

## Preface



After doing two 56-hour long seminars in 2018 and 2019 with grammar school teachers in Niš, I realised that there was not much of relevant literature, activity or practice books that science teachers teaching in English could use. While there is some substantial literature for CLIL in English language classes, there is much less support for particular natural science subjects in the local teaching context. Therefore, the material from those workshops is here systematised and organised around several areas that transpired as the most important for teachers. One important point is that this is not a textbook on the English language, or English language practice nor is it an activity book for any specific subject taught in English. The main focus here is on how to activate content knowledge in a subject while using a foreign language, as well as how to organise instruction so that learners benefit from a CLIL class.

The textbook comes as a response to the situation in which the teachers in the Serbian CLIL project have found themselves: their work is rather unsupported. Not only has language training for teachers been sporadic, but professional training has not been provided, or it was provided through online courses only. Therefore, these teachers are left to individually make decisions about the curriculum, syllabus, assessment and the material. While it is true that the bilingual project comprises only a small percentage of all classes in Serbia, these learners should receive the same quality of instruction as other learners, and the teachers should be supported in their work.

The textbook is aimed at the pre-service and in-service science subject teachers who teach bilingual classes in both secondary and elementary schools in English. Teachers who prepare learners for International Baccalaureate might find some of the resources useful because both English-mediated instruction (EMI) and Content and language integrated learning (CLIL) and their methodological principles are discussed, along with examples of activities and tasks. In addition, English language teachers and teachers doing project work and cross-curricular activities can use the textbook as a supplementary material. The theories of language learning are, therefore, not the focus in this textbook, but some of the important principles in language learning are mentioned to help teachers with the choices in their instruction.

Language skills (listening, speaking, reading, writing) are tools language teachers use to introduce new language, to practice and check linguistic knowledge. However, in CLIL, language skills are a means of learning new information and showing their understanding of the subject (Deller & Price 2015): they are not just an end in

themselves. For this reason, teachers are often reminded to think about their instruction from a dual perspective of content and language. The hope is that the material will offer support for teachers and help them in their teaching.

The textbook provides some theoretical grounding for CLIL, explains some of the theories of learning behind it, and aims to bring the main ideas of CLIL closer to teachers. It is organised around the important topics for CLIL – from language of and for learning, scaffolding, over attention and active learning to material development, adaptation, and assessment. Almost every thematic unit has reflection questions and several tasks that could help teachers think about the existing practices and ways in which these could be refreshed, changed or improved.

The textbook opens with an introductory chapter on the aims of CLIL instruction, both with what the National curriculum states, and an overview of the important goals in the European Framework of Reference for CLIL teacher education. While in-service teachers will already be familiar with the requirements, the section can be quite useful for those about to start their teaching.

The rest of the material is organised into sections that move from topics important for teaching in general to more specifically related to CLIL. Therefore, the first chapters include topics that might not seem to stem directly from CLIL, but are nevertheless relevant for it. Whether learners can use the academic language and appropriate terminology is firstly addressed. Then, scaffolding in CLIL is explained, with some practical ideas on how to organise instruction so that it supports learners in both language learning and content learning. Bloom's taxonomy is revisited as a reminder of different cognitive level for tasks that are used in CLIL. In addition, some room is given to a discussion on attention, memory and how learners 'turn' input into long-lasting knowledge. These chapters draw attention to different ways in which learners learn, offering some ideas for class organization. In regular classes, teachers ask many questions, but in CLIL, with the added aspect of language learning, it is important that learners have enough support in understanding and answering the questions, so that they can be more engaged with the content. The effective usage of questions in the classroom is, therefore, examined. Assessment has been reported as especially challenging for subject teachers, so different types of assessment are discussed: formative assessment and assessment for understanding, together with self- and peer-assessment. As the new curriculum places some weight on different ways of integrating formative assessment into learner evaluation, the section is of relevance in that respect as well.

There is not one specific format for CLIL classes, there are different ways in which CLIL lessons can be organised, and different instructional approaches that are suitable

for the CLIL principles are discussed. One important aspect of instruction stressed by the new National curriculum is differentiated teaching. There are sections on important principles about learners and learner differences, their multiple intelligences and how these dictate the needs for differentiation of instruction. Learners come into a bilingual project with different strengths – some with more developed linguistic competency, some with sounder content knowledge. It is a difficult and complex, but also important, task for CLIL teachers to recognise these and cater to different learner needs.

Some of the differences between CLIL in elementary and high school are also shown, together with how to plan for CLIL classes, with the component of language learning that must be factored into lesson planning. Finally, there are some ideas for preparing material that is more ‘CLIL-friendly’ because material for specific contexts is always scarce.

The book closes with the suggested solutions for the tasks, a list of resources that teachers might find useful and applicable to their own teaching context, and additional literature. As an addition to the material covered in the book, there is a list of online resources which could be used by teachers to create a material bank. For easier access, the links are also available digitally (see Appendix 3).

Finally, I wish to thank all the teachers who participated in the seminars, and the colleagues who gave insightful comments during the preparation of the textbook.