17 Teaching across academic disciplines: CLIL

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Dual focus of Content and Language Integrated Learning (CLIL)

Basic Interpersonal Communication Skills (BICS)

Cognitive Academic Language Proficiency (CALP)

4Cs (Content, Cognition, Communication and Culture)

Benefits and challenges of CLIL

In this chapter, we ask the following questions:

What is the situation regarding CLIL in Austria?

What different versions of CLIL exist?

What theoretical models of teaching CLIL exist?

What are the benefits and challenges of CLIL?

Theoretical perspectives and the Austrian context

In the last two decades, the concept of Content and Language Integrated Learning (CLIL) has become a fixture in the Austrian educational system. Since the implementation of the pilot project "Englisch als Arbeitssprache" (EAA, i.e., English as a medium of instruction) in secondary schools in 1992 by the ÖSZ (Austrian Centre for Language Competence), the country has seen a continuous development of the programme, leading to its nation-wide implementation across all educational sectors (Wilding et al., 2009). This development is based on the European language policy of promoting multilingualism by – amongst other measures – "increasing the efficiency of teaching through Content and Language Integrated Learning" (The European Commission, n.d.).

It is important to note that no uniform model of CLIL exists. Indeed, as Coonan (2003) points out, the implementation of CLIL responds "to local conditions and desires" (p. 27). Thus, CLIL may be defined as an umbrella term that encompasses a variety of educational approaches to learning and teaching non-language subjects through a foreign language. This means that the implementation of CLIL in Austria and elsewhere does not follow a uniform pattern but is shaped by a number of different factors, such as school type, location, resources, administration and teachers.

Hence, to better understand the nature and organisation of CLIL in Austria, it is important to place it within the context of the complex Austrian school system where CLIL can be found at all levels. In this chapter, we will focus on the secondary level. In Austria, secondary education encompasses a variety of different school types and curricula, and a range of school-specific curricula have been developed, each of which has different guidelines regarding CLIL.

The actual implementation of CLIL in schools is thus diverse, owing not only to different curricula but also to the principle of school autonomy, which has become even more pronounced over the last few years. School autonomy in Austria is regulated by educational law, in which the national curriculum provides a compulsory frame of reference but leaves ample space for school-specific as well as location and focus-specific adaptation (RIS, 2017). This means that CLIL may be adapted and integrated into a school's educational profile in a way that best suits the school rather than the requirements of the CLIL programme, which has certainly contributed to a proliferation of terms describing different models of CLIL that are used interchangeably, such as EAA, bilingual education, or English as a medium of instruction (Nezbeda, 2005). An exception to this rather loose regulation is the curriculum for HTLs, secondary schools with a technical focus, which specifically states that - starting with year eleven (year three in HTL) - all syllabi must include a minimum of 72 hours of CLIL teaching per academic year. However, even here, lawmakers have provided room for autonomous adaptation of the programme with regards to distribution of hours and subject choice (RIS, 2017).

The implementation of CLIL on the level of individual schools is as diverse as the terms used to describe it: complying with the loosely framed curriculum and regulations on autonomy as described above, Austrian schools may not only choose the general scope of their CLIL programmes, but also regulate funding, select target groups, set teaching materials and decide on the overall design of the lessons themselves. This results in a variety of CLIL-based programmes including so-called school pilot projects (RIS, 2017), mini-projects, and "Europa Klassen", which are classes with a distinct intercultural focus that often have English as a working language. The scope of these approaches includes short- and long-term exposure and high- and low-intensity exposure to foreign language input, independent of duration. Furthermore, CLIL in Austria may serve as a supplement to or a substitute for either content or foreign language subjects or both. Since there are no legal regulations regarding the qualifications of CLIL teachers, CLIL teachers in Austria may be foreign language or language teachers, content teachers without a teaching degree in language education and teachers of both (foreign) language subjects and content

subjects. Scenarios of CLIL in Austria may also involve team teaching and/or cross-curricular teaching.

Theories of teaching CLIL

The following section attempts to provide a brief overview of CLIL theories. The core concern of most CLIL theories is the dual-focused approach of teaching both content and language as a unified concept. However, modern CLIL theories attempt to reflect the multi-faceted nature of CLIL by providing even more intricate theories, "connecting different goals within the same conceptualization" (Ruiz de Zarobe, 2016, p. 4). Providing a concise theory that fuses the different aspects of CLIL into a practical classroom approach that may apply to all settings, however, has proven difficult considering the complexity of the concept as well as its implementation. In Austria, for instance, CLIL programmes often fall short in terms of providing a holistic approach, owing to the fact that the set timetable which schools have to follow simply does not allow for enough time to focus on both language and content equally. Therefore, content often takes precedence over language. Teachers' choice of topics is also considerably limited by the framework of the standardised Matura which sets goals that all learners have to achieve, regardless of the teaching approaches chosen by individual schools.

As maintained by Ruiz de Zarobe (2016), at the basis of any successful CLIL teaching approach are good practice theories that apply to teaching in general, such as scaffolding and alternative, goal-oriented means of assessment (see Example 1 in Practical Applications below). Pavón and Ellison (2013) argue that content teachers and language teachers should develop theories by learning from each other as "[g]ood CLIL teaching is a fusion of what is best practice in each of these areas" (p. 76).

Some of the more prominent theories that have influenced models of practical approaches for CLIL teachers are, for instance, Cummins' (2008) theory on differentiating between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) as different types of language learning: the two concepts unite the language-learning aspect with the topic-driven content of CLIL by focusing both on the language that is necessary for authentic everyday situations (i.e., talking to friends, interacting in informal settings, etc.) and the language that is necessary to understand and relay topical content in the classroom. Another comprehensive theory of teaching CLIL has been developed by Coyle (2008), who devised the 4Cs Framework (Content, Cognition, Communication, Culture). This framework is supposed to provide learners with concepts that not only incorporate but surpass content and language, creating a more profound learning experience

that includes cultural awareness, the construction of knowledge, the development of communication skills and higher-order thinking processes which foster learner autonomy. More specifically, **Content** describes the subject matter or 'knowledge' which learners acquire through higher-order thinking processes (**Cognition**). These thinking processes require language as a tool to relay ideas and formulate thoughts by means of **Communication**. In order to create contextual understanding of content, it must be placed within a wider, intercultural frame (**Culture**). In other words, "CLIL involves learning to use language appropriately whilst using language to learn effectively" (Coyle, 2006, p. 9). This theory is also exemplified in the "language Triptych", which proposes a reconceptualization of foreign language learning that incorporates three components: the language of learning (vocabulary), the language for learning (discourse strategies), and the language through learning (the ultimate success) (Coyle et al., 2010).

Benefits of CLIL

While there is an ongoing debate on the advantages and disadvantages of CLIL, there is evidence to suggest that CLIL classes offer a variety of benefits for learners and teachers, as well as schools in general (see Hofstadler et al., 2020; Nikula, 2017). According to Mehisto et al. (2008), CLIL can provide a quicker, more immersed approach to language learning that allows students to use the foreign language in an authentic and meaningful way, relaying and processing authentic information with the primary goal of communicating a concept or idea, rather than communicating merely for the sake of using the language. In fact, research suggests that CLIL directly influences student motivation and performance with regards to language learning (Doiz et al., 2014) and fosters critical thinking, intercultural competence and metalinguistic awareness (Mehisto et al., 2008).

Although the Austrian school system has been criticized for being resistant to change, CLIL is generally viewed as an asset for both learners and schools. As explained by Hüttner et al. (2013), in "the Austrian context, Content and Language Integrated Learning (CLIL) as well as many other forms of, especially early, bilingual education fall into the [...] category of easy acceptance" (p. 267). In addition, growing school autonomy as well as a certain degree of competition for student enrolment both foster a demand to set oneself apart. All of this might contribute to the bottom-up or grassroots character of the processes that are often involved in Austrian CLIL implementation (Dalton-Puffer, 2011). Shepherded by teachers and often parents, these processes regularly result in an ad-hoc adoption of CLIL which is one reason for the diversified CLIL landscape in Austrian schools. This readiness of schools to integrate CLIL into their curriculum may also be a result of system-

related advantages. Owing to the specific structure of teacher education in Austria, which requires university students to choose any combination of two or more subjects, secondary school teachers are frequently trained in various combinations of language and content subjects, which makes it easier to implement CLIL.

Challenges of CLIL

Regardless of the many positive aspects of CLIL classes, there is also a number of challenges that must be considered. As stated by Hofstadler et al. (2021), teachers may face an increased level of stress due to the implementation of CLIL, owing to the added workload of procuring and often creating useful materials. Additionally, teachers might feel insecure about their language skills as well as their ability to design lessons in a foreign language that compare to the level of teaching in their regular classes (Hofstadler et al., 2021). Furthermore, outside factors, such as parents who are concerned that learners might gain less factual knowledge in CLIL classes, or even learners who fear that their lack of language skills might negatively influence their grades, must be considered (Mehisto et al., 2008).

Practical applications

Example 1

Goal: learners will produce a magazine focusing on a topic

Activity: class/group magazine

Rationale: to apply the 4C framework to this task: learners engage with the topic (content) and their research in a creative way and with a high degree of learner autonomy (cognition); they collaborate and communicate in groups and/or as a whole class (communication) and create a final product which they learn to place in a wider context (culture)

Pre-knowledge: it is helpful to have some experience with magazine article writing, word formatting or a design programme, basic knowledge of the subject area the magazine focuses on (e.g., Middle Ages, renewable energy, human rights, travelling/dream destinations, 'Roaring Twenties'/Jazz Age, art and architecture from a certain time period, water, climate change)

Level: CEFR A2 and above

Procedure:

- 1. Before starting the magazine work, the topic can be discussed to ensure the learners have some knowledge of the subject matter.
- 2. Learners look at sample magazines, brainstorm what parts (such as titles, texts, comparisons, pictures and puzzles) are included in a magazine and discuss who should be their target readership.
- **3.** Learners either work in groups to produce shorter magazines or together as a whole class to produce a class magazine.
- 4. Different roles (e.g., editor, graphic designer) and topics are distributed.
- **5.** Learners choose what they will write or which part of the magazine they will produce.
- **6.** Learners then work on their texts, which are later peer-reviewed.
- **7.** Finally, the different parts of the magazine are put together (for example, title page, contents page, pictures, articles, caricatures, Agony Aunt letters, recipes, puzzles, comparisons, letters to the editor, weather, horoscope, announcements, questionnaires and interviews), the layout is finalised, and the magazine is printed (and maybe distributed in school).

Assessment:

One way of assessing CLIL projects is with an evaluation rubric. Depending on the nature of the project, teachers can assess the various content and language related competences and skills the students worked on and developed throughout the project. This can include specific language skills, as well as teamwork, IT skills or presentation skills, for example. Four- to five-point scales are recommended. The scale on the following page (developed by one of the authors based on relevant B2 scales) is an example of how to assess magazine work.

Criteria	Excellent	Very good	Good	Needs
				improvement
Range and accuracy of vocabulary and grammar	Accurate use of language, hardly any errors, wide range of vocabu- lary and struc- tures	Mostly accurate use of language, very few errors present, very good range of vocabulary and structures	Mostly accurate use of language, some errors present, good range of vocab- ulary and struc- tures	Errors present that impede communication, range of vocabu- lary and struc- tures limited
Use of subject specific vocabulary	Subject specific vocabulary is used accurately and idiomatically	Subject specific vocabulary is used mostly ac- curately and id- iomatically	Some subject specific vocabu- lary is used	Very little evi- dence of subject specific vocabu- lary being used
Suitable texts for target readership	Text is appropriate and interesting for target readership	Text is mostly appropriate and interesting for target reader- ship	Some aspects of the text are ap- propriate and interesting for target reader- ship	Text as a whole is not appropri- ate or interest- ing for target readership
Accurate information	Text is based on accurate scien- tific/ academic information	Text is mostly based on accu- rate scientific/ academic infor- mation	Text is partly based on accu- rate scientific/ academic infor- mation, some misinformation occurs	Text contains content that is not based on ac- curate scientific/ academic infor- mation
Cooperation during group work (especially peer review)	Student works excellently in a group, is a re- sponsible team member who stays focused on the task and in- cludes other team members	Student mostly works very well in a group, is a responsible team member who often stays focused on the task and tries to include other team members	Student mainly works well in a group, is a re- sponsible team member who sometimes stays focused on the task and tries to include other team members	Student does not work well in a group and does not include other team members
Layout of magazine texts	Layout of the text (headline, body, pictures) is crea- tive, interesting and consistent with a magazine layout	Layout of the text (headline, body, pictures) is consistent with a maga- zine layout	Layout of the text (headline, body, pictures) is mostly con- sistent with a magazine lay- out	Layout of the text (headline, body, pictures) does not match a magazine lay- out

Example 2

Goal: learners will read a text for understanding; they will communicate their knowledge to other students and receive new knowledge from other members of their group; they will work on topic-related vocabulary and relevant language functions (e.g., expressing an opinion)

Activity: expert groups – gaining and sharing knowledge through group work

Rationale: to practise understanding a text and communicating information to others

Pre-knowledge: reading skills for an informative text

Level: CEFR A2 and above

Procedure:

- 1. Learners work in groups and receive one part of an informative text (e.g., how did peasants, nobles, craftsmen, merchants, clergy live in the Middle Ages).
- 2. Learners read through their text in groups and either answer questions (scaffolding) or take notes of what they consider the most important points. In this way, learners become experts on their part of the information.
- **3.** Learners form new groups, with one learner from each original former group, so that four to five experts now sit together and explain their part to the others who take notes. They take turns sharing their knowledge.
- **4.** After all of the groups are finished, a whole class revision exercise can be done to ensure all main points were discussed (e.g., a quiz).

Activities and questions for reflection

- 1. Think of a topic you would like to work on as a CLIL project and after considering the goals of your project, design a lesson plan.
- **2.** Research sample evaluation rubrics for CLIL projects online and adapt one to fit your project.
- **3.** What challenges might you face when implementing a CLIL project at an Austrian school and how can you overcome them?
- 4. Which subjects could you most easily collaborate with in a CLIL project and why?

References

- Coonan, C. M. (2003). Planning for CLIL: A general outline and thoughts on two micro features. In T. Boella & T. Barbero (Eds.), L'Uso Veicolare Della Lingua Straniera in Apprendimenti Non Linguistici (pp. 24-44). Ufficio Scolastico Regionale.
- Coyle, D. (2006). Content and language integrated learning: Motivating learners and teachers. *Scottish Languages Review*, *13*, 1-18.
- Coyle, D. (2008). CLIL a pedagogical approach. In N. Van Deusen-Scholl & N. Hornberger (Eds.), *Encyclopedia of Language and Education* (2nd ed., pp. 97-111). Springer.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
- Cummins, J. (2008). BICS and CALP: Empirical and Theoretical Status of the Distinction. In B. Street & N. Hornberger (Eds.), *Encyclopedia of Language and Education* (2nd ed., pp. 71-83). Springer Science + Business Media LLC.
- Dalton-Puffer, C. (2011). Content and Language Integrated Learning: From Practice to Principles? *Annual Review of Applied Linguistics*, 31, 182–204.
- Doiz, A., Lasagabaster, D., & Sierra, J. M. (2014). CLIL and motivation: the effect of individual and contextual variables. *The Language Learning Journal*, 42(2), 209–224. https://doi-org/10.1080/09571736.2014.889508
- Hofstadler N., Babic, S., Lämmerer A., Mercer, S., & Oberdorfer P. (2021). The Ecology of CLIL Teachers in Austria An ecological perspective on CLIL teachers' wellbeing. *Innovation in Language Learning and Teaching*, 15(3), 218-232.
- Hüttner J., Dalton-Puffer, C., & Smit, U. (2013). The power of beliefs: lay theories and their influence on the implementation of CLIL programmes. *International Journal of Bilingual Education and Bilingualism*, 16(3), 267-284.
- Mehisto, P., Frigols, M., & Marsh, D. (2008). *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan.
- Nezbeda, M. (2005). Überblicksdaten und Wissenswertes zu Fremdsprache als Arbeitssprache. *EAA Serviceheft 6 Praxisreihe*. ÖSZ.
- Nikula, T. (2017). CLIL: A European Approach to Bilingual Education. In N. Van Deusen-Scholl & S. May (Eds.), *Second and Foreign Language Education*. Encyclopedia of Language and Education (3rd ed., pp. 111-124). Springer.
- Pavón, V., & Ellison, M. (2013). Examining teacher roles and competences in content and language integrated learning (CLIL), *Linguarum Arena*, 4, 65-78.
- RIS Rechtsinformationssystem des Bundes (2017). Bildungsreformgesetz. [22 October 2017].
- Ruiz de Zarobe, Y. (2016). Content and Language Integrated Learning. Routledge.
- The European Commission (n.d.). *Education and Training: Languages in Education*. http://ec.europa.eu/education/policy/multilingualism/languages-in-education_en.

Wilding, G., Plösch, M., & Kupplent, W. (2009). PEA – das Projekt Englisch als Arbeitssprache an der HTBLuVA (Bulme) Graz-Gösting. *Themenreihe des Österreichischen Sprachen-Kompetenz-Zentrums* (3).

Suggestions for further reading

Ball, P., Kelly, K., & Clegg, J. (2015). Putting CLIL into Practice. Oxford University Press.

This book provides a theoretical framework as well as sample tasks. In addition, it focuses on assessment, creating materials and considering the input and output related to the CLIL activities.

Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge University Press.

This book provides an in-depth summary of the main concepts of CLIL as well as a theoretical framework.

Dale, L., & Tanner, R. (2012). *CLIL Activities. A resource for subject and language teachers*. Cambridge University Press.

This book offers a theoretical introduction as well as an analysis of the language needed in different subjects. Its main focus, however, is to provide a number of different CLIL activities to be used for a range of subjects and topics.

Mehisto, P., & Ting, Y. L. T. (2017). *CLIL essentials for secondary school teachers*. Cambridge University Press.

This book outlines the principles of CLIL from both the content and language teachers' perspectives and provides a number of scaffolding techniques that help learners to learn content as well as language. Furthermore, the book provides practical strategies on how to administer formative assessment in CLIL.

Commentary on reflection questions

- **1.** to **2.** Your answers to the reflection questions will depend on your personal teaching experience. The point of these questions is to encourage reflection in the area of CLIL.
- 3. Challenges might include:

Finding time in an increasingly busy school year to plan and implement a project or a CLIL class is difficult \rightarrow start small, assess the outcome and then develop further.

Resistance from parents, who are worried that the students will gain less factual knowledge of the content matter \rightarrow inform the parents early about the plans and communicate frequently, provide studies and analyses of the benefits of CLIL.

Resistance from students, who are worried that because of their lacking language competence their grade in the other subject will drop as well \rightarrow focus on the benefits of CLIL for the students in the future and point out that during CLIL lessons the language skills also profit.

Finding teachers who are both educated in a language and the content matter or finding teachers who are willing to cooperate \rightarrow discuss plans and ideas with colleagues from the very beginning and find one or two colleagues who will work together with you on the first CLIL project.

4. This depends on your personal interests, on the subjects you teach and on the school you work at. The topics can range from the Middle Ages (history and social studies) to trees (biology) or money (geography and economics).