreign language they were teaching in order to serve as good examples for students for their presentations in the future both in the school and in the business environment. By now, we know that giving a good example, which was an innovative idea in the 1990s, is not enough on its own. Nevertheless, there are hardly any survey data available on current practices in teaching PS.

The communicative approach in teaching presentation skills through CLIL

The endeavour of contemporary language teaching to develop students’ communicative competence, i.e. “the ability to use a language” (Tarone & Yule, 1989, p. 17), also applies to teaching presentation skills through CLIL. The importance of communicative competence for professional communication has been emphasised by Kurtán (2004). She notes that though communicative competence is the precondition of effective communication, a related concept, intercultural competence must also be developed if students are to be prepared for an international labour market.

Though presentation classes in tertiary education outside English speaking countries constitute EFL environment, all four competencies are involved in the instruction provided, which is also reflected in the content of the most widely used course books (Comfort, 1995; and Powell, 1996) though they do not explicitly list references. Grammatical competence is catered for in the form of covering the most common structures and vocabulary to enable students to communicate their ideas in a comprehensible and accurate form. As to research into the
elements of communicative competence, McGee (1999) originates non-native speakers’ presentation skills in both linguistic and sociolinguistic aspects.

The above course books treat discourse competence focusing on three main aspects: organising content, delivering a presentation and listening to, i.e. being able to follow and understand a presentation. Concerning organisation of content, two basic structuring principles are mentioned in research on presentations: the opening, agenda, body, closing (OABC) framework (Baker and Thompson, 2004) and the situation, purpose, audience and method analysis (SPAM) model of creating professional presentations (Silye and Wiwczaroski, 2003).

The mentioned course books treat sociolinguistic competence through instruction regarding varying levels of formality, creating rapport with and exerting influence on the audience. Research has been more concerned with intercultural aspects.

Although the area of strategic competence has not enjoyed much attention in research perhaps due to the wide-spread belief that communication strategies cannot be taught, both of the above mentioned course books devote several chapters to explicitly teaching the techniques of effectively starting and ending a presentation, question types that are likely to appear during the question-and-answer session at the end of presentations as well as to suggested strategies for answering them. Thus, the course books imply that these strategies are teachable. Thereby, agreeing with the similar view expressed by Tarone and Yule (1989) Bereczky and Szadovska (2005) tested this assumption by analysing 17 students’ presentations at the end of a presentation skills course. They found that most of the answering techniques were successfully applied by student presenters. However, the question welcoming phrases (e.g. That’s a very important question.) were used somewhat schematically causing one presenter to answer a question with the following words “That’s a very important question and now I can’t tell you ...” (p. 71). Regarding instruction, the conclusion drawn from these findings was that while the rarely appearing question types and the satisfaction checking strategy might be given less attention in instruction, clarification on the side of the presenter and discouraged practices like directly saying “no” would deserve more attention.

Teaching PS is largely influenced by the teaching material used. This is even more true in classes where the teacher has not had the opportunity to make numerous business presentations like most ESL/EFL teachers. Szadovska (2009) pointed out that PS course books meant for ESL/EFL learners rarely provide contextual information about their sample presentations, which information is usually present in materials for native speakers learning PS in their mother tongue. Information on the situational context would greatly contribute to students’ sociolinguistic competence.

Szadovska (2009), nevertheless, notes that with the development of technology it has become really easy to find real presentations on the internet and study them with students. One can also find professional presenters’ own websites with videos featuring the trainer presenting (for instance Boyd, 2012). Such videos will be much appreciated by in-company students who can compare their own experiences to the trainer’s performance and comment on the level of professionalism, its usefulness and life-likeness in their work context. Such sources are also important for teachers who have not gained business work experience and who have not had many opportunities to perfect their presenting skills.

Apart from role-plays and simulations favoured by the Communicative Approach heading towards fluency and comprehensibility (Richards & Rodgers, 1986; Kennedy & Bolitho, 1984) a recent trend, i.e. the task based approach suits presentation skills instruction perfectly; and, in fact, is highly recommended by several sources (e.g. Mennim, 2003; Sowden, 2003).

**The teacher’s role**

Teaching presentation skills constitutes a complicated task not only for the learner but also for the teacher. Similarly to learners, teachers have to cope with two tasks at the same time: they teach a foreign language and a professional skill simultaneously. Both Ellis and Johnson (1994) and Biri (2004) identify one of the most debated issues among Business English teachers as the question of teaching language or skills. They conclude that though in some respects the ESP
teacher is a skills teacher, he or she is always first a language teacher. Darn (2009) states that CLIL classes much resemble skills-based EFL classes in terms of task types, however, content is as important as language.

**PS teacher interviews**

The presentation as a typical element in BE classes, as well as a course requirement in most college subjects emerges as a good point for comparison between instruction provided by an English teacher and instruction provided by a subject teacher. Conclusions can be drawn regarding PS instruction for teacher education. In an investigation for her dissertation Bereczky (2012) studied a franchise business college operated in Hungary. On the basis of course data, two basic types of teachers provided instruction on presentations in the selected franchise business college, teachers with a TOEFL degree and teachers with a business degree from various fields of economy. The investigation hypothesised that the situation was similar in franchise business colleges in Hungary where the language of tuition is English and that the teacher’s prior education led to differing teaching methods, which might in turn influence the effectiveness of instruction. Therefore, the research question for the investigation was how the teacher’s education (business degree vs. TEFL degree) influenced the methodology used for teaching PS.

Two teachers of the selected business college in Budapest were interviewed in an attempt to gain data enabling comparison between their PS teaching practices. Both teachers were Hungarian, non-native speakers of English; their names used herein are pseudonyms. The teachers were chosen by typical case sampling; Árpád, a male teacher of 35 had an MSc degree in Economics, while Berta, a female teacher of 29 had an MA in English Language and Literature and a Certificate in Teaching English for Business.

At the time of investigation Árpád was teaching Contemporary Business Management, while Berta was teaching Business English to the students observed. Both teachers included instruction on making presentations in their coverage of the mentioned subjects, and both subjects required students to make a final presentation as part of their assignments for the course. Students in the Contemporary Business Management class were expected to present in groups of three or four for about 15-20 minutes, whereas students in the Business English class had to present individually for approximately 10 minutes. Students observed in the two classes were not identical.

For the purposes of the presented investigation, the questions related to the following areas, originally developed for a comprehensive PS teaching survey using an interview protocol (Appendix B), were retained: the teacher's education and teaching experience, PS course content, feedback and assessment. To complete the investigation, seven further questions were added about the teacher's opinion on his or her own presentation teaching practices, the problem of teaching a skill in a foreign language and ways of developing the effectiveness of teaching. For triangulation purposes, altogether 30 international students were observed while making presentations in the courses taught by the interviewees. The observations were put down in the form of impressionistic field notes.

**Results of PS investigation**

In describing the findings of the interviews, the order of the interview protocol sections are followed.

**Background: Teaching in general**

Árpád has been teaching for seven years. He holds an MSc in Economics and prior to teaching he earned several years of direct business experience at a major, international auditing firm. He manages a small accounting firm of his own. At the investigated institute, he teaches Professional Development, Contemporary Business Management, Managing Self and Others, and other management subjects. He deals with Presentation Skills within the subjects he teaches in the first year, for example in the course of Professional Development presenting takes up 25%,
i.e. about 36 classes of 45 minutes. Berta has been teaching for eight years. She holds an MEd in English Language and Literature, a Certificate in Teaching English for Business and an MA in Translation and Interpreting between Hungarian and English as well as German. She has gained no direct business or other experience apart from being self-employed. At the investigated institute, she teaches Business English, which includes about 30 classes dedicated to Presentation Skills.

**Teaching presentation skills at the time of investigation**

Árpád has taught Presentation Skills for seven years. He attended several in-service courses while working for the auditing firm on making successful presentations, but he has never been instructed to teach the subject. At the same time, it must not be forgotten that it is common practice in HE to employ experienced experts of certain fields with or without a pedagogic degree relevant to their specialisation. Berta has taught Presentation Skills for three years, she has a Certificate in Teaching English for Business, which includes presentations. The course leading to that certificate was organised by the London chamber of Commerce and contained both presentation practice and methodology for teaching the subject.

Both teachers were aware that teaching PS is dealt with in several subjects simultaneously in their institution, but is mainly addressed in Business English and Professional Development during the first year. Almost all other subjects also required students to make presentations, usually in small groups of 3 or 4, where the teachers are free to include as much information about presenting as they want, most of them describe the evaluation criteria and some provide even more instruction. Neither teacher had detailed information on what the other teacher deals with in terms of presenting.

The basics of methodology include the following. Árpád teaches presentations in lectures and seminars, he shows student presentations video recorded in previous years and points out positive and negative instances and practices; his students are expected to make a group presentation, which is also recorded, at the end of the term about an economic topic. Berta only instructs in seminars, she also illustrates presentations but she shows presentation teaching videos; she also deals with rhetoric elements of presenting beside organisation and delivery (for a sample course content see Appendix A). During the course, students practice presenting with several short tasks solved in small groups and pairs (to form an audience) as well as individually. However, the final presentation is to be made individually, in front of the whole class, and is not recorded.

The two teachers agreed that the fact that PS were taught in a foreign language was more of a problem for students than for the teacher. Árpád attributed the students’ problem to the need to learn the presenting techniques at the same time as the specialised vocabulary, while Berta attributed it to students’ lower than intermediate English proficiency. Árpád also mentioned students’ problem with understanding presentations “when their English is not good enough”. Berta asserted that teaching in a foreign language is no problem for her, as she had studied it in English and had never taught it in any other language. Árpád, however, described his teaching experiences as follows: “Well, first I was terribly afraid of it, but later I got used to it. […] Obviously, my way of expression is less sophisticated than in Hungarian.”

Berta did not mention many changes in her methodology compared to a GE class caused by the fact that presenting is taught in a foreign language. She only mentioned that when the students’ English proficiency is lower, she cannot use some of her materials or she has to adapt them. Árpád mentioned making an effort to achieve that students use English not only during whole class communication and presenting but also in small group activities. He uses the same transparencies in English and Hungarian, only the language is different, and he uses the same cases as illustration, for example in games. What is different when he teaches in English is that he gives simpler examples, he uses more paraphrasing and he returns to the same thing from time to time.

When asked about effects of their prior education on their teaching the two teachers reacted significantly differently. Árpád repeated twice that he does not care too much about grammar;
though he tries to speak accurately, he does not “have a bad conscience about mistakes”. He is more concerned about inaccuracies concerning economics. He does not consider it his task to correct grammatical mistakes, except very serious cases, nor does he have time for that within the limitations of the term time. However, he requires that students state only things in their presentations which are accurate, adequate and valid in terms of economics. He said one does not need to be an English teacher to be able to teach presenting in English, but the teacher’s language proficiency must be over intermediate. The fact that he reacted emotionally together with his specifying “English” as the exclusive area he would like to learn more about to develop his teaching presentation skills and repeating the word three times reflect that Árpád is concerned about his language proficiency. In fact, he already has the plan to do so, he would like to teach as guest lecturer in an English-speaking country for a while. Berta commented that she does not feel it a problem that she does not hold a business degree, adding that of course one can always develop and she would be interested in learning more about how presentations are used in business life, for instance she would be willing to take a specialised course in that field. Presently she relies on information that her students involved in company courses provide about their companies’ practices in this respect. She is also interested in rhetorical skills, relations between the presenter and the audience, and feels psychology would give her more insight into persuasion through presenting.

**Course content**

Both Árpád and Berta marked the following items: preparation, adapting to the audience, brainstorming, how to arrange the presentation site, visual aids, handouts, effective presentation openings, structuring content, when to pause in a sentence, how to use voice for emphasis, how to use repetition for emphasis, how to create rapport with audience, how to deal with questions, using body language, the questions a presenter gets from the audience.

Only Árpád marked the following: differences between written and oral communication, transparencies, handouts, marking/connecting presentation phases, expressing causes, intonation, build-ups (using a short and simple conclusion to convince audience), simplification for powerful effect, words and expressions used in business, formal/informal style differences, question types addressed to a presenter, other stylistic elements, summarising content at the end of a presentation, question answering strategies, other: balance of presenters at group presentations. Only Berta marked the following: dramatic contrasts, tripling (lists of three to make something memorable), knock-downs (opposing statements to prove your point), useful expressions, linking words, question answering strategies, rehearsing a presentation.

Neither teacher marked: technical skills: OHP, PowerPoint, whiteboard, projector, giving examples to illustrate the speaker’s point, expressing effects, expressing purpose, pronouncing technical words, word stress, sentence stress, how to use grammar to focus audience attention on message, how to use adjectives to positive/negative emphasis, rhetorical questions, machine gunning (using lists of 6+ to impress audience), words used with different meaning in business (e.g. capital), business word partnerships, fixed expressions/collocations (e.g. get down to business), reducing stress when speaking.

As to other ways of improving instruction efficiency, Árpád mentioned inviting guest lecturers to the school who could make a presentation on their specialisation area related to his subject such as achieving professional appearance, CV writing and job interviews and students could study both the topic and the way of presentation. Berta explained that she would like to provide more opportunities for students to make presentations, which she could record on video and analyse together with the students. She would also like to take her students to companies to watch professional presenters “in action” so as to raise their awareness about the relevance of these skills.

Árpád says he is content with the way he teaches Presentation Skills because, though it is certainly not perfect, he is present at the students’ first attempts, during some of their course presentations through the years as well as at their final dissertation presentation, and he can see the development. Also, this way students get the necessary experience to form a good basis for
further training in their future jobs. Berta is not totally content with her own teaching due to lack of time and technical resources dedicated to the subject by the school.

Implications of PS interviews and PS student questionnaires

One interesting finding is that if a teacher provides instruction in a subject which is made up of knowledge from two originally distinct areas, such as Presentation Skills, and if that teacher is only competent in one of those fields, he or she will probably feel the need to gain the missing knowledge, though they might not state that the lack of information causes feelings of uncertainty. As expected, the teachers' education caused some differences in their perception of methodology used in instruction, they state in their interviews that they concentrate more on their specialisation area. Focusing on the teacher's field of expertise is not accurately reflected in the proportion of the areas they ticked on the instruction content checklist (Appendix B, section B), Árpád also marked several points of rhetoric that he covers. Both teachers asserted that teaching the subject would deserve more time, probably a term, which might refer to a necessary change in the scheme curriculum.

An important finding from the students' point of view is that when assessing student presentations, both teachers evaluate the elements that they have covered during instruction and that the teachers are not constrained by rigid, uniform evaluation criteria, they can tailor evaluation to the pace of development of the class (for evaluation sheets see Appendices C and D). This finding points to a clear development in methodology compared to the practices of the 1980s (Kovács, 1991) when students of similar institutions were expected to make good presentations solely on the basis of watching lectures. Finally, though both teachers know about the existence of the other, there seems to be no sign of co-operation. Sharing tasks as well as placing double emphasis on especially difficult areas could compensate for lack of time.

The observation of student presentations lead to the conclusion that class B members, taught by Berta were more at ease during presenting, the reason might be the experience they gained in small groups combined with the lower number of students in the class. Class A students, taught by Árpád seemed to have made deeper research into their areas, but serious grammatical and vocabulary problems left the impression that their message was ambiguous. Some groups had not agreed on task allocation or had not rehearsed enough, which lead to confusion about who should handle the projector while a member was speaking.

CLIL in Hungary

The integrated treatment of language studies is a European Union priority and is supported through treating parts of international literature, history, geography, etc. in other than the official language of the school (Kézikönyv ..., 2007). CLIL is also included in Hungarian language teaching policies, for example the Világ – Nyelv program (World – Language Programme) of the Hungarian Ministry of Culture (2003-2008) was promoting language learning at all levels of education - primary to tertiary - and teaching any subject in tertiary education in a foreign language (Nikolov, 2007). The Hungarian government's action plan entitled Tudást mindenkinékre! Cselekvési terv 2006–2010, 2006, parts 13–17 (Nikolov, 2007) is another example of fostering CLIL.

The first criterion of organising CLIL is the teacher who can be of two kinds: a language teacher who has learnt another subject or a subject teacher who is trained in teaching their subject in a non-official language. At the moment there are few of them at the European level, and the educational system should pay more attention to training such teachers. The second step is to create collaboration between language and other subject teachers (Kézikönyv …, 2007; Nikolov, 2007). So a CLIL teacher is a 'rare bird'. Most language teachers in Hungary are not prepared to teach another subject in a target language (Nikolov, 2007). Though the few existing bilingual schools are very successful (Bognár, 1999), Hungarian teacher education is not prepared for this type of training (Bognár, 1997). This is also reflected in Nikolov and Öveges' (2009) finding that out of the 438 vocational schools they surveyed only two mentioned CLIL as an issue to be solved saying that they wished to receive some course materials for such purposes.
and no respondents mentioned CLIL among the successes or other respects of their schools. The number of schools offering CLIL education in Hungary shows a sharp rise from 15 secondary schools (Bognár, 1997) in 1987 to 78 primary and 132 secondary schools in 2008 (Vámos, 2009) providing 2-8 subjects in CLIL. The latest regulation of CLIL education in Hungary is the decree of the Hungarian Ministry of Human Capacities on dual language institutions (EMMI Rendelet, 2013), which deals with the minimum output requirements in terms of language proficiency by each year of such education as well as with the content of such courses.

Regarding PS teaching in HE, similarly to Austria (Alexander, 1999), HE in Hungary expects, candidates for BE teacher positions with two degrees: business and teaching (Bereczky, 2005). As this is rarely a viable option, the second best choice is economists or people with a business degree with some English knowledge. BE teachers’ situation in terms of qualification is similar to that of CLIL teachers in Europe who tend to be qualified either in language teaching or teaching a non-language subject but very rarely in both, which is the stated ideal according to European Union policies (Eurydice report, 2006).

References


MOORE, P. (2002). The good, the bad and the very ugly. NZ Business 16, 33-38.


Suggested further reading


For sample presentations, visit: https://www.ted.com
### Appendix A:
Sample Presentation Skills Course Content (Ellis & Johnson, 1994, p. 216)

<table>
<thead>
<tr>
<th>Skills Training</th>
<th>Language Training</th>
</tr>
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<tbody>
<tr>
<td>Presentations</td>
<td>Use of visual aids</td>
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<tr>
<td></td>
<td>Referring to visual aids</td>
</tr>
<tr>
<td>The content matter of the introduction</td>
<td>Organising the content of the introduction</td>
</tr>
<tr>
<td>The content matter of the body</td>
<td>Organising the content of the body, including signals and link words</td>
</tr>
<tr>
<td>The content matter of the conclusion</td>
<td>Organising the content of the conclusion</td>
</tr>
<tr>
<td>Rhetorical skills: putting forward views</td>
<td>Handling rhetorical skills in the second language</td>
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<tr>
<td>Balancing arguments</td>
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<tr>
<td>Style</td>
<td>Choosing language for the style</td>
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<tr>
<td>Tactical questioning and tactical handling of questions</td>
<td>Using appropriate forms in the second language to achieve tactical ends</td>
</tr>
<tr>
<td>Body language</td>
<td></td>
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</tbody>
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Appendix B:
Interview Protocol to Assess Teachers’ Background and Teaching Methodology

Teaching Presentation Skills (PS) Interview Protocol

A Background

Teaching in general

1. How long have you been teaching? (years)
2. What training have you received? Degrees + courses
3. Do you have experience in any other fields? (If yes, please specify.)
4. Do you also teach any other subject than PS? (If yes, please specify.)
5. Describe the education your school provides.

Teaching PS

6. How long have you been teaching Presentation Skills? (years)
7. What training have you received to teach PS?
8. Who organised those courses (if any)?
9. How would you describe teaching Presentation Skills in your school?
10. In what form do you teach PS?

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Seminars</th>
<th>Both</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Are you content with the way you teach PS?
12. What has contributed to that?
13. How do you feel about teaching PS in English and not in your / your students’ mother tongue?
14. Does it cause any difficulties or changes in your teaching methodology?
15. How does your education (the fact that you have a degree in economics /TEFL) affect your teaching?
16. What fields would you like to learn more about in order to make your PS teaching more effective?
17. Could you mention any other ways you could develop your PS teaching? (e.g. making more business presentations yourself, developing your English, recording students’ Ps / professional presenters, inviting professional presenters to class, etc.)

B Course content

18. What do you work on during your PS classes:
   a. differences between written and oral communication
   b. preparation
   c. adapting to the audience
   d. brainstorming
   e. how to arrange the P site
   f. visual aids
   g. technical skills: OHP  PowerPoint  whiteboard  projector
   h. transparencies
   i. handouts
   j. effective presentation openings
   k. marking/connecting presentation phases
   l. giving examples to illustrate the speaker’s point
   m. expressing causes
   n. expressing effects
   o. expressing purpose
   p. pronouncing technical words
   q. structuring content
r. word stress
s. sentence stress
t. intonation
u. when to pause in a sentence
v. how to use voice for emphasis
w. how to use grammar to focus audience attention on message
x. how to use adjectives to positive/negative emphasis
y. how to use repetition for emphasis
z. rhetorical questions
aa. dramatic contrasts
bb. tripling (lists of 3 to make something memorable)
c. machine gunning (using lists of 6+ to impress audience)
dd. build-ups (using a short and simple conclusion to convince audience)
ee. knock-downs (opposing statements to prove your point)
ff. simplification for powerful effect
gg. how to create rapport with audience
hh. words used with different meaning in business (e.g. capital)
ii. business word partnerships
jj. words and expressions used in business
kk. formal/informal style differences
ll. fixed expressions/collocations (e.g. get down to business)
mm. useful expressions
nn. how to deal with questions
oo. question types addressed to a presenter
pp. using body language
qq. reducing stress when speaking
rr. linking words
ss. other stylistic elements
tt. summarising content at the end of a P
uu. the questions a presenter gets from the audience
vv. question answering strategies
ww. rehearsing a P
xx. other: ..............................................

C Assessment and feedback
19. Are the students' presentations marked?
20. Are the students' mini presentations marked (if any)? If yes, how?
21. How do you think the (absence of) marking affects students?
22. What feedback do you get about your PS teaching practices?
23. What do students write/speak about when giving feedback?
24. Are you content with the way your students make Ps?
25. What has contributed to that?
26. How do you think students can become better presenters?
Appendix C:
Sample Presentation Evaluation Sheet (based on Cotton & Robbins, 1993, p. 44)

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Points to consider</th>
<th>Grade (1-5)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Evidence of careful preparation</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Clarity, appropriacy to audience/subject</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>Extent, relevance, appropriacy, subject knowledge, research</td>
<td></td>
</tr>
<tr>
<td>Approach</td>
<td>Message support and reinforcement, variety, humour</td>
<td></td>
</tr>
<tr>
<td>Organisation</td>
<td>Coherence, clarity, appropriacy</td>
<td></td>
</tr>
<tr>
<td>Visual aids</td>
<td>Appropriacy, clarity, handling</td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>Pace, enthusiasm, rapport/eye contact, audibility, intonation, confidence, body language</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Clarity, accuracy, fluency, appropriacy, pronunciation, signalling</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Clarity of message, achievement of objectives, interesting?, enjoyable?, informative?, motivating?</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Grade scale: 1=unacceptable, 2=poor, 3=average, 4=good, 5=excellent
Appendix D:
Evaluation Sheet Used for Students' Group Presentations at Számalk School of Economic Studies, Budapest

COURSE WORK ASSESSMENT  AMIS/BABS  GROUP NAME:
YEAR 1  DATE:
TUTOR

NAMES

<table>
<thead>
<tr>
<th>PRESENTATION</th>
<th>H</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>LO</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Introduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 Timing</td>
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<tr>
<td>3 Structure of presentation</td>
<td></td>
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<tr>
<td>4 Speed, Voice, Word choice</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Audience contact</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>6 Visual aids/Materials</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>7 Conclusion</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8 All members involved</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>9 Preparation</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>10 Handling questions</td>
<td></td>
<td></td>
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<td>TOTAL</td>
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<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
</tbody>
</table>

DOCUMENTATION

Management & Methodology |   |   |   |   |   |   |   |     |   |   | 5%
Content                  |   |   |   |   |   |   |   |     |   |   | 35%
Structure & Presentation |   |   |   |   |   |   |   |     |   |   | 10%

TOTAL MARKS |   |   |   |   |   |   |   |     |   |   | 100%
Applying reflective methods in teaching high school biology in English as a second language: Viruses, 9th grade

Lyubov Dombeva
Zlatarski IB World School, Bulgaria
Forum for across the curriculum teaching (www.factworld.info)

Objectives
The main objective of this work is to raise awareness among teachers about the reflective practices as a tool that can enhance learning in general as well as giving a particular example how the process of learning secondary science in English can be supported.

CLIL in Bulgaria: teaching subjects in English - the Bulgarian way
There are over 60 years of practice of bilingual education in Bulgaria with subjects being taught through a non-native language. The most common languages for bilingual classes over the years were Russian, English, German and French. A smaller number of people study Spanish, Italian and Portuguese and some even study Japanese and Swedish. Sadly however, there are still no official criteria and regulation of what should actually happen in the bilingual classroom. Despite this CLIL has been typical for the upper secondary schools, albeit uncommon in the primary schools in Bulgaria. In the recent years there are attempts at the tertiary level to deliver non-language university courses in a foreign language.

The current situation of Foreign Language Learning in Bulgaria
- Starts early in the Primary years (age 7).
- Has to achieve B2 at the end of 7 grade (age 13).
- Can include one, two or even three non-native languages.
- Has to achieve C2 at the end of 12 grade (age 18) for the language schools.
- Mother tongues other than Bulgarian:
  - Turkish
  - Roma
  - Armenian
  - Hebrew.

Why English?
The Bulgarian Ministry of Education official English language programme states that “the new situation in Europe requires students to 1) have knowledge and skills that will allow them to develop independently, 2) apply them in a multicultural environment and 3) work effectively in a team according to the international standards”. The ability to use the English language is perceived in the society as a major tool for young people to achieve success in life.

The English language environment in Bulgaria is rich, provided by a variety of TV programmes, the Internet, PC games, books and comics magazines available. It fosters learners’ motivation to use the language as a means of information, communication and entertainment.

Soft vs. hard CLIL - Syllabus, aims and objectives
Two general types of CLIL can be distinguished – soft or language-led CLIL and hard CLIL, focusing on the subject. CLIL is considered to be soft when subject curriculum topics are presented in language course books or when teachers do cross-curricular work during a language course. This is opposed to the harder subject-led version when half the curriculum or more is taught in a non-native language.
Soft CLIL follows English Language syllabus and aims – Focus on communication and appreciation of other cultures

At the primary level ELT aims to enable pupils to communicate in everyday, real-life situations and settings; develop appreciation of other cultures and respect cultural differences. Teachers generally achieve these aims using teaching techniques typical for the pupils’ age like games, songs, drawing, modeling, poems, role-play, and drama. The language of instructions is primarily L1, although this may differ among teachers. Pupils are encouraged to develop compensation strategies like gesturing and miming for overcoming communication problems. At this stage, teaching is focused on supporting the positive attitude to learning English. An emphasis is laid upon the accuracy of pronunciation and accent in speech production but also on the fluency and pupils’ ability to function in English. The primary level ELT staff comprises both primary teachers with sufficient knowledge of English as well as language teachers, depending on schools’ policy and available teachers.

The English language programme for the low secondary level aims to further develop pupils’ language skills and learning strategies. This is achieved through tasks that stimulate logical thinking and independent decision making and requires implementation of knowledge from other subjects like cause and effect etc. Activities are used to help pupils intuitively understand the language structure. Teachers encourage pupils to use the English language to satisfy their curiosity, personal interests and communication needs and so demonstrate the practical benefit of learning English. Special attention is paid to preparing pupils for real life situations of intercultural communication by discussing English films, searching the Internet, writing emails in English etc. Pupils’ repertoire of compensation techniques increases to include substitution with synonym, antonym, paraphrasing, international words etc.

Upon the end of 7 grade most students should be self-motivated, independent learners. In addition to the purely tourist purposes a lot of young people see language learning as a way to achieve new aims – learner’s mobility, study and work in international environment, participation in international projects.

Practicing hard CLIL at primary and low secondary level, where the subject is the teaching focus is uncommon in Bulgaria. A rare example of such initiative in the private sector is coming from Anglia School (https://www.facebook.com/SchoolAnglia), founded by the Bulgaria based CLIL specialist Keith Kelly.

In language schools a preparatory year lays the basis for learning subjects in English

Admission to secondary language schools in Bulgaria is highly selective. It follows a national testing procedure in Bulgarian language and literature, and mathematics and does not depend on the level of knowledge and skills in the foreign language. During the study period of five years students graduating these language schools learn two foreign languages.

The 8 grade is the first year in the language schools. It is dedicated mainly to intensive English language learning aiming to develop students’ sensitivity for the English language structure, develop general cognitive skills like analysis, synthesis, associative thinking etc., eventually mastering English to an extent that will allow students to learn other subjects and acquire varied knowledge through English. The language learning is not a goal on its own, but a tool to gather and produce information; it determines students’ professional and/or academic opportunities.

In 9 and 10 grades the level of competences of English is in accordance with the Common European Framework. During that period of the language school students have to achieve a near native speaker knowledge and skills so that their language competences can accommodate bilingual education in other subjects. Most often these subjects are biology, geography, history, chemistry and sometimes physics, philosophy and ICT. Bilingual subjects are taught by non-native speakers, subject teachers with adequate language knowledge.

In 11 and 12 grades ELT is focused on specific literary and culture knowledge. It presents students with some of the best examples of English and American literature. This corresponds to the Bulgarian language and literature curriculum and aims to help students develop further their critical thinking, ethical and artistic values while working with original English language texts.
If English is taught as a second foreign language in the language high school, the aim is to make the learner competent to function fluently and efficiently in a multicultural, multilingual context. In my opinion, most students’ skills correspond to B2-C1 level.

**Hard CLIL in Bulgaria – following subjects syllabi in English**

Currently in Bulgaria CLIL practice refers to upper secondary language schools. These bilingual schools teach the relevant subjects syllabi through English or other foreign languages. The implementation of CLIL may greatly vary between schools and between subjects according to staff availability. The bilingual subjects have to be delivered by subject specialists with adequate knowledge of the language. The syllabi have to be covered to the same extent as in the mainstream subject classroom using the Bulgarian language. Bilingual subjects are taught the same number of lessons as monolingual subjects and only rarely are given extra time from the number of electives. The textbooks available on the market are mainly literary translations from Bulgarian, text heavy and without specialized CLIL support. International subject books are expensive and syllabi may differ so they are not very commonly used. It is generally accepted that bilingual teaching has to test subject not language knowledge, but some language students report it difficult to understand theoretical subject concepts. As a result a lot of students tend to learn concepts by heart to achieve good marks relying on short-term memory. Such trend can compromise education quality in the long-term. Both practitioners and officials from the Ministry of Education agree that a major problem is the lack of official requirements for bilingual schools and bilingual teaching criteria. To ensure agreement on teaching methods there are plans for clearly defining the aims of bilingual teaching and vision how to achieve them. Bilingual teaching needs a support strategy to be developed and adopted for proper CLIL implementation. Evidence shows that successful CLIL depends on the philosophy that learners who are ‘investigating’, who are ‘researching’ are natural communicators and as such necessitate language. This requires subject teachers to think about the language in the curriculum. Research shows that students achieve better exam results if subject teachers implement CLIL methodology due to continuous efforts to develop language and thinking skills throughout the curriculum. CLIL teachers have to be able to identify the language needs students face in different academic subjects and incorporate language development in subject teaching.

Since the 1990s there have been attempts to deliver non-language university courses in a foreign language. These have either been sponsored by the industry in the technical fields (in German and French), or in the case of medicine and ICT (in English), were provoked by the growing number of international students admitted to Bulgarian universities. However there is little evidence that these courses offer integration of content and language and classify as CLIL. Sadly this is true even in the field of education, for example when teachers of biology are trained to teach in English. The initial subject or language teacher training has no special focus on the integration of subject and foreign language learning. It has been recognized that subject teachers need methodological training to increase the level of integration of their teaching practice, and CLIL focused in-service training is sometimes available through universities’ Foreign Language departments. There is a growing demand for qualified CLIL teachers and some are being trained within the national system and abroad. However, without official criteria and standards from the Ministry of Education almost any form of teaching subjects in a foreign language could be called bilingual or CLIL without really meeting its integration goals.

A big THANK YOU to the British Council in Bulgaria for everything it did in setting up the standards and supporting the CLIL teachers in Bulgaria!

- Workshops
- Summer schools
- Books
- Conferences
- Networking
The resources that are available to the CLIL community include:

**English language**
- General English with focus on life skills, including CLIL such as Macmillan’s textbook series and online resources: [http://www.macmillanenglish.com/life-skills/](http://www.macmillanenglish.com/life-skills/).
- Subject supplements to the preparatory year may have CLIL support.

**Subject**
- International textbooks or translated from Bulgarian, but without CLIL support.
- Science and Geography vocabulary practice series (Kelly, 2008, 2010).
- Teachers adapt and/or create their own materials.
- Networking, sharing materials and resources ([http://www.factworld.info/](http://www.factworld.info/)).
- Virtual Learning Environment/Moodle.

**Project based learning and enhancing CLIL**

Statistical evidence shows project-based learning to be more effective in teaching subjects, including science than traditional methods. It has been found to boosts learners motivation, and communication, involving them in creative, hands-on experience that has a final product. There is a huge variety of project formats that can be exploited:
- short-term/long-term;
- whole school/small;
- curricular/extracurricular;
- cross-curricular

Participation in international collaboration projects like Comenius, Science across the World, European Youth Parliament, Solar Schools Forum etc., is the key to successful CLIL for students and teachers both in primary and secondary context. Without regard to the sphere of knowledge, be that social, history, science, art or cross-curricular, by giving communication a real meaning, they are invaluable for bringing up multiculturally sensitive young people. Such initiatives make it possible for students of different nationalities and backgrounds to share values, knowledge and appreciate the richness of variety of cultures in Europe. They also allow teachers to have access to information, exchange useful materials and methodology and share experience. Hopefully, educating knowledgeable, open-minded and responsible young people will help find the key to the sustainable and successful future.

**Introduction to reflection**

Reflection, or metacognition is an empowering methodological strategy that can enhance learners’ intellectual growth (Livingston, 1997). Its implementation as a learning tool has been found to improve students’ cognitive skills, especially the higher order of thinking. It is considered very difficult to distinguish between cognition and metacognition, but it is widely accepted that metacognition involves planning, monitoring and evaluation of learning tasks. In Livingston’s words ‘Knowledge is considered to be metacognitive if it is actively used in a strategic manner to ensure that a goal is met. …Metacognitive knowledge refers to acquired knowledge about cognitive processes, knowledge that can be used to control cognitive processes’.

John Flavell, who coined the term metacognition (qtd. in Livingston, 1997) ‘divides metacognitive knowledge into three categories: knowledge of person variables, task variables and strategy variables’. In the teaching practice these three types of variable are referring to the answers of the questions: Who should learn what? How?

Different authors have no doubt that, teaching metacognitive strategies to secondary students is essential for their further personal and intellectual development. There is evidence to suggest that reflective strategies are used by high-achievers in both school and university context (Livingston, 1997; Vasilev, Kolarova, 2009). A number of detailed studies show that tertiary students benefit from practicing reflection as a learning tool in research work (Reed and Koliba, 1995). Secondary students’ progress has also been reported (Hadgiali, Kolarova, Vasilev,
They had been guided to practice reflective methods such as group discussions, self-observation, interviews, log books, portfolios, reflective statement and others (IBO CAS Guide, 2008). On a basic physiological level thinking about thinking plays backwards and forwards, thus ‘entrenching’ the neural pathways involved in initial learning. Reflection helps reinforcing neuronal connections allowing faster access to stored information and transferring it into long-term memory. This later allows the person to use the information in a new situation (Bargen, 2002).

This particular methodological work is an attempt to apply reflective methods in teaching biological knowledge about viruses to secondary students, age 14-15 in a bilingual context. As pointed out by Teresa Ting (2014) ‘CLIL is brain competitive’ as it supports the learning process in the most natural way. It also aims to develop students’ high order thinking (HOT) skills, especially analytical and evaluative skills. This puts great cognitive demands on the learners and when answering the person variable—who learns, it was deemed practical that the language demands of the learning activities were lowered by providing language support to student (Clegg, 1999, p. 118). Because of the high cognitive demands of the tasks, Cummins advice about task design (qtd in Coyle, 1999, p. 49) was taken into account and the language demands on the learners were lowered, by making them context-embedded and providing scaffolding for language production. To address the strategy variable—how to learn, the task sequence also aimed at a smooth transition from quadrant 1 to quadrants 3 and 4 in the Cummins matrix.

Figure 1: Cummins matrix shows the relationship between the cognitive and linguistic demands made by different teaching tasks on learners

<table>
<thead>
<tr>
<th>Context-embedded</th>
<th>High cognitive demand</th>
<th>Context-reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalise;</td>
<td>Argue a cause;</td>
<td>Argue a cause;</td>
</tr>
<tr>
<td>Compare and contrast;</td>
<td>Identify criteria;</td>
<td>Identify criteria;</td>
</tr>
<tr>
<td>Summarise;</td>
<td>Develop and sustain ideas</td>
<td>Develop and sustain ideas</td>
</tr>
<tr>
<td>Plan;</td>
<td>Justify opinions, beliefs;</td>
<td>Justify opinions, beliefs;</td>
</tr>
<tr>
<td>Classify;</td>
<td>Evaluate critically;</td>
<td>Evaluate critically;</td>
</tr>
<tr>
<td>Transform;</td>
<td>Interpret evidence;</td>
<td>Interpret evidence;</td>
</tr>
<tr>
<td>Recall and review;</td>
<td>Make deductions;</td>
<td>Make deductions;</td>
</tr>
<tr>
<td>Seek solutions;</td>
<td>Form hypotheses;</td>
<td>Form hypotheses;</td>
</tr>
<tr>
<td></td>
<td>Predict results;</td>
<td>Predict results;</td>
</tr>
<tr>
<td></td>
<td>Apply principles;</td>
<td>Apply principles;</td>
</tr>
<tr>
<td></td>
<td>Analyze;</td>
<td>Analyze;</td>
</tr>
<tr>
<td></td>
<td>Suggested solutions;</td>
<td>Suggested solutions;</td>
</tr>
<tr>
<td>Reading for specific information;</td>
<td>Low cognitive demand</td>
<td>Reading for specific information;</td>
</tr>
<tr>
<td>Transfer from one medium to another;</td>
<td>Parrot (repeat utterance of peers/adults);</td>
<td>Parrot (repeat utterance of peers/adults);</td>
</tr>
<tr>
<td>Apply known procedures;</td>
<td>Copy (reproduce information from board or text)</td>
<td>Copy (reproduce information from board or text);</td>
</tr>
<tr>
<td>Describe observations;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sequences;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrates with start, middle, end</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Plan of the topic:
1. Are viruses alive?
2. Viral diseases in humans
3. Structure of a virus
4. Mechanism of infection
5. Conclusion

Topic aims:
1. To provide:
   a. an opportunity for scientific study of viruses.
   b. a body of knowledge about reflective methods and techniques and enable students to apply and use them.
2. To develop:
   a. an ability to analyze, evaluate and synthesize scientific information.
   b. an appreciation of the possibilities and limitations associated with science.

Topic objectives:
1. Demonstrate an understanding of:
   a. scientific facts and concepts – cell theory, properties of living things, viruses, viral infection.
   b. scientific terminology – virus, protein coating.
   c. methods of presenting scientific information – argumentative essay, academic writing.
2. Apply and use scientific facts, concepts, terminology and methods of presenting scientific information in new situation.
3. Analyze and evaluate scientific explanations.

Teaching methods and sequence
Teaching methods used in this methodological work involve a combination of student centered activities, including both individual and pair work, and group discussions. The lesson starts with a short quiz to provide cognitive stimulation to students and refresh knowledge related to the topic. Then, the main topic is presented and students are asked to discuss in pairs what they know about it already. The students are invited to contribute their opinions in a vote poll as a means of initial reflective component in the learning process. Then the main body of facts is presented through reading comprehension of an article, where vocabulary list may or may not be provided by the teacher. Then, the main arguments from the article are outlined individually by the students and shared with the whole class. At this point the Insert strategy is used to draw students’ attention to the metacognitive aspect of their knowledge. Then students work again in pairs in an information gap activity to enhance spoken communication. Student A and student B have identical diagram but different labels. They should not show them to each other, but talk about what is on them instead. As a group students may discuss if their initial idea about viruses has changed and how, or in what ways their ideas about science and knowledge have changed. Students’ academic writing skills are supported to allow them to produce a coherent argumentative essay on the topic. This essay may or may not be assessed depending on the teacher’s aims and the students’ expertise. Formative assessment is meant to control the acquisition of the biological knowledge and not so much the language skills of the learners. Still, students are expected to recognize and apply their knowledge about the structure of the text and spell biological terms correctly.
Components of the learning process

Table 1: System of questions and tasks guiding the learning process towards the achievement of the learning aims.

<table>
<thead>
<tr>
<th>Components of the learning process.</th>
<th>System of questions and tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Activating students’ prior experience (Who will learn?)</td>
<td>Quiz question 1. What are the properties of living things? Quiz question 2. What are the general statements of the cell theory?</td>
</tr>
<tr>
<td>II. Motivational component. Introduction of the topic and formulating the problem (What will be learned?)</td>
<td>Problem question: Are viruses alive? Task 1. Pre-reading: Discuss in pairs what do you know about viruses. Task 2. Pre-reading: Please, vote in the 'Are viruses alive' poll – write your name in the respective column on the board. Note that you can change your vote during the lesson!</td>
</tr>
<tr>
<td>Are viruses alive?</td>
<td>YES</td>
</tr>
<tr>
<td>III. Learning objectives (How will be learned?)</td>
<td>Task 3. Read the article ‘Are viruses alive?’ Task 4. While reading the article identify the unknown words and expressions and include them in your vocabulary list. Task 5. After reading the article, please use the following symbols from the Insert strategy to outline: ✓ Things that you knew already about this topic. ! Things that you find interesting. + Things you want to know more about. ? Things in the article that are confusing or different from what you knew. * Things that you have learned from the article. Task 6. Using the information in the article identify the arguments of scientists for and against viruses being alive and fill them in the table below. Arguments for</td>
</tr>
<tr>
<td>Task 7. Watch the animation of a virus infecting a host cell (here or here) and write down the names of the main stages.</td>
<td></td>
</tr>
</tbody>
</table>
IV. Assessment and control of the learning process

Task 8. The diagram below shows the stages of viral infection, but some of the labels are omitted. Talk to a partner to find out what are the missing labels on the diagram and fill them in. To show the sequence of events in the process, describe it using connecting words like: First, in the beginning, second, next, then, after that, mean while, at the same time, at the end, finally.

Task 9. Using the arguments from the table and the phrases in the handout ‘Language for arguing’ write an essay to discuss if you think viruses are alive.

Task 10. Answer the questions provided by the teacher in the handout ‘Questions about viruses’

Notes:
1. There are many related terms in this field of study that are being used interchangeably. Here, reflection and metacognition are treated as synonyms, meaning ‘thinking about thinking’ (Livingston, 1997).
2. At Zlatarski International School biology is taught in English which is second language for most students. Basic CLIL (Content and Language Integrated Learning) principles were applied to scaffold both language and subject acquisition.
3. Are viruses alive? Reading comprehension article is shown in Appendix 1.
4. Vocabulary list is shown in Appendix 2.
5. Diagrams of mechanism of viral infection – information gap activity are shown in Appendix 3.
6. Language for arguing is shown in Appendix 4.
7. Sample student work – argumentative essay is shown in Appendix 5.
8. Handout ‘Questions about Viruses’ is shown in Appendix 6.

References


Appendix 1: Reading comprehension article


Are viruses alive?
Anyone with a cold or the flu virus feels as if they are under attack by some organism. But in the scientific community it's still an open-ended question. This is why viruses do not belong to a kingdom of living things. Just because a virus seems alive doesn't mean it is alive. After all, it's not even a single-celled organism.

A virus is little more than a strand of DNA or RNA covered by a protein coating. Viruses are a thousand times smaller than bacteria and come in a wide range of shapes. Some look like weird, tall spiders whereas others look like prickly porcupine-like soccer balls.

One thing is for sure; viruses are very much a part of life on Earth and the human experience. Viruses infect animals, plants, and even bacteria. Humans are in a constant battle with viruses. HIV (the virus that causes AIDS), the Ebola virus, and the West Nile virus continue to make headlines and take millions of lives.

Other maladies, such as colds, the flu, chicken pox, measles, and hepatitis, are more common, but sometimes just as deadly. Symptoms vary depending on which kind of cell is under attack. Cold viruses attack the nose and throat, the rabies virus attacks the brain and nervous system, and the human immunodeficiency virus (HIV) attacks white blood cells in the bloodstream. Viruses can even cause some kinds of cancers and leukemia.

Live and Let Die
To determine whether a virus is alive or not, we could compare the virus's characteristics to what many biologists consider the requirements of life. All living things have several common characteristics. Some non-living things may have one or more of the characteristics but not all of them. For a virus then to be classified as alive it must:
Viruses do have DNA or RNA, and DNA is the code for life. Having genetic material is an important step towards being classified as alive. DNA controls the evolution of the cell and the organism. Like living things, viruses evolve through time and thus can adapt to their environment. But unlike cells, viruses cannot use their genetic material by themselves. They need a living cell in order to function and reproduce, otherwise they are playing dead.

Resistance Is Futile

Because viruses are not cells, they can't divide by binary fission like bacteria. Yet they do reproduce themselves in an extraordinary way. Their structure enables viruses to attack a plant or animal cell called a host cell. The protein shell protecting the virus's DNA is covered with spike-like protrusions. These spikes allow the virus to latch onto the cells they infect. Once hooked on, the virus injects its genetic material into the host cell.

The virus's DNA takes control of the cell once it's within the cytoplasm and begins to make the cell produce virus DNA and other parts of viruses. The host cell is forced to expend all of its energy and resources to help the virus replicate and make hundreds more viruses. The poor, weak cell usually bursts like an overinflated balloon from all the viruses and is destroyed in the process. Then, the replicated virus attaches itself to a new, unaffected host cell, and the viral infection continues.

Living things do more than just reproduce. They also must obtain food to fuel the cell's metabolic activity. Some organisms, such as animals, eat other living things for energy. Other organisms, such as plants, harness the Sun's energy to make their own food. Because viruses aren't cells and have no activity within it, it has no need for food. However, the virus-controlled host cell needs...
material and energy to reproduce the viruses. Maybe viruses can fit the requirement that life forms need to obtain and use energy.

All other living things also grow or get bigger. A virus does nothing inside its protein coat; therefore it does not grow. But some scientists argue that a virus’s growth occurs inside the host cell where parts of viruses are built during reproduction.

Plants and animals react to the environment. All living things have ways of sensing the world around them and can respond to changes in their environment. Do viruses react? Viruses cannot move themselves, but there are some differences in opinion that viruses do react to changes in the environment.

Remember, the virus’s DNA or RNA can evolve over time, thereby increasing its chances for survival and adapting to the environment. Like bacteria, they adapt through genetic mutations caused by rapid reproduction. That is why it is so hard to cure viral diseases. Viruses keep changing their DNA and protein coat to further their “life form” and keep ahead of the game.

What’s Your Final Answer?

As humans, we like to classify things because it helps us understand the physical world. Viruses must have a host cell to live and reproduce. Outside of the host cell, viruses are pieces of genetic molecules that can do nothing by themselves. Viruses are right on the border between living and nonliving. Some biologists currently see the virus as a nonliving infectious particle. Other biologists disagree and suggest they are alive because of what happens inside the host cell.

Getting a definite answer if viruses are alive or not may never happen.

But hey, that’s life.
Appendix 2: Vocabulary list for 9th grade reading the article ‘Are viruses alive?’

open-ended question – отворен въпрос
strand of DNA/RNA – нижка ДНК/РНК
protein coating – белъчна обвивка
weird – странен, чудат
prickly - бодлив
porcupinelike – приличащ на бодливо свинче
soccer - футбол
HIV (Human Immunodeficiency Virus)
AIDS (Acquired Immune Deficiency Syndrome) - СПИН
chicken pox – варицела
measles – морбли
mumps – заушка
polio – полиомиелиит, детски паралич
rubella – рубеола
maladies - болести
rabies – бяс
futile – безполезен, безплоден
binary fission – делене на две
host cell – клетка-гостоприемник
spike - шип
protrusion – израстък
to latch – залепвам се
to expend – изразходвам
to replicate – копирам
overinflated – свръхнадут
to attach – прикрепям се
unaffected – незасегнат
to harness – впрягам на работа
Appendix 3: Diagrams of mechanism of viral infection – Information gap activity

Task 8. The diagram below shows the stages of viral infection, but some of the labels are omitted. Talk to a partner to find out what are the missing labels on the diagram and fill them in. Describe the process using connecting words to show the sequence like: First, in the beginning, second, next, then, after that, meanwhile, at the same time, at the end, finally.

Student A

Student B
Appendix 4: Language for arguing

Introducing the theme
Many people believe that...
It is said...
People’s opinions on...differ widely.
Some people go as far as to say that...

Supporting your argument
One of the main advantages of / problems with...is that...
In the first place, /Firstly, /To begin with, /Secondly, /Thirdly, /Finally, /Last, but not least, ...

Adding further reasons
Both...and/not only... but also...
In addition, /What is more, /Furthermore, /Besides, ..., similarly...

Giving an opinion
In my view/opinion, /It seems to me that...
I think/feel that...
It is reasonable to suppose.../ It is not stretching a point...

Giving the opposite opinion
On the other hand, there are several disadvantages
Let us not forget the disadvantages...
Contrary to popular opinion...
In fact...

Linking phrases
Although..., /However,/ In spite of this, /Despite..., /Nevertheless
Some people... while/whereas others...
On the one hand... on the other...

Analyzing the opinions of others
While it could be said that...let’s not forget...
One possibility...If this were the case...
It is true that...
Certainly...
To be sure...
(this) is based on the assumption/premise that
(this) implies/would imply/suggest that
(this) ignores/does not take into account the fact that...
(this) assumes that

Concluding
In conclusion, / To sum up, /On balance, /All things considered...
Appendix 5: Argumentative essay, sample student work

Are viruses living or dead

This is a question which will probably always make scientists discuss a lot and never reach an agreement.

One of the most important facts which supports the theory that viruses are alive is that they have DNA (RNA) which is the code for life. Furthermore, like the other living things, viruses evolve through time and learn to adapt to the environment through genetic mutation.

Some there are some hypotheses about viruses' growth and reproduction in the host cell, but these are still not proved.

With no doubt, the negative statements are much more than the positive ones. For instance, viruses do not move; do not grow; they don't need food or water and they can't even be called single-celled organisms. Moreover, they need a living cell to function, otherwise they are playing dead. Nobody says that viruses develop, reproduce or dieใด; if it is alive it must die at some point, but you can just destroy a virus.

In conclusion, viruses are on the borderline between life and death and scientists have no idea which one is closer to their way of existing. From my point of view, the DNA is not enough to prove that it is alive. I think that viruses are dead and they need many things to be brought back to life.

Anna Xanacova 9B
Appendix 6: Handout: Questions about viruses

Answer the following questions:
1. The photograph and the simplified diagram on the right, both show a human immunodeficiency virus before it enters a white blood cell. Name the structures A and B.

A ……………………………………………………………………………………………………. (2)

B ……………………………………………………………………………………………………. (2)
2. Label the diagram showing the stages of viral infection and describe the events in each stage.

2. Label the diagram showing the stages of viral infection and describe the events in each stage.

2. Label the diagram showing the stages of viral infection and describe the events in each stage.

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2. Label the diagram showing the stages of viral infection and describe the events in each stage.

2. Label the diagram showing the stages of viral infection and describe the events in each stage.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.

3. Explain why antibiotics are not effective against HIV.
The sociolinguistic dimension of CLIL:
applying SFL, the socio-cultural theory and the principles of visual literacy on designing a CLIL project to teach Astronomy to EFL students

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Introduction
Content and Language Integrated Learning, known as CLIL, is a rapidly-growing trend in second/foreign language teaching and learning in Europe nowadays. CLIL shares a strong affinity with the immersion programs applied in Canada and, therefore, CLIL, roughly, relates to bilingualism (Eurydice, 2006). Its European context, however, has revealed another dimension of it, other than its innate bilingual nature: CLIL has developed into a dynamic second/foreign language teaching methodology which could be used to promote plurilingualism, according to the Council of Europe framework of language teaching and learning (Coste et al., 2009). CLIL is teaching non-linguistic curricular content in a second or foreign language (L2), one different from the learners’ mother tongue (L1) (Eurydice, 2006). The target language (L2) is the medium for content, such as biology, history, RE, mathematics, science, to be taught to native speakers of an L1. In this chapter, we are going to suggest the design and implementation of a CLIL model to be incorporated in the EFL class. The model has to do with the generation of educational material to teach Astronomy in English to 13 to 15-year-old learners (lower secondary) with a linguistic competence level that ranges from A1 to B1+ in the CEFR. The model applies the principles of Halliday’s Systemic Functional Linguistics (SFL) (Eggins, S., 2004), those of Vygotsky’s socio-cultural theory (John-Steiner & Mahn, 1996, Llinares et al., 2012) and the principles of the grammar of visual design (Kress & van Leeuwen, 2006) towards the production of a linguistic tool compatible with the core philosophy of CLIL.

The historical background and philosophical framework of CLIL

a. Bilingualism

Getting into the process of outlining the essence of CLIL in rough lines, we could say that CLIL, in broad terms, relates to bilingualism. Bilingualism could also serve as a useful starting point in order for us to understand how the idea of CLIL, in the European teaching contexts, emerged. There are many factors that favour bilingualism. These can be economic ones (e.g. migration), geographical ones (e.g. neighbouring countries), historical/political ones (e.g. population exchange) or cultural ones. It is also true that bilingualism is not the only case of linguistic diversity within a country, since certain countries are multilingual. Bilingualism is about a dominant language and a non-dominant (minority) language (Hall, et al., 2011). Of these two poles, the former exercises power over the latter, due to numerical, political and economic supremacy (Grosjean, 2001). To avoid political and social conflict and friction, bilingual countries foster a status of linguistic equality between the two languages, so that both languages can share an official status, a condition that is reflected to education, the public sector or foreign policy. Examples of such countries are Belgium, Canada or Switzerland. Education and schooling are fields where both bilingual and multilingual conditions can collide and may cause high tension among the stakeholders. We can distinguish the so-called bilingual education into submersion education, in which there is no respect for the minority language and its speakers are placed in classes with proficient native speakers of the dominant language (Hall, et al., 2011). In addition, we can have transitional bilingual education programmes, in which there is a temporary use of the students’ L1, which is the non-dominant language, to bridge the academic gap between them and the native speakers of the dominant language (ibid). There are also
maintenance bilingual education programmes, aimed mainly to immigrant students, where there is an effort of ‘upkeep of the non-dominant language’ (Hall, et al., 2011, p.183), within the educational framework of the dominant language. An important parameter of bilingual education is the immersion bilingual education programmes, applied in Canada, in which ‘learners are immersed in the second language’ (Hall, et al., 2011, p.184), through being taught content in it (ibid).

‘Studies of programmes following this well-documented and influential model suggest that children from a majority language background can develop content knowledge (history, science, mathematics, etc.) in a second language to a degree comparable or superior to peers schooled exclusively in their L1, and that they do so with no apparent cost to academic development in the majority language’. (Hall, et al., 2011, p.184).

In Europe, a similar programme, which complies with the European Commission guidelines on linguistic competence in at least three languages, the students’ mother tongue and two additional languages (Sheils, n.d), has emerged. This programme is Content and Language Integrated Learning (CLIL). Other bilingual education programmes entail community language teaching and heritage language programmes (Hall, et al., 2011).

b. From multilingualism to plurilingualism

Bilingualism is not the case in the European Union (EU) as a whole. The Council of Europe, the official body for designing and disseminating language policy in the EU, has recognized the linguistic diversity within the Union (Council of Europe, n.d). This condition is actually the recognition of the EU being multilingual and this, in turn, has led to the solid belief that all languages spoken within the Union are respected and given equal socio-cultural status (Eurydice, 2006). Part of the European Union language policy has been the development of a framework for preparing linguistic material and assessing linguistic competence, during the process of language learning across the Union, the well-known Common European Framework for Languages (CEFR). Within the philosophy of the CEFR, there lies the belief that language knowledge and linguistic competence are fundamental among the members of the Union, because they facilitate mobility for academic, professional and social purposes, they enhance intercultural communication and access to information and they promote language learning as a life-long process (Council of Europe, n.d). These elements take language learning beyond the basic recognition that member states share a multilingual home. There is now a shift from multilingualism - the command of two or more languages - to plurilingualism. In being plurilingual, the individual is viewed as a social actor who ‘has proficiency, of varying degrees, in several languages and experience of several cultures’ (Coste, et al., 2009, p.11). The notion of plurilingualism, therefore,

‘emphasises the fact that as an individual person’s experience of language in its cultural contexts expands, from the language of the home to that of society at large and then to the languages of other peoples (whether learnt at school or college, or by direct experience), he or she does not keep these languages and cultures in strictly separated mental compartments, but rather builds up a communicative competence to which all knowledge and experience of language contributes and in which languages interrelate and interact’. (Council of Europe, n.d, p.4)

An immediate inference made out of these statements is that plurilingualism has to do with an individual’s ability to act and interact in a specific social context, using language as a medium of social (inter)communication, and, at the same time, they would allow themselves to negotiate their own social knowledge with other cultures, in different contexts. Plurilingualism is not only about linguistic competence; it entails investment on social inheritance and experience and how they can be negotiated among interlocutors, who are challenged to make certain linguistic, as well as cultural, choices, to carry out communicative tasks. Plurilingualism, thus, entails pluriculturalism (Coste, et al., 2009).
c. Key competences for lifelong learning

The recognition of the European Union being multilingual – a condition that has to do with both the official languages of the member states and the minority languages that European citizens may use in their everyday communication –, as well as of the latest tendency to develop one’s plurilingual skills has led the European Parliament and the Council of Europe to the generation of a Reference Framework of Key Competences for lifelong learning (Official Journal of the European Union, 2006). The Framework also emerged out of the need to prevent social, educational and professional exclusion and isolation of certain disadvantaged groups within the Union, as well as a front against the challenges of globalization, which requires flexibility on the part of the citizens (Official Journal of the European Union, 2006). The Framework includes eight (8) competences:

1) Communication in the mother tongue
2) Communication in foreign languages
3) Mathematical competence and basic competences in science and technology
4) Digital competence
5) Learning to learn
6) Social and civic competences
7) Sense of initiative and entrepreneurship
8) Cultural awareness and expression

A CLIL lesson can serve as a platform where all of the eight competences can find fertile soil to grow. Because CLIL is ‘a dual-focused educational approach’ (Marsh, D. et al. (n.d), p.11), combining language teaching with non-linguistic content teaching, learners, as well as teachers, are challenged to use different competences and skills to deal with both the requirements of the methodology as such and the aspects of the teaching components.

Designing a CLIL lesson for the lower secondary EFL classroom

a. The CLIL context in Greek schools

CLIL is non-existent in Greek state schools, both primary and secondary. Greece is a monolingual country (Greek), therefore there is not an official second language to be taught at schools. Teaching an L2 in Greek schools has to do with foreign language teaching (English [compulsory], French and German [selective]). In practice, foreign language teaching, in general, is quite underestimated in the Greek educational system, despite the very important and innovative initiatives that have been taken up by the University of Athens and the University of Thessaloniki recently. Therefore, initiatives on applying CLIL, or other innovative methodologies, are single initiatives, very sporadic ones, and they always have to do with a single foreign language teacher’s decision to enhance their teaching and attach a different dimension to it. Fortunately, taking up such initiatives is not restricted by educational officials, but rather encouraged, with the foreign language teachers to enjoy a degree of autonomy. To my knowledge, CLIL lessons in Greek schools, where applicable, are carried out in English.

b. Designing a CLIL Astronomy lesson

Two years ago, I took up the initiative of introducing CLIL in my EFL teaching. Through my readings, I came across the CLIL methodology and I decided to, experimentally, add it to my mainstream EFL teaching. I have not stopped studying and researching about CLIL ever since. I chose to teach Astronomy in English and, since there was not any teaching material to start with, I decided to design my own teaching material. The reasons why I chose Astronomy could be summarized thus: first of all, Astronomy is a fascinating subject and, to my view, most of us share a great interest in what happens ‘out there’. The space, the sky, our galaxy, the birth of the universe are issues which are fascinating not only to scientists, but to all of us. Secondly, Astronomy is part of the curriculum: the students in Greek schools are taught basic Astronomy as a part of their physics classes. Thirdly, there is much of what I would call ‘social knowledge’ about it among us: we talk about the outer space in many instances in our everyday interactions, we are thrilled by space films, documentaries, space missions, we very often look up to the sky,
wonder what is there and make up stories. Fourthly, Astronomy seemed a subject which, to my understanding and anticipations, could very effectively support the 4Cs CLIL Framework (Coyle, D., 2005), explained below. Lastly, Astronomy seemed to provide me with lots of input which was compatible with the socio-linguistic model that I had in mind to develop throughout my teaching material and approach.

c. The 4Cs CLIL framework

Do Coyle (2005) has developed a cohesive, conceptual tool of the CLIL standards and has explained how they interrelate to co-construct a CLIL class. Below we can check what the Framework could look like and what its components are.

![The 4Cs CLIL Framework](image.png)

The first C stands for **content** (subject, themes, cross-curricular approaches). **Content** does not only refer to the specific content of a subject and knowledge about it; it also refers to the learner’s ability to construct their own knowledge. One’s ability to construct their own knowledge has to do with the second C – **cognition**, in other words our thinking mechanisms. The third C stands for **communication** that is language used for content analysis and understanding, but also for social (class) interaction. The fourth C is for **culture**. CLIL is about intercultural awareness. Later on, in the presentation of my teaching model I am going to show (hopefully!) where and how these components fit.

As stated above, CLIL is about both language teaching and content teaching. The methodology views these two components as **integrated**, as the acronym suggests. Yet, an important, distinctive point about the role of language in CLIL is the one that Llinares, Morton and Whittaker make: ‘the focus of CLIL is not to equip learners with the language they need to transact everyday tasks, such as ordering a meal or buying a train ticket’ (Llinares et al., 2012, p.9). What CLIL actually does is to give the students the opportunity to communicate educational knowledge (*ibid*). In other words, students are challenged to use the language they learn to talk about content/subject issues, in a, more or less, scientific way. In my model, I would like to explain how language in my CLIL material can be organized to serve this purpose as well as to reveal the social role of a language.

**Teaching Astronomy in the EFL class: integrated disciplines**

My CLIL model integrates three (03) theoretical perspectives in order for a comprehensive CLIL teaching product to be realised, compatible with the core philosophy of CLIL. As Llinares, Morton and Whittaker (2012) suggest, the philosophy of CLIL shares a lot with Vygotsky’s **sociocultural theory**, which, in turn, matches Halliday’s **systemic functional linguistics (SFL)** framework. The third aspect I have added to my model has to do with ‘**the grammar of visual design**’ (Kress & van Leeuwen, 2006), which examines the role of visual representation in communication and how ‘reading images’ can guide interlocutors into negotiating meaning. This third approach is in complete alignment with the other two approaches. The three perspectives alike view language as a social product, emerging through social interaction and negotiation of meaning. Therefore, they offer a common platform for a CLIL teaching project to be developed,
but, at the same time, they are compatible with the Council of Europe principles for language teaching.

a. Vygotsky’s socio-cultural theory

Vygotsky’s socio-cultural theory serves as the broad framework where the other two approaches will be embedded in my model. Vygotsky’s approach is based on the view that ‘human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in their historical development’ (John-Steiner & Mahn, 1996, p.191). Language is, therefore, central to human (social) interaction and, moreover, in Vygotsky’s terms, language is one of the choices that interlocutors have among other symbol systems. This point is core to the development of my CLIL teaching model, as I will explain below. Vygotsky also stressed to the ‘dynamic interdependence of social and individual processes’ (John-Steiner & Mahn, 1996, p. 192) towards knowledge acquisition. An important process towards knowledge acquisition is internalization. Humans co-construct their knowledge through linguistic interaction with others and nature (social context) and, in process, they transform ‘this communicative language into inner speech and further into verbal thinking’ (John-Steiner & Mahn, 1996, p. 196). Another concept, central to the socio-cultural theory, is scaffolding. In short, scaffolding has to do with a social process where more knowledgeable individuals ‘intervene temporarily to enable learners to achieve learning goals’ (Llinares et al., 2012, p. 11). Scaffolding is about knowledge building and facilitating, helping learners move higher and higher, acquiring more and more knowledge. Scaffolding is entailed in the concept of the zone of proximal development, which defines the spectrum between the actual developmental level, where learners can achieve tasks independently, and the level of potential development, where the learners can realize tasks with the aid of a more knowledgeable peer (John-Steiner & Mahn, 1996).

b. Systemic Functional Linguistics (SFL)

M.A.K Halliday, like Vygotsky, stresses on the fundamental role of language in social communication and interaction. He goes on to view language as a core tool of negotiating meaning in social (con)texts and regards this as an ongoing process within ‘products of social interaction (texts), in relation to the cultural and social context in which they are negotiated’ (Eggins, 2004, p. 2). Halliday views language as a system, as social semiotic, therefore he is interested in explaining ‘how people use language with each other in accomplishing everyday social life’ (Eggins, 2004, p. 3). Four theoretical aspects are central to the SFL framework: first, ‘language use is functional’ (Eggins, 2004, p.3), second, language functions towards meaning-making, third, meanings produced through language are determined by their social and cultural context (Eggins, 2004), and fourth, language use is a semiotic process, a process of making meaning by choosing’ (Eggins, 2004, p.3). The importance of meaning in language use and production, as well as the stress on linguistic choices are very crucial elements in SFL. Producing meaning is the result of the language being formulated by a set of systems, which can provide the language user with ‘an unlimited choice of ways of creating meaning’ (Bloor & Bloor, 2013, p. 3). Therefore, different ideas can be expressed in different (lexico-grammatical) forms, depending on the context, but even the same idea can be expressed in various (lexico-grammatical) forms to match Malinowski’s ‘context of situation’ (Malinowski, 1923, 1935 cited in Martin, 2010) and/or his ‘context of culture’ (ibid). Halliday also suggests that towards the meaning-making process three kinds of meanings (metafunctions (Bloor & Bloor, 2013)) are simultaneously produced in speech: the interpersonal meaning, which reveals the interactants' relationship and status, the ideational meaning, which has to do with the knowledge of the world the interactants share, and the textual meaning, which has to do with the organization of a text in order for a specific kind of meaning to be produced. Moreover, the contextual use of language has led to ‘the development of specific socially recognized forms known as genres (such as business letters) and styles or registers (such as business English’) (Bloor & Bloor, 2013, p.7).
c. The grammar of visual design

Just as Halliday realizes language as a meaning-making process, Gunther Kress and Theo van Leeuwen (2006) also perceive visual communication as a process for negotiating meaning in a specific social and cultural context. They focus on what they call 'visual literacy', which has to with reading, narrating and negotiating pictures. Pictures are signs – and also a genre themselves – and, as such, they are realizations of a semiotic system. Language is also a semiotic system (Kress & van Leeuwen, 2006) and, as such, it owns, just as pictures do, a place in the broad landscape of symbol systems that interlocutors have at their disposal in social interaction, as Vygotsky had previously suggested. Kress and van Leeuwen (2006) also suggest that individuals can communicate through images (visual literacy), and this communication shares equal stages of development as verbal communication. In their words, ‘it is the transformative action of individuals, along the contours of social givens, which constantly reshapes the resources, and makes possible the self-making of social agents’ (Kress & van Leewen, 2006, p. 13). They also adopt Halliday’s SFL framework in order to apply it onto the reading of images. They claim that visual design also entails three functions, the interpersonal, ideational and textual, therefore ‘whether we engage in conversation, produce an advertisement or play a piece of music, we are simultaneously communicating, doing something to, or for, or with, others in the here and now of a social context, (...) and representing some aspect of the world ‘out there’ (...) and we bind these activities together in a coherent text or communicative event’ (Kress & van Leeuwen, 2006, p. 15).

CLIL: Astronomy in the EFL class: lesson presentation and analysis

My model is divided in two broad sections: scientific content about our solar system and its components (content aspect in the 4Cs CLIL Framework) and Mythology (cultural aspect in the 4Cs CLIL Framework). Both sections share the same linguistic organization, based on the socio-linguistic model presented above. CLIL is applied along with the mainstream EFL class, roughly for about four (04) teaching hours per month (out of the eight (08) compulsory teaching hours of English per month provided by the curriculum). I produce the material myself and distribute it to students in photocopied handouts. Students keep the handouts in a file where they add any additional material that has to do with the lesson each time. English is used at a percentage of 85% to 95% in the CLIL class, depending on the linguistic level of the students, but the use of mother tongue is welcome when communication reaches a dead end. After all, the use of mother tongue is not at all restricted in a CLIL class (Llinares et al., 2012). Content is organized with material found online, usually adapted to the students’ linguistic needs, but quite often I cooperate with the science teachers to clarify things or incorporate important information. The project also runs as an eTwinning project for the 2014-2015 school term in cooperation with two Spanish lower secondary schools.

Below you will find examples of my teaching material along with explanations about its construction, function and usage.

The lesson starts with picture discussion. Pictures are the first genre students encounter in this model and they are challenged to discover and deal with its characteristics. Students are asked to study the pictures and talk about what they present. As you may notice studying the following pictures (Example 1 - Lesson 1), the linguistic choices students have to make are very simple and, whatever language they choose to use, they are expected to reach some kind of agreement about the information presented in the pictures. They can talk about colour, movement, direction and, of course, facts. They can also talk about the layout of the picture and how it can help and enhance content, and therefore, meaning. Moreover, despite that fact that the pictures seem to present the same theme, there are differences, or best, additional, new information, which challenges the students to expand the spectrum of their linguistic choices (both grammatical and lexical) in order to make meaning. As an exercise, after they have negotiated the meaning across the pictures, students could be asked to add captions to the pictures (a very favourable task!).
Next comes the text (Text 1). The text is a source of information, in order for the students to:

a. reinforce the knowledge they have acquired through picture discussion, b. discover new knowledge, by deciding what they have already learnt and what is new to them, c. get acquainted with extensive reading and be given the chance to use some reading techniques, d. be introduced to the notion of the genre, which, in this case, is a report (the first half of the text), and they have to discover the linguistic choices (basic grammatical) that make up a report (Simple Present). The other half of the text is a narrative, and the students are challenged to decide what can introduce a narrative (the question: How did the Solar System form?) and how a narrative is developed (Simple Past). This contrastive analysis will, in the long term, give them the potential to realize the different features and dynamics of these two genres.

**Text 1**

Our solar neighbourhood is an exciting place. The Solar System is full of planets, moons, asteroids, comets, minor planets, and many other exciting objects. Learn about Io, the explosive moon that orbits the planet Jupiter, or explore the gigantic canyons and deserts on Mars.

**What is The Solar System?**

The Solar System is made up of all the planets that orbit our Sun. In addition to planets, the Solar System also consists of moons, comets, asteroids, minor planets, and dust and gas. Everything in the Solar System orbits or revolves around the Sun. The Sun contains around 98% of all the material in the Solar System. The larger an object is, the more gravity it has. Because the Sun is so large, its powerful gravity attracts all the other objects in the Solar System towards it. At the same time, these objects, which are moving very rapidly, try to fly away from the Sun, outward into the emptiness of outer space. The result of the planets trying to fly away, at the same time that the Sun is trying to pull them inward is that they become trapped half-way in between. Balanced between flying towards the Sun, and escaping into space, they spend eternity orbiting around their parent star.
How did the Solar System form?

This is an important question, and one that is difficult for scientists to understand. After all, the creation of our Solar System took place billions of years before there were any people around to witness it. Our own evolution is tied closely to the evolution of the Solar System. Thus, without understanding from where the Solar System came from, it is difficult to comprehend how mankind came to be.

Scientists believe that the Solar System evolved from a giant cloud of dust and gas. They believe that this dust and gas began to collapse under the weight of its own gravity. As it did so, the matter contained within this could begin moving in a giant circle, much like the water in a drain moves around the center of the drain in a circle.

At the center of this spinning cloud, a small star began to form. This star grew larger and larger as it collected more and more of the dust and gas that collapsed into it.

Further away from the center of this mass where the star was forming, there were smaller clumps of dust and gas that were also collapsing. The star in the center eventually ignited forming our Sun, while the smaller clumps became the planets, minor planets, moons, comets, and asteroids.

Exercise 1

Students are presented with a word cloud. They are asked to use the words in the cloud to produce a piece of writing, a genre of their choice (either a report or a narrative).
Model lesson 2: The Earth

Below I am presenting again a whole lesson about *The Earth*. You may notice that the layout of the lesson tries to apply the principles of the linguistic model presented above, following a particular sequence.

THE EARTH

Look at the pictures and their captions and talk about our Earth. Add the missing captions:

![The Earth's magnetic field protects it from the Sun's radiation](image)

The Earth is a **sphere**, an object similar in shape to a ball. Astronauts aboard the Apollo 17 shuttle took one of the most famous photographs in history, called "The Blue Marble". This image shows Earth as it looks from about 29,000 kilometers (18,000 miles) away in Space. The picture shows us that Earth is spherical and looks like a giant blue and white ball.

Hundreds of years before humans travelled to space, we knew the Earth was round. The Sun and the other planets of our Solar System are also spheres. Three-fourths of Earth's rocky surface is covered with water. As far as we know, Earth is also the only planet that has liquid water, another important thing for life.

The entire planet is also surrounded by a thin layer of air called the atmosphere. Earth's atmosphere is unique in the solar system in that it contains just the right amount of oxygen to support animal life. Therefore, Earth is the only planet in the solar system on which life is found. The layers that make it up are also referred to as spheres (Figure 24.3). They are:

- **Atmosphere**—the thin layer of air that surrounds the Earth.
- **Hydrosphere**—the part of Earth's surface that consists of water.
- **Biosphere**—the part of the Earth that supports life. The biosphere includes all the areas where life is found.
- **Lithosphere**—the solid part of the Earth. The lithosphere consists of mountains, valleys, continents and all of the land beneath the oceans. Only one-fourth of Earth's surface is land, but solid rock makes up more than 99% of Earth's total mass.
Exercise 1
Complete the lists below with the information required:

**The Earth’s inner layers**

**The Earth’s outer layers**

Exercise 2

**The Earth’s magnetic field**
Use the notes below to write about the Earth’s magnetic field:

- gigantic bar magnet inside the Earth
- north and south pole
- magnetic field around
- iron and nickel in the Earth’s core
- move and create the magnetic field
- magnetic field spreads for thousands of kilometers into space
- what is the important role of the Earth’s magnetic field?

(source here)
Model lesson 3: Mythology

This lesson is an example of the second section of my model, that of mythology. Mythology enters the scene of Astronomy as an intercultural component. Astronomical objects have the names of Ancient Greek and Latin deities and there is always a very clear cultural connection between the names of the planets and moons and their ‘ancestors’. In this section we try to discover these intercultural connections and understand how the planets were named after those famous mythological creations. Meanwhile, a cross-cultural dialogue begins, since mythology takes us not only through the famous and rich Greek legends, but there are usually references to other cultures as well, provided different connections can be found.

In the following example there are different activities of intercultural awareness and you will be able to discover the way the students are challenged to enter such a dialogue. The lesson is fully based on picture discussion.

**MARS (ARES): the god of war**

*An oath to Ares*

O, mighty Ares,
in you we trust, to you we bow.
You are our commander, you are our lord,
we leave our destiny in your hands.
Our body and soul are yours,
we do not have a father other than you.
To your legs we rest our weapons,
the shield, the bow, the spear, the sword.
Bless us, proud god!
Exercise
Compare and contrast the following pictures and then talk about soldiers and weaponry in different times:
Conclusions

Let’s now check to what extent my paradigm complies with the 4Cs CLIL Framework. First of all, the content itself. Apart from the typical scientific content of Astronomy, which is given in a linear text, content is enriched with pictures. Pictures help the students receive a very vivid input about the subject in question and put their thinking mechanisms in action almost immediately. Looking at the pictures, the students do not spend much time understanding what they are going to deal with. Pictures are very effective stimulators of previous knowledge, social knowledge and imagination (ideational meaning in SFL). Therefore, all their cognitive skills are activated (cognition in the 4Cs CLIL Framework). And, of course, students look at the pictures and organize information into a text (textual meaning in SFL), making proper linguistic choices. Therefore, communication starts quite smoothly and instantly (communication in the 4Cs CLIL Framework).

(E.g. ‘This is the Sun’, ‘I can see the Sun and the planets’ ‘The planets move around the Sun’ ‘The soldiers are carrying guns’ ‘Ares is wearing a helmet’, etc.). Reading the text, the students need to employ reading techniques and strategies, and this requires more advanced cognitive skills, and, of course, understanding the text demands lexical and grammatical knowledge (textual meaning in SFL), but also contextual awareness. (Inter)cultural awareness, on the other hand, owns a very significant portion in this model, since mythology serves it right (culture in the 4Cs CLIL Framework). Mythology is the pure cultural aspect in this teaching material for very obvious reasons, but it is not only Mythology. I believe that the whole content demands a ‘dive’ in our common social knowledge, collective memory and the so-called ‘collective unconsciousness’ (ideational meaning), in order for interlocutors to effectively communicate, make commonly acceptable meaning and reach, what I call, a communicative agreement. For example, students could negotiate meaning over An oath to Ares, and they could, at the same time, discuss the social context of this oath (Who would take such an oath and why? In what cases?) (communication in the 4Cs CLIL Framework). Therefore, the students are challenged here to make use of their plurilingual skills, apart from their linguistic ones. And all these happen in a very subtle way, just as in mother tongue communication. One additional reason for this subtlety is, I think, the fact that, in this case, communication is meaningful, focused and targeted. The students have to talk about very specific things, in a very specific context, with very concrete sources of information. This facilitates communication a lot, to my view. Moreover, negotiating meaning and reaching a communicative agreement or conclusion happen simultaneously, just as Halliday suggests, as far as the meaning-making process is concerned. On a different level, the students need to communicate with each other, in order to reach the anticipated communication agreement, and, in doing so, they need to employ different conversational skills (agreeing/disagreeing, opinion exchange, interrupting, correcting, etc.). This is a process which always takes place in real-life communication domains. This process matches Halliday’s interpersonal meaning: the interlocutors make proper linguistic choices according to their status and relationship in order to reach a communicative goal. Certain exercises could help towards that goal. Exercises which help students discover (new) knowledge, but, at the same time, get them involved in a process of negotiating meaning and information. Exercises could initiate a social dialogue. The model includes many different kinds of activities which serve the meaning-making process (crosswords, puzzles, chart filling, multiple choice activities, sentence completion, rephrasing, information matching).

You may have noticed that, in my model, language is given a slight priority over content, since my purpose is to improve students’ linguistic skills through teaching content, although in CLIL it is not quite clear what is actually prioritized, language or content.

Note

As far as the organization of the content in the above teaching material is concerned, different online sources have been used, such as: Kids astronomy, Universe Today, RMG, NASA, Planets for Kids, Space, and Space Facts. Content has been carefully selected, combined and adapted to the students’ linguistic level and the linguistic needs of the model. Pictures have been selected from various internet sources.
References

APPENDIX

Sample teaching material on Astronomy (CLIL).

MERCURY - the scarred planet

Mercury = Hermes

Hermes ... a. wears winged sandals.

b. can fly.

c. is the messenger of gods.

d. protects the travellers and the merchants. © KONSTANTINA ZAVALARI (Med – OU)
Exercise 1

Compare and contrast the following pictures. Talk about differences that have to do with: a. Hermes's appearance, b. artistic elements, c. artistic context d. Hermes's role:

The winged Hermes  
Hermes of Praxiteles, carrying young Dionysus

Fill in the blanks with the proper words:
Hermes was one of the ------------------ Greek Olympian gods. He could ----------- because he wore -------------- -------------- sandals. Hermes delivered the ------------------ of gods to the people.

What do these companies do?
1. www.hermesmail.com : You can trust us to take your letters and parcels worldwide.
2. www.hermesair.com : Our planes travel you to the east and the west, the fastest, the safest, the cosiest.
3. www.hermes-logistics.com : Our lorries are brand-new, our drivers are very experienced, your goods are safe.
4. www.hermesrail.com : Fast, luxurious, comfortable trains to take you anywhere a rail can. Get on board!
5. 

Factfile

a. It orbits the Sun in 87.969 days.
b. It rotates round itself in 58.6461 days.
c. It is 57 million km away from the Sun.
d. Its maximum temperature is 465° C.
e. Its minimum temperature is -184° C.

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The planet
The planet Mercury is the closest of the planets to the Sun. It is visible from the Earth in the late evening or early morning sky. This planet is often called a morning star. This is because Mercury shines brightly in the early morning, just before the sun rises. It has also been called an evening star for the same reason. Mercury is often visible for a brief period of time just after the Sun sets.

Mercury is heavy
As the Sun formed, it pushed much of the lighter gas and dust out of the inner Solar System, leaving behind only heavier elements. As a result, Mercury is made out of many, heavy elements, mainly iron. It is a large metal ball of iron, with a cool iron core*.

Mercury has wrinkles
As Mercury's iron core cooled, it shrunk. This made its rocky crust* become wrinkled. Scientists call these wrinkles Lobate Scarps*. These scarps can be hundreds of miles long and even up to a mile high.

Mercury is scarred
The surface of the planet Mercury is covered with craters. These craters have been created by millions of accidental crashes with asteroids and comets. On other planets, different geological activities (e.g. volcanic eruptions) can help heal the wounds of these crashes. But, because Mercury's crust is so thick and hard, volcanic eruptions cannot make their way through to the surface of the planet, so Mercury will forever retain its scars.

Mercury has no atmosphere
The planet Mercury is too small and has too little gravity to hold onto an atmosphere. Gases released from the planet quickly escape into space. Also, Mercury is so close to the Sun that any atmosphere is quickly blown away by the Sun's solar winds. That means that there is almost no air on Mercury.

Mercury has no moons !!! (astronomy facts selected and accordingly adapted from www.kidsastronomy.com)

Finish the sentences

1. Mercury is very -------------- to the Sun, so we can ----------------------------------.

2. Mercury is an --------------------------, that's why it is very ------------------

3. Mercury's crust is ---------------------.

4. It can be boiling ------------------ on Mercury in the morning and freezing -------------- in the evening. When Mercury faces the Sun, its surface ------------------------- is very, very -------------

5. There is ------------------ in Mercury's core. When it cooled, it -----------------. After it shrunk, ------------------ appeared on Mercury's surface. These ------------------ are called --------

6. The surface of mercury is also full of ------------------ after ------------------------- crashed onto it. So Mercury is called ' ----------------------------'.

7. Volcanic eruptions can never penetrate --------------------- because it is

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Tell the story:

Our

Our **neighbourhood** was created about 13.8 billion years ago. A huge **cloud of dust and gas** was roaming the dark, lonely sky, until it somehow **collapsed** under the weight of its own **gravity**. In the cloud there was **lots of matter**, which, after the ‘explosion’ – **the big bang** – started moving in circles, just like a **planet**. The cloud matter **spinned** in a **giant** circle. At the centre of this circle a small **star** began to form. The star got bigger and bigger because it collected all the dust and gas that collapsed into it.

At the same time smaller pieces of the cloud matter started appearing around. The small star finally ignited forming **the Sun** and the smaller pieces around it became the **planets**, **comets**, and **asteroids**. The Sun is the biggest and most powerful object in our **solar system**. So it **attracts** all the other objects **towards** it. As a result, all the planets, comets, asteroids and the moons **orbit** the Sun.
Jupiter is a giant gas planet. Its atmosphere is made up of mostly hydrogen gas and helium gas, just like the sun. The planet's surface is covered in thick red, brown, yellow and white clouds.

One of Jupiter's most famous features is the Great Red Spot. It is a giant spinning storm, resembling a hurricane. At its widest point, the storm is about three-and-a-half times the diameter of Earth. Jupiter is a very windy planet. Winds range from 192 mph to more than 400 mph.

Jupiter has three thin rings. The rings were discovered in 1979 by NASA's Voyager 1 spacecraft. Jupiter's rings are made up mostly of tiny dust particles.

Jupiter rotates, or spins, faster than any other planet. One rotation equals one day. Jupiter's day is only about 10 hours long. Jupiter's orbit is elliptical, or oval-shaped. It takes 12 Earth years for Jupiter to make one revolution around the sun, so a year on Jupiter is equal to 12 years on Earth.

Did you know that....

a. Jupiter is the largest planet of our solar system (its diameter is 11 times that of the Earth)?

b. Jupiter’s mass is greater than twice the sum of all the other planets?

c. If Jupiter got four times its current mass, it would still remain about the same size?

d. Jupiter is the fastest spinning planet in our solar system (despite its mass and size)?

e. Jupiter’s Great Red Spot measured 40,000 km a century ago, but it’s shrinking — it’s currently half that size?

f. Jupiter has rings, too?

g. Jupiter’s magnetic field is 14 times as strong as the Earth’s?

h. Jupiter has 63 moons?

i. Jupiter takes about 12 years to orbit the Sun?

j. Temperature in the clouds of Jupiter can reach -145°C, but its core temperature can be about 24,000°C (!) (hotter than the Sun!!)?
Jupiter’s clouds: layers of methane and ammonia

Jupiter’s Great Red Spot: an enormous anti-cyclone system which has lasted at least 100 years. It is a giant spinning storm, like a hurricane.


Jupiter’s rings: three thin rings, made of tiny dust particles

Jupiter’s winds: they range from about 350 km per hour to more than about 750 km per hour

Activity 1

Rate Jupiter’s four largest moons (Galilean satellites):

Io: a volcanic moon

Europa: its surface is mostly water ice. Beneath the ice there is an ocean of water.

Ganymede: the largest moon in our solar system, with its own magnetic field.

Callisto: has many craters and is made of ice and rock.

ACTIVITIES

True or False?

1. It’s Jupiter’s mass that makes it the largest planet of our solar system.
2. Jupiter is half its size now, comparing it to the past.
3. There is an extreme temperature range between the upper parts of Jupiter and its core.
4. The Great Red Spot of Jupiter looks like a twister.
5. Jupiter’s rings are formed by pieces of ice.
6. Because Jupiter is massive and huge, it moves quite slowly.
7. Jupiter rotates in about 24 hours.
8. Jupiter is cloudy and windy.
9. Jupiter’s orbit is a perfect circle.

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18 CLIL Social science lessons supported by wiki

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Introduction
To support meaningful communication in English and enhance English communication skills and learning competences out of language classes, the pedagogical experiment was carried out at the Higher Secondary School for Administration of the EU, Prague, Czech Republic. The school has more than 800 students whereas all study English and two modern languages (German, Spanish, French and Russian). The school provides four specializations. One of them is Diplomatic Services, where the students can study two or three foreign languages.

The school management came with the idea of implementing English into different subjects 4 years ago to give the students more opportunities to practise English. Unfortunately, there was no subject teacher, who wanted to participate. Finally, a teacher with a diploma in teaching English and Social Science got involved into CLIL methodology. To persuade subject teachers to use at least CLIL “showers” in their lessons in the future, the CLIL teacher wanted to design a course, where the students communicate in English mainly with their classmates and the teacher plays the role of a facilitator. As a wiki gives the opportunity for team teaching, a language teacher can help without being present in a classroom. Additionally, the CLIL teacher focused on implementing learning competences into a learning process. Although learning skills are an inevitable part of a school curriculum, there are not fully integrated into teaching and a learning process as they should be.

Learning competences
In the Czech school curricular documents there is a slightly different approach to the construct of learning competences than in educational literature. Lokajíčková (2013, 324) states: “That learning competences are not always a synonym to the construct of learning to learn, as it is used mainly in English written literature.” and she suggests “Learning competences are considered to be dispositions for managing the situations for learning, while learning to learn is regarded as a process which accompanies learning.” Lokajíčková understands the concept of learning to learn to be super-ordinate to the concept of learning competences.

In the experiment the Czech school curriculum approach was applied where learning competences represent the capability to apply or use a set of related knowledge, skills, and abilities required to successfully performed tasks in a defined learning objective. In the Czech school curriculum learning competences are defined as follows (RVP, 2006):

The higher secondary education graduate should:
• have a positive attitude to learning and education,
• know different learning techniques,
• be able to create suitable learning’s conditions and learning environment,
• put different ways of working with a text into effect (learning and analytical reading), know effectively how to look up information and process it; be reading literate,
• listen to different oral presentations (explanation, lectures, speeches etc.) with understanding and be able to write down notes from different media sources,
• use different information sources including other people’s experience as well as their own,
• follow and evaluate their own learning progress and accomplished tasks and be able to accept other people’s assessment of their learning results,
• be aware of future possibilities and opportunities in their education, specifically in the field of their specialisation.
Above mentioned learning competences are more similar to generic skills defined by Petty (2014). Petty calls them mini key competences which include synthesis, analysis, evaluation, study skills and affective and social skills. Both learning competences and generic skills reflect skills and abilities which are cross-curricular and enhance desired quality for being competitive on the labour market. The learning skills are an integrated part of CLIL methodology and examples can be found in a textbook *The TKT Teaching Knowledge Test Course, CLIL Module*.

**Experiment design**

One class of 30 students was taught Social Science in CLIL by means of ICT support. In the experiment, the CLIL lessons were supported by the use of a wiki environment. The students were exposed to one a 45-minute lesson a week during the school year 2013/14. (Based on the successful results, the following school year two more classes were taught CLIL Social Science supported by a wiki.) The students were divided into ten groups of three students for the whole course. The level of students’ English is A2/B1 according to CEFR. During the course the students worked both individually and in teams. They were also assessed individually or collectively depending on given tasks. Each student had an unlimited access to teacher's materials, which were displayed on the wiki class collaborative pages. The team pages and student's portfolio page were accessed only to the members of each group.

**Results**

The students most appreciate the fact that they are able to speak on different topics in English, they can express themselves in many different ways (graphs, mind maps, pictures, videos etc.), which reflects their learning styles. They find interesting that they are assessed not only by the teacher but as well by their peers - team members. Most of the students are in favour of co-operating in teams, even though sometimes it was very challenging. Although there are a few studies, e.g. by Kam and Katerattanakul (2014), which consider synchronicity for the most important aspect of collaborative learning, there seems to be enough studies, e.g. by Coll, Rochera and de Gispert (2014), which find asynchronicity especially in self and peer-assessment fundamental. Nevertheless, there are a few students who do not like working in teams, and they consider the whole idea of CLIL and using the wiki neither motivating, nor contributory to their studies. It can be stated that the experiment has approved the idea of implementing CLIL and a wiki platform into teaching and learning process.

**Structure of the lesson**

The teaching and learning processes have been designed to promote maximum communication without omitting other language skills (reading, writing, and listening). The whole process consists of three stages. The first stage includes presenting new knowledge or information to the students by the teacher with the help of the wiki platform, a text-analysing activity or an expert group activity. This stage refers to Neo-behaviourism, where a teacher is a guarantee of transferring basic knowledge to students, so that they are able to gain an insight into the whole issue.

The second stage represents active learning (Constructivism). Students are responsible for seeing the issues in context and developing their own experience. This stage has two phases. In the school phase the students work in pairs or teams on activities which encourage them to use general classroom communication skills, e.g. asking questions, giving feedback, asking for help, repeating, checking or interpreting data. During the home phase, the students work within the wiki environment. Each student has their own portfolio page, can be seen in Picture 1, where they submit their homework, usually based on comparing ready-known information (pre-concept) with “just-learnt” information or give an opinion on related issues.
The students give a short assessment or self-assessment on a current learning issue or their performance during a lesson. This should help them to improve their functional language for academic purposes, e.g. for predicting and justifying, comparing and contrasting or showing preferences and giving opinions as well as to extending their experience.

The third stage deals with creating student’s own learning space/environment via the Internet. This process refers to Connectivism, where “knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and traverse those networks”, which supports the idea of creating learning groups on the Internet (for more see here).

Students work in teams of three to four students on a team/collaborative wiki page, can be seen in Picture 2. The whole team contributes to their page after each lesson. Students should post their reflection on a lesson as well as they should add some materials concerning their interests or needs.
The team members can see each other portfolio pages, so that they can be inspired while working on their tasks at home. They comment member’s contributions and react to their comments. The whole communication is supervised by the teacher, who regularly posts her own comment and assesses the content of the page from subject-content or foreign language point of view. This supervision should help students stay focused on learning and develop not only academic and general functional language, e.g. agreeing, disagreeing or presenting work but also be responsible for creating collaborative materials.

Communication

Including functional language for academic and general classroom situations into a teaching and learning process depends on a variety of factors e.g. (overall learning outcomes, the specific objectives set, the degree of complexity of the input, the students’ experience with language; what they already know, what is to be recycled, what they should know, the students’ learning style...etc.). Functional language should be taught as a separate introductory activity or introduced within the lesson. At the beginning of the course the students were handed out a list of the most useful phrases for general classroom situations. For more see here, here and here.

During the lessons the students were asked to use the phrases as much frequently as possible and fill into the list any new phrases they needed. The page with phrases was also on a wiki and the students could add new phrases. Regarding to a functional language for academic purposes the students needed mainly phrases for presenting their work, interpreting data, predicting and justifying, comparing and contrasting. At the beginning the students struggled a lot, because it was completely new to them. However, with proper scaffolding the students made a great progress.

Wiki

There are two main reasons why the wiki can be chosen as the main online collaborative platform. Firstly, “the basic wiki has several properties that make it ideal framework for composing different time and place environment. Applications engineered within the style of wiki interactions can support a variety of learning activities ranging from tightly to loosely coupled collaborations. Wiki-based collaborative applications can also support metacognitive tasks, like reflection or self/co-explanation”, Larusson (2009, 372) defines. Secondly, the wiki is considered to be a user-friendly tool. The wiki is a website allowing users to create and edit pages easily and collaboratively. It can serve as a tool for synchronous and asynchronous communication and also enables students and teachers to keep a track of any changes made into students’ contributions, which might build their awareness of students’ learning process. Furthermore, it might serve not only as a platform for a teacher’s assessment of student’s progress or frequency of contributions (adding, deleting), but also it might provide the information about student’s interests, motivations and giving space for their creativity. More information on the practical use of a wiki in learning and teaching processes can be found here and here.
Model activities

The following examples of learning activities are taken from real lessons of CLIL Social Science. The content of the subject is divided into five areas according to a school curriculum (Psychology, Learning, Sociology, Family and Personal Finance). As these curricular topics are quite personal and closely related to students’ emotionally unstable age, the students like talking about themselves and things that are uneasy to cope with (e.g. parents, friends, a school and money).

As the subject is taught only once a week for forty-five minutes, each lesson has to be carefully planned from several points of views.

Firstly, the subject content has to include the core new information like basic definitions, short texts, a few practical examples and activities within one lesson.

Secondly, as there is not enough time for deeper explanations or practice, the vocabulary scaffolding is necessary for each activity. The language is primarily aimed at practising grammar and lexis which the students have already have the knowledge of e.g. personality adjectives, the vocabulary concerning the family, friends, everyday life, social problems, money etc., basic tenses and a passive voice.

Thirdly, each activity should be also focused on learning skills taken from above early mentioned learning competences.

Finally, there is a wiki home activity (always in English) which should support above mentioned aspects of a learning process.

It is very challenging for both a teacher and students.

Model activity 1: Psychology

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>topic</th>
<th>Psychology – Perception.</th>
</tr>
</thead>
<tbody>
<tr>
<td>content</td>
<td>Students understand the terms <em>perception</em>, <em>five senses</em> and <em>stimuli</em>.</td>
<td></td>
</tr>
<tr>
<td>language</td>
<td>Specialist vocabulary, verbs: to involve, to allow, 2\textsuperscript{nd} case – of.</td>
<td></td>
</tr>
<tr>
<td>learning skills</td>
<td>Reading skills strategies, students can use visuals (a mind map) for summarising the text.</td>
<td></td>
</tr>
</tbody>
</table>

Vocabulary Input

- English Glossary.

School Activity

- Reading for a gist, drawing a mind map, explaining new things to a partner.

Home/Wiki Activity

- Write a diary entry on your portfolio page: for five minutes (at any time of a day) observe things around you, use all your senses and write what you see, feel, smell and hear.

Instructions:

1) Read the text on your own, use three different colours to mark a text associated to a) *perception*, b) *five senses* and c) *stimulus/stimuli*. 

**What Is Perception?**

Perception is our sensory experience of the world around us and involves both the recognition of environmental stimuli and actions in response to these stimuli. Through the perceptual process, we gain information about properties and elements of the environment that are critical to our survival. Perception not only creates our experience of the world around us; it allows us to act within our environment. Perception includes the five senses; touch, sight, taste, smell, and taste. It also includes what is known as proprioception, a set of senses involving the ability to detect changes in body positions and movements. It also involves the cognitive processes required to process information, such as recognizing the face of a friend or detecting a familiar scent. The world is full of stimuli that can attract our attention through various senses. The environmental stimulus is everything in our environment that has the potential to be perceived.

The modified text taken from here.

2) With your partner try to guess the meaning of the new words written in a table, use the text and English Glossary.

<table>
<thead>
<tr>
<th>Czech</th>
<th>English</th>
<th>English Glossary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>To be perceived</td>
<td>The way that you notice or understand something using one of your senses.</td>
</tr>
<tr>
<td>Recognition</td>
<td></td>
<td>The act of knowing who or what someone or something is because of previous knowledge or experience.</td>
</tr>
<tr>
<td>Environmental</td>
<td>stimulus/stimuli</td>
<td>An agent (as an environmental change) that directly influences the activity of a living organism or one of its parts (as by exciting a sensory organ or evoking muscular contraction or glandular secretion).</td>
</tr>
<tr>
<td>Perceptual process</td>
<td></td>
<td>Relating to, or involving perception especially in relation to immediate sensory experience.</td>
</tr>
<tr>
<td>Proprieties</td>
<td></td>
<td>Special characteristics.</td>
</tr>
<tr>
<td>Elements</td>
<td></td>
<td>A particular part of something.</td>
</tr>
<tr>
<td>Proprioception</td>
<td></td>
<td>The reception of stimuli produced within the organism.</td>
</tr>
<tr>
<td>Cognitive processes</td>
<td></td>
<td>Relating to, being, or involving, conscious intellectual activity (as thinking, reasoning, or remembering).</td>
</tr>
</tbody>
</table>

Table 4: New specialist vocabulary

3) When you finish, together draw a mind map containing the most important information about perception. Then try to explain new things to your partner according to your mind map without looking into the text.

**Model activity 2: Psychology**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Topic</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>Psychology – Motivation.</td>
<td>Students understand the terms of motivations and can explain Maslow's Hierarchy of needs.</td>
</tr>
<tr>
<td>language</td>
<td>Specialist vocabulary, students give explanations.</td>
<td></td>
</tr>
<tr>
<td>learning skills</td>
<td>Students can learn from different sources (from a text and classmates). Note taking.</td>
<td></td>
</tr>
</tbody>
</table>
## Vocabulary Input
A short text, highlighted vocabulary, a list of important words.

<table>
<thead>
<tr>
<th><strong>School Activity</strong></th>
<th>Expert groups: a group of four students works on one topic (Extrinsic Motivation), then they find partners from the second group (Intrinsic Motivation) and explain to each other their new information, while explaining the another students takes notes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home/Wiki Activity</strong></td>
<td>Create Maslow's Hierarchy of needs on your portfolio page. To each stage write your most important needs. Then look at the pyramids of your team-members and compare your needs to their needs. Are the same or different?</td>
</tr>
</tbody>
</table>

## Instructions
1) Read together the definition and typical examples of behaviour. Look at the new words; use a dictionary to translate them if you need. Ask the teacher, if there is anything unclear.
2) In a group a) discuss if you understand the definition b) gives more examples of typical behaviour.
3) Find a partner from the other group. First, explain to him/her your definition, gives examples. Then explain again and this time the partner takes notes (spell the word if he/she does not understand).
4) When you finish, swap the roles.

## Worksheet A

**Extrinsic Motivation:** occurs when we are motivated to perform behaviour or engage in an activity in order to earn a reward or avoid a punishment.

**Examples** of behaviours that are the result of extrinsic motivation include:
- Studying because you want to get a good grade.
- Cleaning your room to avoid being reprimanded by your parents.
- Participating in a sport in order to win awards.
- Competing in a contest in order to win a scholarship.

In each of these examples, the behaviour is motivated by a **desire to gain a reward** or avoid a negative outcome.

**Vocabulary:**
- To occur
- To perform
- To engage
- To include
- To involve
- behaviour
- avoiding
- in situations
- in an activity
- to reward
**Worksheet B**

**Intrinsic Motivation**: involves engaging in behaviour because it is personally rewarding; essentially, performing an activity for its own sake rather than the desire for some external reward.

**Examples of behaviours** that are the result of intrinsic motivation include:
- Participating in a sport because you find the activity enjoyable.
- Solving a word puzzle because you find the challenge fun and interesting.
- Playing a game because you find it exciting.

In each of these instances, the person’s behaviour is motivated by **an internal desire to participate** in an activity for its own sake.

**Vocabulary:**
- To occur
- To perform
- To engage
- To include
- To involve
- behaviour
- avoiding
- in situations
- in an activity
- to reward

**Instructions**
1) Look at your worksheet. You have only half of the information. The second half your partner has. Take turns and dictate to each other the missing information.
2) When you finish, look at the pyramid of needs and think if it is the same for you, your parents and great-grandparents? Are the same or are different, discuss it in a group of four.

---

**Worksheet A**

<table>
<thead>
<tr>
<th>Maslow’s Hierarchy of Needs</th>
<th>Morality, creativity, spontaneity, problem solving, luck of prejudice, acceptance of facts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esteem</td>
<td>Friendship, family, sexual intimacy.</td>
</tr>
<tr>
<td>Safety</td>
<td>Breathing, food, water, sex, homeostasis, excretion.</td>
</tr>
</tbody>
</table>

**Worksheet B**

<table>
<thead>
<tr>
<th>Maslow’s Hierarchy of Needs</th>
<th>Self-esteem, confidence, achievement, respect of others, respect by others.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-actualization</td>
<td></td>
</tr>
<tr>
<td>Love/belonging</td>
<td>Security of: body, employment, resources, morality, the family, health, property.</td>
</tr>
<tr>
<td>Physiological</td>
<td></td>
</tr>
</tbody>
</table>

Useful links for teaching psychology:
- [https://www.youtube.com/watch?v=vo4pMVb0R6M](https://www.youtube.com/watch?v=vo4pMVb0R6M)
Model activity 3: Learning

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>topic</th>
<th>Learning – Learning styles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>content</td>
<td>Students can classify learning activities according to learning styles.</td>
<td></td>
</tr>
<tr>
<td>language</td>
<td>Functional language: giving instructions. Imperative forms. Give preferences. To prefer (^{-}\text{ing}) to (^{-}\text{ing})</td>
<td></td>
</tr>
<tr>
<td>learning skills</td>
<td>Students know different learning techniques. They can draw a pie graph.</td>
<td></td>
</tr>
</tbody>
</table>

Vocabulary

Input

A multiple intelligences test.

School Activity

At first, the students make a multiple intelligences test from a book CLIL Activities © Cambridge University Press 2012 photocopiable. They have to score 40 items. Afterwards they do simple counting and get their multiple intelligences’ results. Based on their scoring they complete a pie graph. Then the follow-up activity includes matching learning activities to seven intelligences modalities (which represent different learning styles).

Home/Wiki Activity

On your team page write these five subjects: Czech language, English Language, Maths, Law and Economy. A) Write to each subject the way you learn it the best (each of you). B) Look at your answers and try to match each member to his/her learning styles.

Instructions

1) Read the statements related to learning activities and match them with one of the seven intelligences modalities.
2) Ask your partner about his/her learning styles (intelligences modalities) and with the help of "scaffolding" give your partner instructions how to learn the best different subjects.

Worksheet: Learning

Multiple intelligence modalities:
- visual, auditory, kinaesthetic, verbal, logical, intrapersonal, interpersonal

- a) Use many visuals in the classroom.
- b) Do not use activities which require students to sit quietly.
- c) Make connections, links between new and old information.
- d) Work in pairs and small groups regularly.
- e) Use physical activities, competitions, board games, role plays etc.
- f) Use wall displays posters, maps, flash cards or graphic organizers etc.
- g) Use activities that allow you to move around and be active.
- h) Use reading activities followed by speaking.
- i) Use audio tapes and videos, storytelling, songs, jazz chants, memorization and drills.
- j) Try to keep diary, your own notes.

Scaffolding: giving instructions.

Use gestures.

Don’t use audio records.

You should prefer learning in a group to learning alone.

You shouldn’t work on your own/ by yourself.

It helps to draw pictures.

It doesn’t help to listen to music while learning.

It is suitable to watch films instead of reading a long text.
<table>
<thead>
<tr>
<th>Outcomes</th>
<th>topic</th>
<th>Learning: classical and operant conditioning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>content</td>
<td>Students understand terms of classical and operant conditioning, they understand the difference between unconditioned and conditioned stimulus.</td>
<td></td>
</tr>
<tr>
<td>language</td>
<td>Grammar: using “would” and verb patterns, likely and unlikely.</td>
<td></td>
</tr>
<tr>
<td>learning skills</td>
<td>While watching a clip, students listen for specific information and complete missing words in a gap.</td>
<td></td>
</tr>
</tbody>
</table>

**Vocabulary Input**

A clip with subtitles and a gap filling activity.

**School Activity**

Students watch a clip without and with subtitles at: [https://www.youtube.com/watch?v=H6LEcM0E0io](https://www.youtube.com/watch?v=H6LEcM0E0io) and do while watching tasks.

**Home/Wiki Activity**

On your portfolio page evaluate the activity. The following questions might help you: Was it easy or difficult? What did you like? What new things did you learn? What would you change about the lesson? Were you active during the lesson?

**Instructions**

1. Watch a clip without subtitles and when you hear the word in a hierarchy graph tick it.

![A clip watching activity: A hierarchy graph](image)

2. Watch a clip with subtitles; try to remember as much information as you can, then tell your partner what you remember.
3. Listen to the first part of a clip and complete an article in a gap.
4. Listen to the second part of a clip and complete missing words.
5. Find explanations of the new words/terms from a hierarchy graph in a text and write their definitions into your school notebook.
Read the first part of a text and complete articles (a/an or the) in gaps.
When we think about learning we often picture students in 1 classroom or lecture hall, books open on their desks, listening intently to 2 teacher or professor in 3 front of the room.
But in psychology, learning means something else. To psychologists, learning is 4 long-term change in behaviour, that's based on experience. Two of the main types of learning are classical conditioning and operant, or instrumental, conditioning.
Let’s talk about classical conditioning first. In the 1890's, 5 Russian physiologist named Ivan Pavlov did some really famous experiments on dogs. He showed dogs some food and rang 6 bell at 7 same time. After 8 while, 9 dogs would associate 10 bell with the food. They would learn, when they heard the bell, they would get fed. Eventually, just ringing the bell made the dog salivate. They learned to expect food at 11 sound of a bell. You see, under normal conditions, the sight and smell of food causes a dog to salivate. We call the food 12 unconditioned stimulus, and we call salivation the unconditioned response. Nobody trains a dog to salivate over some steak. However, when we pair an unconditioned stimulus like food with something that was previously neutral, like the sound of a bell, that neutral stimulus becomes a conditioned stimulus. And so classical conditioning was discovered.

Read the second part of a text and complete words in gaps.
Operant conditioning explains how consequences lead to changes in voluntary behaviour. So how does operant conditioning work? There are two main components in operant conditioning: reinforcement and punishment. Reinforces make it likely that you’ll do something again, while punishers make it likely. Reinforcement and punishment can be positive or negative, but this doesn't mean good or bad. Positive means the addition of a stimulus, like getting dessert after you finish your veggies, and negative means, the removal of a stimulus, like getting a night of no homework because you did well on an exam. Let’s look at an example of operant conditioning. After eating dinner with your family, you clear the table and wash dishes. When you’re done, your mum gives you a big hug and says: “Thank you for helping me.” In this situation, your mum’s response is positive reinforcement if it makes you more likely to repeat the operant response, which is to clear the table and wash the dishes. Operant conditioning is everywhere in our daily lives.

More materials on learning:
http://www.educationcorner.com/study-skills.html
http://www.educationworld.com/a_curr/profdev064.shtml
http://www.lifecircles-inc.com/Learningtheories/learningmap.html
Model activity 5: Personal Finance

Outcomes

<table>
<thead>
<tr>
<th>topic</th>
<th>Personal Finance – a personal budget.</th>
</tr>
</thead>
<tbody>
<tr>
<td>content</td>
<td>Students learn the items of a personal budget.</td>
</tr>
<tr>
<td>language</td>
<td>Specialist vocabulary – income, expenses, budget, savings.</td>
</tr>
<tr>
<td>Questions:</td>
<td>“how much money...?”</td>
</tr>
<tr>
<td>learning skills</td>
<td>Students learn from each other and their parents by sharing experience with personal budgeting. Students can assess/give feedback on their work.</td>
</tr>
</tbody>
</table>

Vocabulary Input

A gap-filling activity.

School Activity

Students work in pairs. Mainly they talk about their personal budget.

Home/Wiki Activity

Show your parents your monthly family budget you designed at school. Discuss any differences with your parents. On your portfolio page write a short assessment of your monthly family budget. Did you get it correctly? Did you learn anything new from your parents, etc.?

Instructions

1) Complete following words into the text A personal budget:
   Verbs: to change, to identify, to allow, to plan.
   Nouns: income, budget, savings, decisions, expenses.

   Text A: personal budget:
   A) helps you 1) ........ how you spend your money and how much you spend in a given period of time;
   B) helps you 2) ........... the 3) ................ you'll need for unexpected 4) ........... or changes in 5) ...................; and
   C) you make 6)................... about your money both today and as your situation changes over time.
   Remember, your 7) ........ is a general plan. If your expenses 8) ..........., or if you have an emergency expense, your budget will have to change, too. So try to 9) ............yourself a few crowns left over every month for pocket change or for the unexpected.

2) When you finish, check your answers with your partner.
3) Read the text: What information do you need to make a personal budget? With your partner discuss some examples of your income and expenses.

What information do you need to make a personal budget?

You need to know:
a) how much money you have coming in during a given period of time, that is, your income
b) how much money you have going out in a given period of time, that is, your expenses;
c) how you can adjust your spending habits to save for unexpected events and get the most value for your money.

4) Ask your partner:
   a) “How much money do you........??”
   Finishing the questions with as many verbs as you can.
   b) How much money they have coming in during a month (earn, to get from parents, to win in lottery...)
   c) How much money they have going out a month (to spend on, to pay for, to give, to save.....)

5) Write your monthly family budget.
More materials on personal finance/budget at:
https://www.moneyinstructor.com/budgeting.asp
http://www.practicalmoneyskills.com/foreducators/lesson_plans/

### Model activity 6: Personal Budget

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Topic</th>
<th>Personal Finance – saving and spending habits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Students compare and evaluate different attitudes to money.</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Past tenses and a narrative. Giving opinions.</td>
<td></td>
</tr>
<tr>
<td>learning skills</td>
<td>Students learn from each other and their parents by sharing experience with personal budgeting. Students can assess/give feedback on their work.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vocabulary Input</th>
<th>A short moral story.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Activity</td>
<td>Students read the story and then discuss the different ways of handling money.</td>
</tr>
<tr>
<td>Home/Wiki Activity</td>
<td>Imagine the situation. Your team wants to go to London for a three-day trip in six months. Design a saving plan for the whole team. Don’t forget to plan the trip budget first.</td>
</tr>
</tbody>
</table>

### Instructions

1. Read the story *Julia*. While reading the story, notice how many ways we can use past tenses.
2. In the story there are seven children, how do they handle their money?
3. Discuss with your partner the best and the worst way of spending money.

### References


Julia

Every month, Julia and her cousins would go for the big family meal at their grandparents' house. They would always wait excitedly for the moment their grandfather would give them a few coins, "so you can buy yourself something." Then all the children would run off to buy chewing gum, lollies, or wine gums. The grandparents, aunts, uncles, and parents commented that, behaving like this, the children would never learn to manage their money. So they proposed a special test, in which the children would have to show, over the course of a year, just what they could manage to get with those few coins.

Some of the children thought that they would save their money, but Ruben and Nico, the two smallest kids, paid no attention, and they continued spending it all on sweets. Every time, they would show off their sweets in front of the other children, laughing and making fun of their cousins. They made Clara and Joe so angry that these two could no longer stand to keep saving their money. They joined Ruben and Nico in spending whatever they had, as soon as possible, on sweets.

Monty was a clever boy, and he decided to start managing his money by exchanging it: buying and selling things, or betting it with other children, in card games. Soon he had surprised the whole family. He had accumulated a lot of money for little effort. The way he was going, he would end up almost a rich man. However, Monty was not being very careful, and he got involved in more and more risky deals. A few months later he hadn't a single penny left, after placing a losing bet on a horse race.

Alex, on the other hand, had a will of iron. He saved and saved all the money he was given, wanting to win the competition, and at the end of the year he had collected more money than anyone. Even better, with so much money, he managed to buy sweets at a reduced price, so that on the day of the competition he was presented with enough sweets for much more than a year. And even then, he still had enough left over for a toy. He was the clear winner, and the rest of his cousins learnt from him the advantages of knowing how to save and how to wait.

There was also Julia. Poor Julia didn’t enjoy the day of the competition, because even though she had had a wonderful secret plan, she had spent her money without giving her plan enough time to work. However, she was so sure that her plan was a good one, that she decided to carry on with it, and maybe change the expressions on her relatives' faces, who had seemed to be saying "What a disaster that girl is. She couldn't manage to save anything."

When she was about to complete the second year of her plan, Julia surprised everyone by turning up at the grandparents' house with a violin and a lot of money. What was even more impressive was hearing her play. She did it really well.

Everyone knew that Julia adored the violin, even though the family couldn't afford to pay for her to have lessons. So Julia had got to know a poor violinist who played in the park, and she offered him all the coins her grandfather had given her, if he would teach her how to play. Although it wasn't much money, on seeing Julia's excitement, the violinist agreed, and he taught her happily for months. Julia showed so much desire and interest that a little after a year the violinist loaned her a violin so they could play together in the park, as a duo. They were so successful that gradually she managed to buy her own violin, with quite a bit of money to spare.

From then on, the whole family helped her, and she became a very famous violinist. And she would always tell people how it was possible, with just a few coins well spent, to make your wildest dreams a reality.

Text of the story is taken from here.
19 CLIL & the teaching of history and culture

Michal Bodorík
Constantine the Philosopher University, Slovakia

Introduction
In contemporary society “history subjects” are part of national curricula around the globe. Within history classes the cultural component is taught as an inseparable part. Knowing and understanding history and culture then belongs to the standard general knowledge and education of every human being. The question then is, “What do history and culture lessons give to learners?” Deutsch (1998) sees relevance in the following: “History provides identity. Studying history improves our decision making and judgment. History shows us models of good and responsible citizenship. History also teaches us how to learn from the mistakes of others. History helps us understand change and societal development. History provides us a context from which to understand ourselves and others.”

From the above quote it is clear that studying history and culture is meaningful for people and in relation to our topic of teaching these using the CLIL approach, meaning in a foreign language. This is suitable not only for understanding what is happening around us but also for the improvement of communicative competence in the target language. Reid (2014, p. 7) grounds this idea in her monograph by saying: “One of the main priorities of the council of Europe and also Slovak authorities is to equip European citizens with the ability to communicate across linguistic and cultural boundaries in an increasingly multicultural and multilingual Europe, in other words to acquire intercultural communicative competences... Slovak citizens have to be able to communicate professionally in foreign languages and to communicate without any major cultural misunderstandings.”

Based on the previous paragraph the theme of our chapter is relevant as implementation of the CLIL approach provides Slovak learners with an educational environment that supports the idea of learning historical and cultural aspects in a national and international context and at the same time the opportunity to gain communicative competence in a foreign language.

CLIL and Slovakia
During the last decade of teaching English as a Second Language in Slovakia the CLIL (Content and Language Integrated Learning) approach has become of serious interest. Some elementary schools within Slovakia have adopted this approach as a way to teach and learn a foreign language in a more natural way. This approach gives teachers and learners alike the opportunity either to discuss specific content in the foreign language being studied or to practice the foreign language in a content-rich environment.

In is important to differentiate the CLIL approach from bilingual education which also has strong roots in Slovakia. Gondová (2013) states that the main difference is the fact that teaching language (language of instruction) is for the learner a foreign language by which he/she is able to communicate only in class but not beyond the class. This is because the language is not a natural communication tool for the community – the society that the learner lives in.

Another explanation that is valid for the Slovak educational system is given by Pokrivčáková (2013, p. 16) who says: “teaching bilingually at bilingual schools usually means teaching at least three content subjects exclusively in a foreign language (i.e. for 100% of teaching time) either by native or non-native teachers. Bilingual education is considered too challenging and demanding for the majority of learners and is recommended only to excellent, highly motivated students with above-average intellectual skills and language aptitude.”

As the CLIL approach has gradually naturalized within the Slovak school environment many serious questions emerge and it becomes crucial to think about aspects that affect teachers and students as well as the Slovak educational system as a whole. One of them is the efficiency of the
applied approach. For this purpose several authors have carried out different surveys and found valuable insights.

In 2012 the National Institute for Education published a collection of papers under the name: Obsahovo a jazykovo integrované vyučovanie (CLIL) v ISCED 1. This collection gathered information about the process of applying CLIL methodology at the primary school level – more specifically the final evaluation of a project of experimental testing regarding the effectiveness of the CLIL approach applied during the teaching of foreign languages, the results of testing of psychological aspects at grade 4 and also the contemporary trends in CLIL research. In the second part the publication contains several lesson plans and examples of specific materials that could be applied within CLIL lessons in natural sciences and maths.

Another publication that focused on the adaptability of CLIL in Slovak primary schools was published by Pokrivčáková in 2013 under the title: CLIL Research in Slovakia. This monograph gives a holistic view of the outcomes of the research that was conducted with the regional background of the Slovak educational system. The book discusses five areas that deal with viewpoints of learners and teachers toward CLIL, the study results of CLIL lessons as well as the interactions within classes. Last but not least space is also given to the needs and competencies of teachers.

These crucial aspects have arisen during the adaptation process of CLIL in Slovakia. The second issue that emerges is the material base for teachers. The term material base encompasses all of the necessary tools for CLIL teachers such as: books, workbooks, individual activities, lesson plans, examples of already taught courses/lessons, previously created and used handouts that better ensure the educational process. Teachers play the crucial role as they are the ones responsible for deciding what to teach, what topic and the content with which to work. When planning CLIL lessons teachers determine what materials (activities, handouts, tasks) best suit the purpose.

In Slovakia the educational system encompasses both history and culture under one subject: "History". These history classes are taught at various levels, mainly at primary and secondary schools. The university school level also offers history subjects among specific study programmes. Several authors who are also teachers at primary schools elaborated about materials they applied when teaching using CLIL methodology.

In 2011 Vengrická wrote a publication that was part of a project supported by the Ministry of Education, Science, Research and Sport of Slovak Republic and the funds of European Union. The project was connected to the innovation, methods and forms of teaching using the CLIL method at the primary school level. The publication was designed as a collection of various worksheets that were united under one title – Vlastiveda (generally translated as "science about the homeland"). The collection was prepared for the application of CLIL methodology in grade four with the aim to teach specific content in English. As this edition was not purely composed for teaching history or culture, some of the worksheets dealt with topics such as: the prehistoric period, the middle ages, working with maps, Slovak historical figures, Slovak monuments and landmarks. Based on these topics students would learn about history and culture in a national as well as a European context. Individual sheets contained information about the aims of the lesson in terms of content and language, the equipment necessary for carrying out the lesson, the procedure and online sources.

Another author who wrote two publications about implementation of the CLIL approach to teaching history in 2013 was Přibík. His first publication entitled: Učebné texty v dejepise vyučovanom metódou CLIL (Learning Texts for the History Class that is Taught by CLIL Methodology) was designed with the assistance of The Methodology and Pedagogy Centre in Prešov (The Institution for In-Service Teachers’ Education and Training) and with the support of EU funds. With the implementation of the CLIL approach as a form of bilingual education the making of materials that match the needs of history classes has emerged and so the author decided to create learning texts that are suitable for teaching this subject in the English language. Přibík’s textbook is divided into two parts, first is the theory in which the content, form, structure, specifics of teaching materials for bilingual studies are defined and where
teachers' foreign language competence and fluency are discussed. The second part contains three examples of lesson plans that are based on the author’s personal teaching experience with a focus on teaching history content and so gives the reader a chance to understand the complexity of designing and sequencing individual lessons for CLIL purposes. Within the lesson plans a topic connected solely to Slovak history is elaborated to show that it is possible to teach one’s home country history in English.

The second publication that Přibík worked on was titled: Interaktívna prezentácia na hodinách dejepisu vyučovaných metódou CLIL (An Interactive Presentation for History Lessons Taught Using CLIL Methodology). This writing was also designed with the support of the previously mentioned organizations. The work discusses how important it is to apply PowerPoint presentations for teaching purposes and especially to use presentations with interactive whiteboards for teaching history classes. An example is given with the detailed description of designing a presentation for the teaching of the French Revolution. The author depicts his process of making the presentation step by step and explains the purpose of sequencing the slides into sections for a logical layout of the lesson and for better teaching of the selected topic.

It has also to be said that there are few people who teach history in a CLIL environment as this subject seems to be complicated to teach. One challenge to be considered is that some national topics require specific vocabulary that may not have relevant terminology in the target language. Based on Cambridge ESOL Examinations (2011, p. 8) “one of the most common concerns of CLIL teachers is that they cannot find appropriate history materials for their classes. Either they cannot find anything to complement the work done in the L1 curriculum or adapting native speaker materials takes too much time... However, as teachers gain more experience with CLIL, they generally start to feel able to adapt native speaker materials from websites and from subject-specific course books.” For this reason this chapter includes model activities to be adapted for use in CLIL lessons.

Another relevant component is the balance between the amount of subject matter – content and the amount of language taught. According to Cambridge ESOL Examinations (2011, p. 2) when teaching history through CLIL: “it is important to notice that ‘content’ is the first word in CLIL. This is because curricular content leads language learning. Learning about history in a non-native language is challenging for teachers and learners. It involves developing knowledge and understanding of: events, people, structures and changes in the past; how the past influences the present; chronology; interpreting and evaluating sources; explaining cause and consequence, comparing and contrasting interpretations of the past; making links across historical periods; reaching conclusions.”

Gondová (2013) defines the perception of CLIL adaption among Slovak schools as follows: CLIL is understood primarily as subject (content) teaching, as evident by the fact that CLIL lessons are referred to in the schedule as subject classes, not as language lessons. In contrast the CLIL lessons have dual goals – subject and language. Language teaching is therefore not separated from the context but is an integral part of the teaching of the subject which also determines the language goals.

Because of the previously stated reason that content is “first” the model activities below were designed to work with a history topic – content and the target language (English) are then practised using activities which support the needs of communicative competence. If the titles of activities seem inappropriate it is because they refer to the development of different language skills, for even as a lesson focuses on a theme it also fosters certain language aspects.

The activities below are written in the English language as the intention of this publication is to provide a wider audience with suitable materials that could be made available for immediate use. Furthermore the book presents issues and thoughts that teachers and indeed schools should consider when adopting the CLIL approach.

The following activities are provided in this chapter as a source of sample activities for in-practice teachers in Slovakia. Students at universities may implement them for lessons where
historical and cultural content are taught using a foreign language (English) and the presence of the mother tongue.

These activities may also be included as part of an individual lesson plan for a “History” subject that is taught in Slovakia as a compulsory component of the national curriculum. History teachers when planning their individual lessons as well as the full year programme refer to the academic standards that are based on the official documents issued by The National Institute for the Education of the Slovak Republic, more specifically: Učebné osnovy DEJEPISU pre 5. – 9. ročník ZŠ and Štátny Vzdelávací Program Dejepis – ISCED 2.

This planning means a teacher plays the key role within the educational process as he/she decides which activities to use and how to apply them so that learners are able to bind the content and the target language of the lesson. The following chapter is therefore divided thematically, meaning that individual activities may be used either for teaching the selected topic as new subject matter or for revision of the theme.

The topics selected for this chapter hinge on the fact that it is simpler to use materials that are available online in the foreign language being taught during CLIL lessons. In the case of the topics given below there are plenty of sources that offer various activities, games, tasks, videos, worksheets and already made materials that could with small changes be applied for CLIL teaching purposes. As Gondová (2013) states when selecting a topic for a CLIL lesson it is useful to choose those topics and materials that support communicative competences. In order to encourage communication among learners, according to her words, it is necessary to expose them to the language as much as possible. By exposure she means the work of students with texts (spoken or written) – authentic materials.

Topic 1: Egypt, the Ancient Civilization

Grade level: the forthcoming activities could be applied both at the elementary school level specifically grade 6 and at the high school level either at year 1 or during the history seminars for the school leaving year.

Objectives: Learners will gain an understanding of the daily life of people in ancient Egypt. They will recognize and identify connections and parallels of life in early civilizations and life in the 21st century.

Subject area: world history and culture

Teaching aids: language laboratory, computers, data projector, interactive whiteboard, loudspeakers.

Every individual lesson has its own division, a sequence of parts that are logically interconnected to provide learners with sufficient exposure to both the content and the foreign language. The following activities will be divided according to the skill to be focused upon.

Model Activity 1: Egyptians

Level: Beginner, Elementary, Intermediate, Upper-Intermediate English and History/Culture Lessons. (It depends on how the teacher chooses to work with the song and activities linked to the music.)

Length of activity: 10-15 minutes

Subject matter: Culture, History, Music

Objectives: Students will learn:
1. the original (historical) music of the Egyptian culture,
2. Their focus is given to basic vocabulary connected to old Egyptian music,
3. Learners will understand the differences between Egyptian and Slovak musical cultures.

Materials: music1, music2, music3, music4, pictures.
The procedure

**Introduction** – Warm up activity (a historical song)

At the beginning of the first lesson that is thematically based on Egyptian history and culture the teacher should expect the individuality of each learner as he/she may have had some experience with either the historical and cultural facts of the chosen civilization as well as exposure to the language environment where the prepared vocabulary was already used. In this case it is appropriate to create a suitable learning environment through a warm up activity that may be in the form of a discussion based on listening to one or more historical songs.

1. Teacher asks learners to listen to a selected song/songs. Students are asked to listen carefully and be prepared to give their impressions.
2. After the song the teacher asks them to give their impressions or if students are unsure they might respond by answering such pre-planned questions as: Where does the music come from? What is the culture of its origin? What do you think about the music – your feelings?
3. After a short discussion the pictures of typical musical Egyptian instruments are projected. At this time the teacher hands paper pictures to the students. (See below)

![Figure 1: The Ancient Egyptian Musical Instruments ClipArt Gallery](image)

4. Students are asked to identify and describe what they see in the pictures. (Another option is that the teacher puts the titles of each drawing on the whiteboard and students are asked to match the titles with the images.)
5. The teacher talks to learners and explains what the pictures mean and asks the students for a comparison to Slovak musical culture.
6. Teacher and students have a discussion in both languages English and Slovak to talk about different musical instruments. The mother tongue is present as the learners are supposed to know vocabulary in the Slovak language as well.
7. Finally the students repeat the new vocabulary and record it in their workbooks.
8. After this activity the lesson may continue with the exposition of the main content of the knowledge to be learned.
Remarks: The activity described above is one possible way to interconnect the teaching of history and culture with another subject in a CLIL environment. It is a combination of music – a cultural feature of Egyptian society with historical content taught in the English language. Students are warmed up – attracted by songs as the music creates the atmosphere at the beginning of the lesson and is then followed by a discussion as the teacher leads the students toward the activity which will follow. The pictures that are projected are used for visual imagery of the music as well as to embed the new vocabulary. The paper pictures that are handed out to students are suitable as additional material for their workbooks.

This activity can be used at the beginning of the lesson as the introduction to the new thematic unit. It is up to the teacher to adapt the mentioned material as well as other options available online, e.g. here, here and here.

Model activity 2: A mummification game (developing vocabulary and listening)

The following activity focuses on expanding the vocabulary of learners who are acquiring knowledge of historical/cultural content in the English language with the assistance of the mother tongue. According to Pokrivčáková (2012, p. 70) who discusses the teaching of vocabulary “intentional learning is organized through a variety of teaching techniques and by taking in a range of word-learning strategies.” Among several options she recommends vocabulary games as a suitable tool to assist both students and teachers; therefore, the game proposed below may be of benefit.

The game is based on burial rituals that were typical of the ancient Egyptian culture. It is important for the teacher to utilize the material according to the flow of the lesson as the selected topic is a cultural aspect that could be taught in a sequence of history lessons that discuss other aspects of ancient Egyptian culture as well. Another option is to implement this activity into a wider unit of religion and funerary customs around the world where its aim is to show specifics of this particular civilization.

Level: Intermediate, Upper-Intermediate English and History/Culture Lessons. The teacher must be very careful when using this activity as it requires a certain level of already gained vocabulary of Egyptian history. It is better to assign it with advanced users of English.

Length of activity: 15-20 minutes

Subject matter: Biology, Culture, History, Religious Studies

Objectives: Students will learn:
1. advanced vocabulary for the burial – mummification process,
2. proper pronunciation of specific terminology,
3. about the cultural differences of burial traditions around the world.

Materials: online game, crossword, extra materials1, extra materials 2, extra materials 3

The procedure

1. The teacher explains at the beginning of this activity that the students will play an online game.
2. With the assistance of the computer, data projector and the loudspeakers he/she will screen the whole activity.
3. The playing of the game can be managed as a group activity (when the teacher takes the steps of each move when using only one computer with learners' assistance) or as individual work (when each learner plays his/her own game on his/her attributable computer – the lesson takes place in the language laboratory).
4. When students start playing on the web page (see figure 2) it is the teacher’s responsibility to lead the way. He/she must decide which words are necessary to be explained and written down in workbooks.

**Figure 2:** Embalm your own Egyptian mummy (online game)

5. The game itself guides the player to continue and so to fulfil each task in order to successfully mummify “Seneb’s body”.

6. During the play time or at the end of the game the teacher may talk about the steps taken during the process of mummification. In this connection the teacher might compare other ancient civilizations and their way of burying the deceased (second link above can be used as an example).

7. During the play period the students not only listen and learn new words but gain proper pronunciation as the teacher monitors how words are enunciated.

8. For the revision and summary of the newly discussed vocabulary for the content it would be suitable to do a crossword (figure 3) or other type of activity (quick quiz, word search puzzles, order the text, etc.) designed for this purpose.

9. If there is not much time left for the revision activity it could be finished at home as part of homework.

10. At the end of the lesson notes are written. Students can also repeat the pronunciation of words.
Remarks: The activity that has been described above gives learners the opportunity to join the learning of content and language by playing a game. The game not only works with historical facts and exposition of new vocabulary it also exposes students to the real activity when they are obliged to think as well as be involved in the process of solving tasks. This way of teaching also works in the case of different learning styles especially for auditory and visual learners. The game can be played in the middle of the lesson or at the end as a tool for vocabulary revision. It is an advantage that every new or difficult word that affects student’s uptake of proper pronunciation is explained and pronounced in English.

Model activity 3: A story about the Gift of the Nile (teaching grammar and reading)

The CLIL approach of study gives many opportunities for both teachers and students to do a variety of things during individual lessons. One of the options is to teach two skills at once within a content-oriented environment. The following activity first of all gives students the chance to practice their reading skills in the English language. Secondly they learn the true story regarding the discovery of Tutankhamen’s tomb and thirdly they practice the grammar rule of past tense in a natural way.

Many everyday classes aim to teach historical events or cultural aspects of human societies starting with an introduction that involves the students becoming engaged in the narration of something – some event that happened in the past. One of the possibilities is the reading activity that is subsequently provided with a worksheet or materials that are designed for further practice of the selected topic. As mentioned in Pokrivčáková (2012, p. 99) “reading is a receptive communicative skill the purpose of which is to receive and comprehend a verbal message of the
written text”. In this regard the next sample activity is based on the reading of a text about the ancient Egyptian civilization. The text selected and adapted for reading comprehension is from a history encyclopaedia which means that the students will work with authentic material. An advantage is the reality that the text includes some grammar aspects that will be further discussed and practised during the lesson.


Length of activity: 30-45 minutes

Subject matter: Culture, Geography, History, Social Studies

Objectives: Students will learn:
1. the important facts about the river Nile and the establishment of Egyptian kingdoms,
2. they practice the use of past tense forms,
3. analyse new vocabulary that occurs within the text.

Materials: CLIL materials, 3rd activity:

The procedure

1. At the beginning of this activity the teacher explains to students that they are going to read facts about ancient Egyptian life. In this phase the background knowledge of the topic should be activated. Background knowledge means the general overview of Egyptian culture. The teacher can also mention that students should look for grammar structures of the verbs in the text.

2. The handout with the text that was designed for this activity is distributed throughout the class. (See below)

3. Students can read the story on their own or they can take turns reading it aloud.

4. After the reading of the material the teacher checks for general understanding of the text. He/she may ask a few questions connected to the topic. For instance:
   - Why was Egypt called the gift of the Nile?
   - Who was the pharaoh?
   - Who were the viziers?
   - Look at the picture, tell how Egypt was divided? (See figure 4)

5. Following discussion of the text ask students about the new words they found challenging. In this connection it is teacher’s responsibility to explain the new vocabulary to learners either in English or in the mother tongue if it is necessary for better understanding.

6. If students struggle with pronunciation of words it will be beneficial to log on to the web pages (here or here) to listen to the words being pronounced properly and then repeat them afterwards.

7. The next step is connected to the grammar focus of the handout where the teacher brings attention to the questions and assists students in finding answers.

8. The lesson continues with the fulfilment of tasks that directly focus on individual grammar rules. The exercises included in the grammar point of the handout depend on what the teacher wants to revise in particular. As seen in the example below it can simply start by regular past forms that are directly selected from the text. But the teacher may also include a scanned outline of the construction of the simple past tense both of the verb “to be” and other verbs. In this practical part irregular verbs or questions and negatives (see exercise 2) could be covered depending on either whether the teacher considers it important for students to repeat or on the time remaining for the lesson.

9. The whole activity finishes with the task (exercises 3) that joins grammar as well as vocabulary in a new text.

10. If the students’ pace is slower and the tasks are not practised at school they can become part of the homework assignment. This homework will join grammar with new historical facts.
Figure 4: Map of Ancient Egypt
Handout

Gift of the Nile

Without the life-giving waters of the river Nile, ancient Egypt would have been a barren desert, too dry for farming or living. The ancient Egyptians depended on the Nile River for drinking water and irrigation, and on its annual flooding that collected rich, silty soil along its banks.

Here farmers cultivated wheat and barley (for bread and beer), flax (for linen), fruit, and vegetables. They also raised cattle, sheep, and goats. So vital was the river that the Greek historian, Herodotus, described ancient Egypt as the “gift of the Nile.”

The first villages of ancient Egypt were established some 7,000 years ago. In time, these small settlements formed two kingdoms – Lower Egypt in the Nile delta and Upper Egypt along the river valley. In about 3100 BC, King Menes, the ruler of Upper Egypt, united the two kingdoms and built his capital at Memphis. He also established Dynasty 1, the first dynasty (line of kings) of ancient Egypt. The king was the most powerful person in ancient Egyptian society and was worshipped as the god Horus, in human form.

From about 1554 BC, the king was given the honorary title of pharaoh. He appointed two officials, called viziers, to help him govern and collect taxes. The country was also divided into 42 districts, called nomes, each governed on the pharaoh’s behalf, by officials called nomarchs.

(The text above was adapted from the World History Encyclopedia 2000, p. 28-29)

GRAMMAR POINT

- Read the text above again and underline all the verbs you see.
- In what tense is the text written? ____________________________
- Which verb forms are used? _________________________________
You can answer in Slovak.

1. Look at the verbs below. Write the missing forms:

<table>
<thead>
<tr>
<th>Collect</th>
<th>Collected</th>
<th>Establish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide</td>
<td></td>
<td>Raised</td>
</tr>
<tr>
<td></td>
<td>Appointed</td>
<td>Govern</td>
</tr>
<tr>
<td>Call</td>
<td></td>
<td>Cultivated</td>
</tr>
<tr>
<td>Depend</td>
<td></td>
<td>Describe</td>
</tr>
</tbody>
</table>

2. Fill in the following sentences with a suitable verb form from above:

a.) Many different pharaohs__________ the kingdoms of Egypt.
b.) Ordinary people who worked as servants__________ the lands of the country.
c.) How_____ the kings__________ their appointed officials?
d.) The new villages in Egypt were__________ around 7000 ago.
e.) _____ the viziers__________ the country into districts?
f.) Who__________ the taxes?
g.) Why_____ the farmers of Upper Egypt_______ wheat and barley?
h.) Herodotus ___________ ancient Egypt as the “pearl of the Nile.”
3. Fill in the blanks with the words in the boxes

<table>
<thead>
<tr>
<th>transportation</th>
<th>Desert</th>
<th>thousand</th>
<th>Pyramids</th>
<th>Nile</th>
</tr>
</thead>
</table>

Ancient Egyptian civilization, which is famous for its colossal ____________ began over five ____________ years ago. It was centred around the ____________ River and surrounded by the inhospitable Sahara ____________. The ancient Egyptians depended on the Nile for everything from water to ____________.

<table>
<thead>
<tr>
<th>irrigate</th>
<th>tears</th>
<th>crops</th>
<th>flood</th>
<th>fertile</th>
</tr>
</thead>
</table>

Though it almost never rains in the Nile River Valley, rains in the far away Ethiopian Highlands cause the Nile River to ____________ every year. Ancient Egyptians believed that these yearly floods were caused by the ____________ of the goddess Isis. The floods carried rich soil with them, covering the Nile Delta with ____________ soil for growing ____________. Ancient Egyptians created an elaborate system of ditches and canals to ____________ their crops with the flood waters.

(The vocabulary activity above was downloaded from Ancient Egypt Cloze available at website link two.)

Key:
1.) divided, appoint, called, depended, established, raise, governed, cultivate, described
2.) a- governed, b- cultivated, c- did call, d- established, e- Why did divide, f- collected, g- did raise, h- described.
3.) pyramids, thousand, Nile, Desert, transportation; flood, tears, fertile, crops, irrigate

Remarks
The teacher should adapt the aforesaid activity according to the needs of his/her students as he/she knows best what the focus should be, what the learners’ weak and strong points both in terms of grammar or vocabulary are. The task allows for the practicing of grammar features within a text. Students get the chance to see the use of past tense in authentic texts.

This sample activity is designed for application during the entire lesson as using both parts will be time consuming. The first part – reading can be accompanied by a picture presentation and explanation, possibly a discussion of life lived in the past. The time frame also depends on which grammar rule the teacher chooses to practise or revise but he/she has to be careful that the history lesson is not subsumed by the language class.

Another historical and cultural topic to be discussed in this chapter is also popular among students for its interesting stories and historical events to do with the period of discovery voyages. This topic is also part of the Slovak national curriculum and speaking from teaching experience gives space for colourful applicability in projects and student involvement.
Topic 2: Age of Discovery Voyages

**Grade level:** Sample activities with tasks that are included in the following section may be incorporated into history classes at elementary schools in grade seven as this is the level when individual school plans incorporate the topic of discovery voyages. These activities can also be of benefit for second year grammar school history lessons as well as for history seminars that are usually taught at Slovak grammar schools.

**Objectives:** The main objective of the selected topic is for learners to understand the progression of the discovery voyages that occurred from the 15th to the 17th century. Students are about to create their own picture of the chronology of historical events during that period, to understand the results and changes that came along after exploration of new places, and will be able to discuss and substantiate with arguments important milestones and the everyday life of individual societies that played a crucial role during the age of European exploration.

**Subject area:** world history and culture, world geography

**Teaching tools:** computers, data projector, interactive whiteboard, language laboratory, loudspeakers and maps

**Model activity 1: A sailing game (developing listening, reading and vocabulary)**

In the process of teaching historical and cultural topics it is always a pleasure especially for young learners when they can play games during their classes. With this in mind the intention of the learning process is not strictly focused on a collection of new information and facts to be taught – learned, it also gives the opportunity to learn new things in a pleasurable way and gives students the chance to visually process the discussed topic. The subsequent activity is a combination of various tasks that when joined together give the learner a better picture of the events and actions that occurred in the past.

The lesson is based on two main parts. The first is reading comprehension and the second is playing a game. When applying the following sample activity in actual classes the teacher needs to be aware of the fact that learners should have had some previous experience (historical information – knowledge, vocabulary) to build on. Therefore this activity is not suitable for complete beginners of foreign language learning. For elementary and intermediate level students it is the teacher’s responsibility to adapt the corresponding materials according to the language ability of pupils, pace and the content target of the lesson.

The reading portion of the lesson focuses on several paragraphs selected from the website given below and adjusted to suit the main subject content of the lesson but which will also assist with the understanding of the life story of Christopher Columbus. Students can then realize how the voyages affected the course of events afterwards. In this part of the lesson the aim is reading for the gist of the story as well as reading for specific information.

Playing the online game allows for the practice of listening skills as the characters within the story talk to each other and provides opportunity to discuss important facts and learn new vocabulary while helping the sailors to load the ship with cargo. This activity is part of a sequence with other lessons that discuss the period of discovery voyages.
Model activity: Adventurous Voyages

Level: Intermediate, Upper-Intermediate English and History/Culture Lessons. The activity requires a certain level of acquired vocabulary connected with the 15th century discovery period.

Length of activity: 30-35 minutes

Subject matter: Culture, Geography, History

Students learn: 1. about the life story of Christopher Columbus. 2. Read authentic texts which help students to understand the importance of discovery voyages and context of historical events of that period. 3. They learn new vocabulary related to the theme.

Materials: Online game and mini quiz, extra information.

The procedure:
1. In the introduction of the lesson the teacher explains to students that the topic of the lesson is connected to a famous traveller. (He/she may ask students to guess the name by adding clues.)
2. At the beginning of the activity the teacher distributes the handout material to the class. (See below)
3. Students will look at the task that is based on the reading of individual texts that discuss the life journey of Christopher Columbus. The aim of the activity is to completely read through the texts and finally to attach titles given as the options to these specific texts.
4. When orally reading the teacher may ask questions after each text to examine for understanding of the story or he/she may ask students to retell what they have read.
5. The reading part can be carried out in several ways. It could be silent reading, when each student reads to himself/herself or reading aloud when learners take turns, which would be more suitable as the teacher may check for pronunciation as well as help with explanation of unknown words.
6. After the reading is finished and students assign the headings, the class continues by playing the game.
7. For the game part it is important that the class takes place in the language laboratory as students need computers to play or the teacher can play it with the class through the projection upon the board (interactive white board) and taking individual steps according to what students decide regarding the options.
8. For the game students go to the website given in the links above. The game (see figure 5) could be used as an option to revise the historical facts and vocabulary.
9. If there is not enough time the teacher can assign the playing of the game as homework and check whether they have played it at home by using a mini quiz. (See below in the handout) The mini quiz questions are designed from the content of the online game.

Figure 5: BBC online game: Famous People – Christopher Columbus
Look at the six titles below. Each title belongs to a text below (in most cases). Read these texts and attach each title to the appropriate paragraph(s). There are two extra titles.

5. Columbus Sets Sail

4. Why is Columbus Famous?

6. What Happened to Columbus?

3. Early Days

1. What Columbus Discovered

Title: ________________________________

**Childhood**

Cristoforo Colombo, or Christopher Columbus as we call him, was born in Genoa in Italy. Genoa was a busy port. His father was a wool merchant and weaver. We don't know if Columbus went to school much. He may have had lessons from monks.

**Going to sea**

The Columbus family hoped to get rich through trade. Columbus went to sea at the age of 13. Life at sea was exciting, but dangerous. He hoped to come home a rich man! Columbus learned how to sail a wooden ship with sails. He learned about the winds and tides. He learned to navigate (find the way), by looking at the Sun and stars.

**In Portugal**

Columbus went to live in Portugal. One story says he swam ashore after his ship was attacked by pirates! He and his brother Bartholomew made and sold maps.

**Columbus's dream**

People in Europe wanted to find a new sea route east, to trade with Asia. They wanted to send ships to India, China and the East Indies. The Portuguese tried sailing South, around Africa. It was a long way. Columbus wanted to sail west. Because maps of the time made the oceans look smaller than they are, Columbus hoped to reach China in a few days. He needed money to make his dream come true.

Title: ________________________________

**A New World**

Columbus sailed on to Cuba and Hispaniola. He explored a world new to Europeans. People later called it the New World.

**Native Americans**

Native American people lived on the islands. Columbus called them 'Indians', because he thought he'd landed in 'the Indies' (Asia).

At first the Native Americans were pleased to see the visitors. Columbus gave them cheap presents and bells. But he also claimed their islands for Spain!

**Shipwreck**

On Christmas night 1492 the Santa Maria was wrecked. It hit a reef.

The other two ships sailed home. Columbus left 40 men behind. He took some captive Native Americans with him. He landed in Spain in March 1493.

**Second voyage**

Columbus soon went back to rescue his men. This time, he took 17 ships. But all the men left behind were dead.
Help from a Queen
Columbus tried to persuade rich people to help him. Most laughed at him. At last, King Ferdinand and Queen Isabella of Spain gave him money for ships. In return he promised them new lands, spices, gold and new people to rule.

Columbus sails
Columbus set sail on 3 August 1492. He had three ships: the Niña, the Pinta and the Santa Maria. They were wooden ships with sails. There were about 90 men in the ships. Food for the voyage was kept in the ship's hold. The men took salted fish in barrels, cheese, wine, water, live pigs and chickens.

Life on the ships
The sailors worked shifts. The time for each shift was measured using a half-hour glass. The men had no cabins, but slept on deck. Every morning, they said prayers. The ships let in water all the time. The men had to work pumps, to keep the ships afloat.

Finding the way
Columbus used a compass to help him navigate. He used a traverse board to plot (mark) the direction they wanted to sail in. The voyage took longer than Columbus expected. There was no land, just ocean. The men got scared. They were running out of food and water. After 36 days, a sailor on the Pinta spotted an island. On 12 October 1492 the explorers went ashore. Columbus called the island San Salvador. It was in the Bahamas.

Who was Christopher Columbus?
Columbus was an explorer. In 1492, he sailed from Europe to America. He and his sailors crossed the Atlantic Ocean, not knowing where they would land. It was a voyage into the unknown. After Columbus, other Europeans began to explore and settle in America.

When did he live?
Christopher Columbus was born in 1451. It was a time of new ideas and discoveries in Europe. We call this time the Renaissance - a word that means 'rebirth'. People were making maps of new lands. They were building ships to explore places they had never visited before.

What did Columbus do?
Columbus did not 'discover' America. There were many people already living there. Vikings from Europe had landed in America 500 years before. But Columbus did not know that. His voyage started regular contact between America and Europe.

Mini quiz:
1.) A tool used for navigation is called what?
2.) What is a barrel?
3.) Explain the process that describes how people knew where to go and how to sail. What did they use?
4.) Where did Columbus navigate the Santa Maria for the first time to pick up more supplies? How did he refer to the land he saw for the first time?
5.) Give three examples of things Columbus traded with native inhabitants.
6.) What did sailors do when they returned to Spain?
7.) Give the names of Columbus ships.
8.) To what other places did Columbus make voyages?
9.) The Santa Maria was built to carry eight people, but Columbus took a crew of how many?
   A) 88  B) 56  C) 95  D) 52
10.) Name the item used by sailors to store their belongings.
Key:
1-astrolabe, 2-tool to store water or meat, 3-by using a map, 4- to Canary Islands, San Salvador 5-
 jewellery, iguanas, ornaments, Cassava plants, hanging beds, potatoes, rhubarb, gold nuggets,
 parrots, pearls, 6-paraded through the streets, 7- the Niña, the Pinta and the Santa Maria, 8-England
 Iceland and Africa, 9-D, 10-chest

Remarks: The previous activity gives students the chance to practice reading and listening
 skills and at the same time to learn new vocabulary related to the life of sailors. The aim is
 through the reading of texts about Columbus’ life to understand better the century he lived in as
 well as to understand the reasons for subsequent colonialism.
 By playing the sailing game the information about individual voyages are consolidated and
 the speaking characters also support the listening skills of students. The advantage is that the
 game offers subtitles in case students do not catch the whole message and so the meaning of
 every word of new vocabulary is explained directly through action. The game also offers a mini
 quiz but it is better to use the questions from the handout above.
 The teacher is the leader of the lesson and if there seem to be challenges he/she needs to be
 available when needed. If necessary the activities or handouts may be amended to the level of
 student ability with the foreign language. Teacher and students should switch between both
 languages Slovak and English to provide knowledge and ability to communicate about the topic.

Developing listening and writing skills (videos about Amerigo Vespucci)
 In situations when the CLIL approach is adapted learners benefit due to several factors. One
 of them is the dual aim of the class which means the combination of expanding the knowledge of
 a topic (content) with the practice of foreign language skills. The activity that is depicted below
 is suitable for more experienced learners as it accommodates the practice of listening and
 watching several videos that provide students with key information for the subsequent quiz
 questions. The individual videos are made by a native speaker so students work with authentic
 materials and thus are not only practising listening and vocabulary but are also exposed to
 proper English pronunciation.
 The teacher may use this option to his/her advantage to further practise speaking skills by
 adding extra questions when working on the circling of correct answers in the quiz. If there
 appears a problem with understanding of the message from the video, the students and teacher
 can shift into their mother tongue for explanation of the main ideas.
 In addition the scope of the activity widens through the addition of a writing component
 where learners would grapple with their writing skills. In the meantime the teacher acts as a
 tutor and leader of the lesson.
Model activity: Amerigo Vespucci

**Level:** Intermediate, Upper-Intermediate English and History/Culture Lessons. Working with the activity below demands previous writing experience and in this connection the students must possess extended vocabulary related to the historical event – the age of discovery as well as the concept of narration in written form.

**Length of activity:** 30-45 minutes, as it depends on the level of learner writing skills and the depth to which the teacher wants the writing to be elaborated

**Subject matter:** Culture, Geography, History

**Objectives:** Students will learn:
1. the story of Amerigo Vespucci’s life and his voyages around the American continent.
2. Students will realize the importance of this person's exploration in the context of national and worldwide history.
3. The students will practice listening comprehension as well as their writing skills.

**Materials:** video 1, video 2, video 3, and quiz

The Procedure

1. At the beginning of this activity the teacher explains that this topic is part of a wider context linked to the period of discovery voyages.
2. The students become familiar with the fact that they are going to watch several videos about Amerigo Vespucci (a picture can be shown – see figure 6). At this point a discussion may be held in English about who Vespucci was and how he was connected to the period of the 15th/16th century.
3. Watching the videos (links above – video 1 and 2) for the first time is for general understanding of the story. Before the class is to watch the videos a second and probably a third time, the teacher hands out the work sheets (included below) to students.
4. The teacher goes through the questions with the class and asks learners to pay attention to the information in the videos.
5. After the viewing students work out the quiz either alone or in pairs. If in pairs they discuss the work in English. If it is necessary and there is any new vocabulary the class may spend some time working on terminology using the mother tongue.
6. In the second part of the lesson the teacher tells students about the writing task in the handout.
7. If students do not have enough experience (previous language classes of English concerned with writing skills) the teacher can provide tips or advice necessary for successful management of the project. Both teacher and students design rules for writing that they will follow. The example given below is optional and can be amended. (Based on their level of English language, students may be asked to write a history essay. There are many suitable websites online from which to choose the most important hints, e.g. here.)
8. In the process of working on tasks 9 and 10, the teacher can decide whether to use one or both of them or to simplify them.
9. It is essential to give students feedback on their writing and discuss their challenges as well as what was written correctly.
10. Good writing or essays can be put on display.
Handout – Amerigo Vespucci Quiz Questions

Circle the correct answer

1) When was Amerigo Vespucci born?
   a) 9 March 1451        b) 9 April 1478
   c) 5 August 1458       d) 3 November 1448

2) Where was Amerigo Vespucci born?
   a) Lisbon              b) Madrid
   c) Barcelona           d) Florence

3) Where did Amerigo Vespucci land in 1497?
   a) South America       b) the Indies
   c) Central America     d) Mexico

4) When did Amerigo Vespucci begin his second voyage?
   a) 1 January 1498      b) 16 May 1499
   c) 1 September 1502    d) 3 December 1504

5) For which country did Amerigo Vespucci undertake his third and fourth voyages?
   a) England             b) Ireland          c) Portugal          d) Scotland

6) What was Amerigo Vespucci’s achievement?
   a) He discovered America
   b) He discovered that the land reached by Columbus was not Asia but a New World
   c) He discovered the Solomon Islands
   d) He discovered Australia

7) Who first used the name America on a map?
   a) John Cabot          b) Henry Hudson        c) Martin Waldseemuller

8) When did Amerigo Vespucci die?
   a) 22 February 1512    b) 10 April 1535      c) 14 September 1536
   d) 11 October 1426

9) Write down your own story about the life of Amerigo Vespucci. You can include information from the text above. Please use the past tense and terminology from the quiz. (150 – 170 words)

10) Describe in a few sentences how America got its name according to the 2nd video.

(The questions used in the quiz above were downloaded from the link above and some of them adapted for interconnectedness with the corresponding video.)

Remarks
The activity interpreted above can serve as the lesson for assignment with authentic video logs designed for history lessons. This can work to expand students’ horizons and give a clearer view of the life journey of an explorer. It could be an activity implemented for one or several
lessons or it is possible to choose just portions of it. The selected topic should be included as part of a wider context of historical events of the past.

The part of the task that deals with writing a story and describing of a situation based on the watched documentary requires more time as well as more advanced writing skills. For this reason teachers should be aware of what their learners can manage. It is necessary to remark that when doing a writing activity with the class the teacher is also responsible for all necessary materials and tips for writing skills. He/she must think in advance about what may be difficult for students and if tasks number 9 and 10 would cause too many difficulties due to lack of knowledge or experience they should be adapted to the learner’s abilities.

**Conclusion**

All of the gathered sample activities designed for implementation in the teaching of history and culture within the CLIL environment were depicted in this chapter to show that historical and cultural content can be taught through the medium of a foreign language – English. The dual aim of CLIL methodology is clearly seen in each topic and type of task given in the handouts and the procedure tells how these lessons may be carried out. Each activity may require special attention of the teacher as he/she is the one responsible for the sequencing of the lesson and to decide which activities to use and in what depth. Understanding history and culture in English and being able to communicate critically in both mother tongue and second language should be to the advantage of the each student and a step forward to a future career. The activities presented in this writing should guide CLIL teachers in the preparation of their lessons and possibly to show them how to adapt new sources of authentic materials and native language websites.

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