Bulletin of the *Transilvania* University of Braşov
Series IV: Philology and Cultural Studies • Vol. 15(64) No.1 – 2022
https://doi.org/10.31926/but.pcs.2022.64.15.1.4

Integrating content and language in ESP teaching

Alexandra STAN[1]

This paper presents and describes an English for Specific Purposes (ESP) course designed for second year forestry students using the principles of Content and Language Integrated Learning (CLIL). Starting with a theoretical overview of what CLIL stands for, the discussion continues with a presentation of the ESP course aimed at the efficient acquisition of the target language and of the content knowledge represented by specialized terminology. Examples of activities that engage the four language skills, i.e. reading, listening, speaking, and writing, are also provided before the concluding remarks, which reveal some advantages and limitations of applying the CLIL strategy in teaching ESP.

Keywords: *ESP, CLIL, integrated teaching, higher education, forestry*

1. Introduction

English has become a medium of instruction in universities all around the world. Students are encouraged to learn English for their future, but these students' priorities lie in devoting their efforts to their specialisms, not to a foreign language. This is challenging for ESP teachers, as they must create or adapt courses that would motivate the students to take an interest and believe that English is indeed useful for their future professions.

My experience of teaching ESP as L2 to Romanian undergraduate forestry students has revealed that one strategy for teaching ESP effectively is Content and Language Integrated Learning (henceforth CLIL), which "developed as an innovative form of education in response to the demands and expectations of the modern age." (cf. Coyle et al. 2010, 31).

CLIL has been discussed and applied in various studies and fields e.g., mathematics (Vavelyuk 2015) and journalism (Tzoannopoulou 2015), but to my knowledge, studies focusing on CLIL application to teaching ESP in forestry higher education in Romania were non-existent at the time of this research. Therefore,

[1] Transilvania University of Braşov, alexandra.stan@unitbv.ro

the aim of this article is to describe the ESP course I designed for second year Romanian undergraduate forestry students, which underlies the CLIL approach.

The discussion begins with a theoretical overview of what CLIL means and what it implies, followed by a section that presents and describes the process of application of this strategy to the ESP course I have been teaching for six years at *Transilvania* University of Brașov. The concluding remarks will shed some light on the advantages and limitations of using the CLIL strategy in teaching ESP.

2. Theoretical background

According to Coyle et al. (2010, 19), "Content and Language Integrated Learning (CLIL) is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language."

In practice, CLIL involves the learners as active participants in their education through research (a process of inquiry) and innovation (using complex cognitive processes and means for problem solving) (Coyle et al. 2010, 33). Harrop (2012, 58) argues that "by realigning language and cognitive development, CLIL can combat the lack of relevance of language teaching based on grammatical progression and boost learners' motivation".

The teacher's role changes from the donor of knowledge to the facilitator, thus empowering the learners "to acquire knowledge whilst actively engaging their own and peergroup powers of perception, communication and reasoning" (Coyle et al. 2010, 34).

CLIL is different from established approaches like content-based language learning, or forms of bilingual education, due to "the planned content, cognition, communication and culture into teaching and learning practice" (Coyle et al. 2010, 34-35). This 4C model which represents the theoretical framework that underlies CLIL is a holistic approach where content (subject matter), communication (language learning and using), cognition (learning and thinking processes), and culture (developing intercultural understanding and global citizenship) are integrated (Coyle et al. 2010, 125-126). The 4Cs framework (see Figure 1) is based on principles such as the following (cf. Coyle et al. 2010, 128-129):

(1) Content matter is also about the learner creating their own knowledge and understanding (personalized learning);
(2) Content is related to learning and thinking (to cognition);
(3) Thinking processes (cognition) need to be analyzed for their linguistic demands;
(4) Language which is related to the learning context needs to be learned;

(5) Interaction in the learning context is fundamental to learning, especially when the learning context operates through the use of a foreign language;
(6) The relationship between cultures and languages is complex, therefore intercultural awareness is fundamental to CLIL.

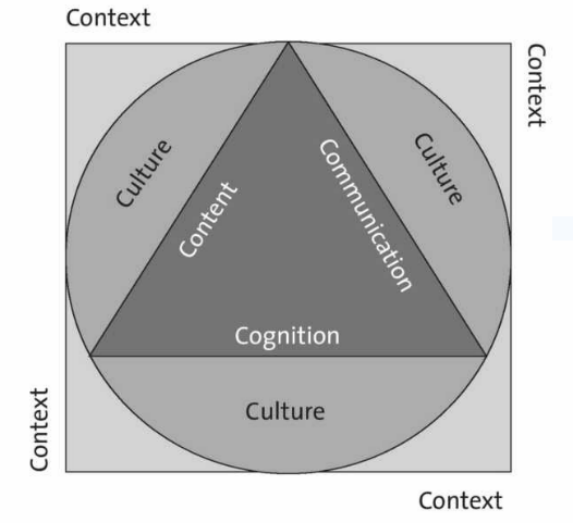


Figure 1. The 4Cs framework (cf. Coyle et al. 2010, 127)

CLIL involves a variety of models that can be applied according to the types of learner.

3. An integrative ESP course for forestry students

The ESP course presented herein is aimed at second year forestry students and is based on Coyle et al.'s (2010, 86) C2 model, called Adjunct CLIL.

In this model, language teaching runs parallel to content teaching in order to achieve higher-order thinking. Even if language teaching is field-specific (the forestry field), this course complements the university curriculum. As the language teacher, I take responsibility for teaching the content area. Based on my six-year experience working on various translation and interpreting projects at the university, I believe that I am able to teach at least the introductory materials of the specialized disciplines in English.

The course focuses on content, language and cognition through a supported – or scaffolded – approach which is used to introduce terminology and concepts in

conjunction with the content. According to Hammond and Gibbons (2005, 9), scaffolding is a "support designed to provide the assistance necessary to enable learners to accomplish tasks and develop understandings that they would not be able to manage on their own."

CLIL teachers must actively involve learners in their own learning process by enabling them to develop metacognitive skills like learning to learn in interactive classrooms via group work. Cognitive engagement by the students is relevant for effective CLIL teaching and learning.

This ESP course runs for 4 semesters (first and second year of study) and caters for B1-B2 level of English. The course presented in this paper is taught during the first semester of the second year and builds on the knowledge acquired during the first two semesters. The main objectives of the course are: improving students' written and spoken communication skills, enriching their specialized vocabulary, offering them the proper instruments to use specialist terminology in coherent written and oral communication, fostering learner agency, preparing them for further studies, and introducing them to a wider cultural context.

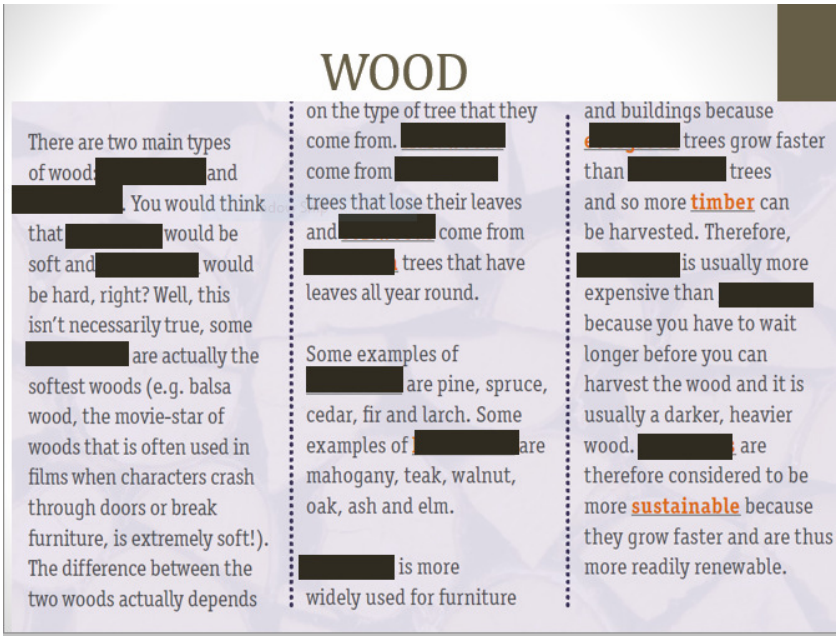
Consisting of six topics + revision, the course focuses on specialized forestry terminology and is aimed at developing all four language skills: reading, speaking, listening, and writing. The topics are extracted from the first- and second-year core syllabi, and represent major disciplines relevant for the subsequent specialization of the students: pedology, dendrology, ecology, botany, fauna, and entomology.

The lectures deliver a theoretical foundation and activities that engage all the language skills, while the seminars are dedicated to the students' oral presentations (engaging the speaking skill) of their scientific articles (exercising their writing skills), all of which results in their formative assessment. Listed below are examples of activities that are meant to engage the four language skills: reading, listening, speaking, and writing.

3.1. Examples of reading activities

The following examples of reading activities are aimed at practicing and fixing forestry terminology:

(1) fill-in materials such as authentic texts (see Figure 2) or images (see Figure 3) extracted from encyclopaedias or specialized internet websites (e.g., https://www.fao.org/home/en/):



WOOD

There are two main types of wood: [redacted] and [redacted]. You would think that [redacted] would be soft and [redacted] would be hard, right? Well, this isn't necessarily true, some [redacted] are actually the softest woods (e.g. balsa wood, the movie-star of woods that is often used in films when characters crash through doors or break furniture, is extremely soft!). The difference between the two woods actually depends on the type of tree that they come from. [redacted] come from [redacted] trees that lose their leaves and [redacted] come from [redacted] trees that have leaves all year round.

Some examples of [redacted] are pine, spruce, cedar, fir and larch. Some examples of [redacted] are mahogany, teak, walnut, oak, ash and elm.

[redacted] is more widely used for furniture and buildings because [redacted] trees grow faster than [redacted] trees and so more **timber** can be harvested. Therefore, [redacted] is usually more expensive than [redacted] because you have to wait longer before you can harvest the wood and it is usually a darker, heavier wood. [redacted] are therefore considered to be more **sustainable** because they grow faster and are thus more readily renewable.

Figure 2. Example of text for reading activity (text adapted from https://www.fao.org/3/i3856e/i3856e.pdf)

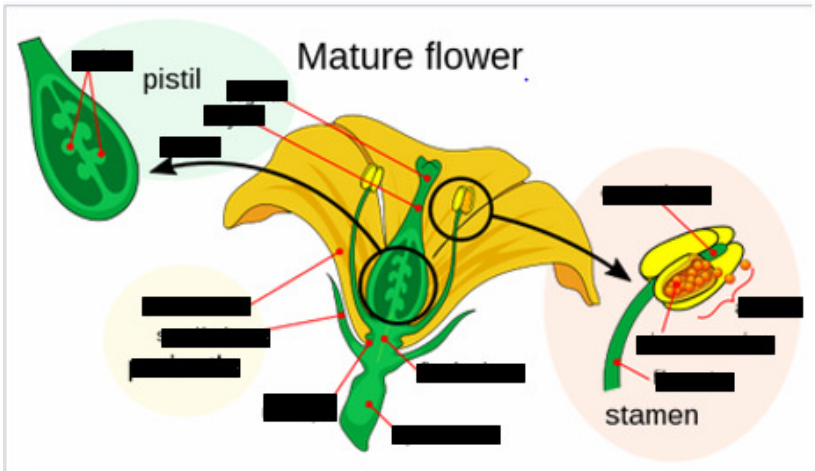


Figure 3. Example of image for reading activity (adapted from "Diagram of flower parts" by LadyofHats,

https://en.wikipedia.org/wiki/Flower#/media/File:Mature_flower_diagram.svg, published into the public domain)

(2) arranging jumbled paragraphs in the correct order so that a text makes sense;
(3) finding synonyms and/or antonyms in a text;
(4) converting words in brackets from a text into nouns or adjectives.

3.2. Examples of listening activities

Some examples of listening activities are:

(1) viewing youtube videos and solving tasks based on the video content (such as answering multiple choice and open-ended quesions and filling in sentences);
(2) listening to oral presentations delivered by their peers.

3.3. Examples of speaking activities

These are aimed at encouraging students to express themselves and share their ideas:

(1) phrasing definitions of concepts related to a topic;
(2) answering questions and debating various subjects like:
   a. What is botany?
   b. What is dendrology?
   c. What happens when we remove forests?
   d. What can we do to protect forests?

(3) giving oral presentations;
(4) providing suggestions and asking questions about the oral presentations.

3.4. Examples of writing activities

These are aimed at fostering group work and motivating students to interact and exchange ideas:

(1) writing definitions of concepts;
(2) writing a poem using the specialized terms related to the topic discussed;
(3) researching for and writing a scientific article about a subject referenced in the lecture.

3.5. Assessment of the students

The course ends with a formative assessment in the form of a portfolio consisting of four scientific articles which must be written and presented orally in groups of three or four. The criteria for the assessment, of which the students are informed during the first lecture, are:

(1) the students must write and present four (out of the six topics) scientific articles in groups of three or four, to ensure the timely assessment of all the students;
(2) the students must choose the topics for their papers at the end of each lecture;
(3) the presentations must take place only during the seminars and they must be 15 minutes long;
(4) the students will be graded individually, not as a team, according to the knowledge of the topic and the terminology.

Through the formative assessment, the content is first and foremost assessed. The language is assessed based on the students' ability to recall subject-specific vocabulary, to present or effectively discuss their chosen topic, to demonstrate thinking/reasoning in the CLIL language. This type of assessment enabled ongoing correction in the classroom, as well as assessment of the written language and of the oral language of the presentations after they were completed, with a view to improving the communication of content.

According to Coyle et al. (2010, 283):

> sharing the objectives and offering success criteria are important first steps towards effective assessment, as learners begin to find out in this way not just what they are likely to be learning, but also how their work will be assessed, both as they work and when they have completed it.

The above discussion shows that the CLIL principles were met in the development of this ESP course for forestry students: using authentic materials (**content**), engaging students actively in their learning through research (**cognition**) and group work, allowing for interaction (**communication**) that would be fairly limited in a class of 100+ students. They were also exposed to the differences in the English and Romanian practices regarding silvicultural work and game management legislation, thus enabling the development of intercultural understanding (**culture**). In short, the four Cs in the 4C framework that represents the foundation of CLIL were implemented.

4. Conclusion

This paper set out to describe an ESP course designed for second-year Romanian forestry students, which used the CLIL strategy of integrating content and language. Some studies show that "the outcomes of most CLIL programmes are unsurprisingly positive, with CLIL students displaying higher levels of proficiency and higher communicative competence than their non-CLIL peers" (Harrop 2012, 59).

Harrop (2012) discussed some of the advantages and limitations of CLIL. Among the advantages are improving the motivation of all learners, as it provides authentic contexts for language use, and language becomes the means rather than the end in itself; enhancing content knowledge, cognitive skills and creativity in learners of all abilities; and leading to greater intercultural awareness. As far as the limitations of applying CLIL, they may arise where there is a lack of linguistic proficiency in the students, as well as insufficient teacher proficiency, which may be serious obstacles to understanding and learning. Although a number of measures are necessary to unlock the full potential of this teaching strategy, it depends on all participants involved in the teaching-learning process to capitalize on the tools that CLIL has to offer.

References

Coyle, Do, Philip Hood, and David Marsh. 2010. *Content and Language Integrated Learning*. Cambridge: Cambridge University Press.

Hammond, Jenny and Pauline Gibbons. 2005. "What is Scaffolding?" In *Teachers' voices 8*, ed. by Anne Burns and Helen de Silva Joyce, 8-16. Macquarie University.

Harrop, Ena. 2012. "Content and Language Integrated Learning (CLIL): Limitations and Possibilities." *Encuentro* 21: 57-70.

Tzoannopoulou, Marina. 2015. "Rethinking ESP: Integrating Content and Language in the University Classroom." *Procedia – Social and Behavioral Sciences* 173: 149-153.

Vavelyuk, Olga. 2015. "To Integrate Successfully: Language and Subject Studies in ESP Teaching." *Procedia – Social and Behavioral Sciences* 199: 44-49.

Online references

https://en.wikipedia.org/wiki/Flower#/media/File:Mature_flower_diagram.svg
https://www.fao.org/3/i3856e/i3856e.pdf
https://www.fao.org/home/en/