Creating materials with ICT for CLIL lessons: A didactic proposal

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Abstract

When planning a CLIL lesson, the teachers have to plan the input that they want to teach their students, that is to say, the amount of knowledge that the students are going to learn and how this information will be presented and introduced in the CLIL class. However, one of the most concerns of CLIL teachers when looking for materials is that they can’t find appropriate materials for their lessons. Unfortunately, there is a dearth of commercially produced CLIL course books and the content knowledge is usually inferior to that of the L1 subject. For these reasons, teachers often have to spend their time preparing their own materials. Therefore, the aim of this paper is to introduce CLIL teachers the creation of materials in an easily way. For doing this, we are going to develop a lesson planning from the second course of Natural Science entitled “Our bones”. Just for the students to learn the vocabulary related to this topic, we have developed different interactive activities, which can also be printed, created with free online programmes, and resources.

1. Introduction

CLIL has been described as “the most recent developmental stage of the communicative language teaching” (Dalton-Puffer, 2007). The term CLIL, which is an acronym for Content and Language Integrating Learning, is an approach to teaching the content of curricular subjects through the media of a non-native language. The concept CLIL was created by a group of bilingual education specialists of differing backgrounds in the 1990s as an umbrella term.

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covering all the educational activities where “a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint curricular role” (Marsh, 2002, p.58).

Since the early 1990s, CLIL –both as a term used by researchers and policy makers and as a practical pedagogical approach– has soared in popularity. The definition from Marsh (2002) cited above is very similar to that of Coyle, Hood and Marsh (2010), according to whom “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” (see also Georgiou, 2012). Both definitions can be divided into at least two parts: firstly non-language content is taught or learnt through a foreign language and secondly the curriculum contains both language and non-language subject matter.

According to Bentley (2007), in a CLIL course, learners gain knowledge and understanding of the curricular subject while simultaneously learning and using the target language. Therefore, when planning a CLIL lesson, it is very important to plan the input, that is to say, the information that is being presented in the CLIL class. In general, a teacher should follow these steps:

- Choose the topic, and establish the main subject and language contents related to it.
- Look for materials that are going to be used in the CLIL class (textbooks, audio, video...)
- Organize and adapt these materials
- Decide what kind of activities is appropriate
- Elaborate the activities

However, one of the most concerns of CLIL teachers is that they can’t find appropriate materials for their lessons. Unfortunately, there is a dearth of commercially produced CLIL course books and the content knowledge is usually inferior to that of the L1 subject. For these reasons, teachers often have to prepare their own materials. In doing so, teachers have a basic choice between three options, according to Moore and Lorenzo (2007, p.28) but each of these options offers advantages and disadvantages:

1. **Produce their own original materials for scratch**: if teachers produce their own materials, they can be reasonably sure that the focus will be exactly where they want it to be, yet the process can be extremely time-consuming and many teachers simply do not have the time to produce everything by themselves, as the amount of time devoted to lesson preparations could be disproportionate. Searching for and adapting existing materials as well as preparing new materials when needed takes up a considerable amount of time and results in a greater workload for CLIL teachers compared to L1 mediated teaching (Floimayr, 2010, p.21; Gierlinger, 2007, pp. 80–81; Mehisto, Marsh & Frigols, 2008, p.22). Teachers might also lack the “professional competences” required in materials adaptation, supplementation and design (Coonan, 2007, p.628).

2. **Employ “undiluted” authentic materials**: The term “authentic material” can be used in a variety of meanings, as a definition is far from consensual. Here, we are going to use it in these two senses: a) non-pedagogical materials from the general media; and b) specifically didactic content materials produced for native speakers of the target language. But one of the most common standardized and used definitions is the following one: “authentic materials are reading texts that were written by native speakers and published in contexts designed specifically for native-speaker consumption, with no thought given to non-native accessibility. The topics, language, syntax, structure, etc., are all pitched at a target audience of native speakers and offered through media intended primarily for native speakers”. Other researchers widen the definition to include videos, television programs, and any other sources of language – or anything that might stimulate language use.

3. **Adapt authentic materials in line with the teaching goals**: It is a well established fact that being a CLIL teacher is usually more time consuming than being any other type of teacher, much due to the fact that a great deal of time has to be spent on adjusting and creating appropriate teaching materials. It can be difficult to find authentic materials which do not require some form of treatment prior to use because of the complexity of language used in the instructions, in texts or in the activities themselves.

2. **CLIL subjects**

First of all, it is important to remember the core principles of CLIL at Primary Education and at Secondary Compulsory Education:

- The subject comes first.
- Long, dense texts and complex sentence structures should be avoided.
- Presentation of the content should be supported by visual aids: photos, flow charts, diagrams, tablets, and labelled drawings, for example.
- Learning must be guided and structured.
- Comprehension tasks will be used more frequently than in a native language context to reinforce assimilation and processing of content and provide additional language practice.
- Learning is active whenever possible.
- Greater emphasis is placed on the process of learning.
- The four skills (listening, speaking, reading and writing) are crucial for presenting and learning new information.

Trying to fulfill these principles, there are different points that we have to take into account when designing the materials for our CLIL lessons. Firstly, as regards the way of approaching the contents, whenever the topic we are talking about, it is important to link the content of the curriculum to real world problems and to the backgrounds and experiences of the students, in order to increase their motivation. In that way, we can use, for example, real news or parts of films to introduce the topics.

Secondly, we should take into account that, in CLIL programs, the subject of English should be closely related to all other subjects taught in English. An exchange of ideas, materials, problems, etc. should be constantly taking place back and forth between the subjects, teachers and students. In that sense, collaboration with the English teachers in order to adapt and prepare material is essential.

The content subjects are linguistically supported by the target language class, and the backbone of the teaching of the target language is made up of authentic material used in other subjects. Students are going to learn the content through the second language, and the second language through specific contents. Again, coordination between teachers is very important. By working in this way, students are challenged and at the same time they get acquainted with real language and acquire technique in how to deal with any difficulties.

And thirdly, students’ motivation is also increased by the use of ICT in the CLIL lessons (videos, animations, podcasts, Internet pages, Virtual Labs, WebQuest...). Using ICT in the classroom has lots of advantages: it increases students’ motivation, promotes interaction among students, and develops basic competences: handling with new technologies, learning to learn, independent and/or autonomous learning, and so on.

3. Designing materials

Materials have traditionally been researched as a minor part of general methodology but in recent years a growing awareness of the importance of this topic, especially among English language teaching research, has lead to the growth of a whole body of research concentrating on materials (Tomlinson, 2001, pp.66–67).

Research on materials in general can be studied on three distinct but interrelated levels: content, consumption and production (Harwood, 2013):

- Content naturally refers to studies analyzing what is included and excluded in the materials; what kind of pedagogical thinking is behind them, which topics are common or allowed and how visible are minorities in the illustrations, for example.
- Studies on consumption look into the actual use of the materials by teachers and learners in classrooms.
- Production oriented studies concentrate on the processes involved in the design, writing or distribution of materials by professional materials writers, publishers and teachers.

As Tomlinson states (2001, p.66), materials development is also “a practical undertaking involving the production, evaluation and adaptation of language teaching materials, by teachers for their own classrooms and by materials writers for sale or distribution”. The modern teacher needs to be able to evaluate, adapt and produce materials so as to ensure a match between the learners and the materials they use. This is especially true for CLIL where few ready-made materials are available and thus CLIL teachers must all become materials designers. Thus, in helping teachers with this ‘task’ of creating materials, we will introduce them in the usage and management of some free online programmes and resources in an easily way. Therefore, for doing this, we are going to develop a lesson planning from
the second course of Natural Science entitled “Our bones”.

We are going to create our ICT materials to support our theoretical explanations using two different programmes. The first one used for this is HotPotatoes. It’s a completely free online resource. The first thing you have to do is to download it in the following link: https://hotpot.uvic.ca/. When registering, you can select the language in which the application will be installed. It includes six applications enabling you to create interactive multiple-choice or short-answer (Jquiz), jumbled-sentence (JMix), crossword (JCross), matching/ordering (JMatch) and gap-fill exercises (JCloze). Also, the Masher option allows you to create a final group of activities linked and shown in the same page. The first exercise has been created using JCloze. Our next exercise is created with JQuiz. It consists of different questions with multiple choice answers. The last activity created with JCross is a crossword. Here, the programme provides you with the option of creating a crossword just by writing the words you want to appear in it. Then, you only have to give a clue for the students to be able to discover the appropriate word, with “Add clues”.

Just to finish with this programme, once you have saved all your different activities, you can create a whole exercise with the different activities saved and publish on the net. This is done with The Masher application. With the option “Add files”, you can select all the activities you want to add to this exercise. Also, you can select the order in which the activities will be shown. Once you have finished, with the option “Build unit” you can create your web page with your own resources.

Another resource we can use just as a final revision for our students is with a free programme called Kahoot. You have to download it from the web page: https://getakahoot.com and sign up with an email account. Then, you must indicate your role (teacher, student over 16 or under 16, in business or using it socially) and the school, university, organisation you belong to.

Once you have signed, with the option “QUIZ”, you can start to create your own online quiz for your students in a very easily way. With the button New Kahoot, you start by introducing your questions and the correct answers. The only thing you have to do is to insert the question, the four possible options and select which one will be the correct one. Also, you must select the amount of time allowed for the students to answer. With the option “+Add question”, you can include as many questions as you consider and wish. Once you have created all the questions with their possible answers, you can select their order of appearance in the quiz. The last step is just to choose the language of your kahoot to be published, its primary audience (school, university, business, training, event or social), and you can also establish the privacy settings and its level of difficulty. After having selected everything, you’ll have your kahoot created and ready to be used in class.

Just to start your quiz in class, the only thing you have to do is that your students enter the game pin appearing in the kahoot once it has been saved. The students can access to the game by introducing the webpage https://kahoot.it/#/ and entering the given pin.

As this resource is completely free and it is thought to be used as a massive resource, there can be a lot of participants as players and the teacher can get a final statistics about the final results of the students. All the questions will appear on the teacher’s screen and the students will decide the correct answer with their mobile phones, tablets, laptops, and so on.

4. Conclusions

Creating and designing teaching materials on the part of the teachers is a beneficial process with both advantages and disadvantages. As regard the advantages, we can mention that all the activities created contain the specific vocabulary and amount of input chosen by the teacher, what is not normally found in most of the textbooks, which have a rather commercial purpose. Also, as Howard and Major maintain (2005, pp.101-103), all the activities are contextualised and fulfill with the students’ individual needs. In designing their own teaching materials, teachers can also take decisions about the most appropriate way of organising the information as well as of presenting the new topics and vocabulary items. Finally, it is worthy to mention that by doing online activities and quizzes all together in the classroom, the students feel quite motivated towards their own learning process.

However, among the disadvantages we can highlight that the fact of creating and designing materials is a time-consuming extra effort on the part of the teachers as it takes a long time creating all the activities needed to support the theoretical explanations. Also, there is a drawback when using ICT as if teachers are not competent in this field, perhaps it could be a little bit difficult for them. This is the reason why we have devoted this paper to the presentation and introduction of two very easy resources to create and design effective materials for classes.
References