

Step-by-Step Organization of a University CLIL Course

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Abstract

This paper reports on the organization of CLIL (Content and Language Integrated Learning) University courses in funerary archaeology held at the Division of Palaeopathology of Pisa University. We outline the different steps involved in the practical implementation of the proposed approach, which include choice of topic, linguistic content, tasks and strategies, and we describe the ways in which CLIL can be used both in the classroom and in archaeological fieldwork excavations for teaching of the discipline and practical experience with leading scholars in the field. Each two-hour lesson slot is divided into four parts, devoted to both the receptive (reading, listening) and productive (writing, speaking) skills, which constantly expose the students to language, helping them understand the contents of the discipline. It is necessary to take into account the additional difficulties students attending the courses might have, which are due to their having to learn basic and academic language skills and new subject concepts at the same time. All the material relevant to the course is simplified and adapted to the needs and language of the students, who are supported by authentic materials in the form of text-books, articles, tutorials, illustrations, audio and video recordings, and by a number of activities ranging from gap-filling exercises, matching words with their definitions, jumbled sentences, sentence formation, preparation of posters, powerpoint demonstrations. The trainees are also involved in increasing an ongoing bilingual English-Italian glossary and contextualized English grammar. Working individually, then in pairs and in small groups, they are responsible for the different areas of the discipline. Funerary archaeology is the study of death, ancient burials and human skeletal remains, body disposal, etc., and includes skeleton anthropology, bone diagenesis, taphonomic anthropology, as well as other features comprising excavation phases, techniques and tools employed, field archaeology.

1. Introduction

Over the past decade, CLIL has been considered to be one of the most innovative approaches to foreign language teaching. CLIL methodology consists in teaching a curricular subject through the medium of a language other than that which is normally used, and is aimed at improving language competences by studying content through different perspectives. CLIL methodology enhances learners' confidence in both the language and the discipline that are being taught, and is expanding rapidly in both public and private schools and universities in many parts of Europe, also in Italy [5].

In this paper, we describe the organisation of CLIL-based funerary archaeology courses conducted by a palaeopathologist from the Division of Palaeopathology of the University of Pisa, two archaeologists acting as fieldwork instructors from the Section of Medieval Archaeology of the University of Siena and the Division of Palaeopathology of the University of Pisa, and a language teaching consultant working as researcher at the Institute for Computational Linguistics (CNR) in Pisa.

The courses, on an optional basis, are addressed to Italian University students attending the first cycle, three-year degree and involved in archaeology and physical anthropology. The students registering for 18-hour three-credit courses running at a rate of 2/3 hours a week need to have a minimum knowledge of the language, which is the condition requested for attendance to the classes. A multiple choice English grammar entrance test followed by an interview with the language teacher help establish the students' language level [3].

At the beginning of the courses, the students need to familiarize with the specialist language of funerary archaeology, using contents which are explored in-depth with the content instructor, and at the same time to revise the different areas of the English grammar system with the language teacher. Both grammar and content delivery are handled in English. The content and language instructors check any previous knowledge the students might have on the subject, in order to allow them to build new information on what they already know and to consolidate the new data that have been acquired, according to the constructivist model of learning [2].

For the teaching to be effective, it is important to plan each lesson carefully, setting realistic goals, choosing the suitable materials, and developing and organising activities for the students. Using the foreign language within the context of a specific subject makes the work more authentic, meaningful and motivating. The decisions taken by the instructors range from the choice of the textbook and other readings including books, articles, encyclopaedia entries, internet publications, etc., to the selection of audio and video recordings in the form of lectures, documentaries, tutorials. At the beginning of each lesson, the students are informed about the subject that is going to be treated and discussed, and the exercises, specific tasks and more general activities that will be carried out. Relevant content material drawn from the texts is adapted to the needs of the students, who are repetitively exposed to the subject-specific language, and the most important and useful, or problematic words and expressions are stressed, repeated and consolidated through different exercises and activities.

This paper is structured as follows: Section 1 describes the general features of the CLIL approach, and of the funerary archaeology courses. Section 2 outlines the organisation of the classes, the first decisions made by the instructors, and choice of the materials. Section 3 lists a number of exercises and activities that can be performed during the courses and section 4 comments on the organisation of the classrooms. Finally, section 5 focuses on the importance of CLIL methodology for fieldwork activities.

2. Lesson planning

The textbook chosen for the courses is "*The Archaeology of the Dead. Lectures in Archaeoethanatology* [11], which is made up of 10 lectures, each focussing on a particular aspect of archaeoethanatology, and introducing to the basics of the discipline. Each lesson of the course is organized around a specific topic (types of burials, decomposition processes, anatomy of the body, disturbances, etc.). Content material can be downloaded from the site of the Institute <http://www.paleopatologia.it/>, or delivered through photocopies, or powerpoint presentations, and presented to the students by the content instructor and language teacher working in collaboration.

The first introductory lesson consists in showing the different phases of putrefaction of the corpse, and these are explained through a sequence of images appearing in Duday's introduction. We try as much as possible to supply the explanations of particular types of burials, or places, or processes with clear illustrations, or photographs, and other similar materials in both printed or digital format acting as visual support for the understanding of content area phenomena [15], while the basic vocabulary required for the understanding of each topic is listed at the beginning of the lessons [9]. The same vocabulary is included in an ongoing English-Italian glossary of funerary archaeology terms constantly enriched with specialized terms and definitions drawn from authoritative texts. Some of these

definitions are used to illustrate the explanations of specific language items of a contextualized English grammar [8]. The main grammar items of the English language (articles, adjectives, nouns, pronouns, verb tenses, conditional sentences, etc.) are extrapolated from the text, and are explained or revised.

Particular emphasis is given to the functional language that can be useful and necessary to talk about the subject area, e.g. to explain what can be seen in a picture, to describe causes and effects, to speculate. Different ways of hypothesizing (*it could be, it might be, it must be*), *suggesting (I think it is, it looks like, it is likely to be, etc.)* are associated with specific language items and structures, that need to be taught and practiced again and again. The language structures and expressions are often determined by the subject matter (e.g. *passive is found, were recovered*; or past tense to describe, for instance, excavations carried out on particular sites, or when describing a *slide in the foreground, in the background, on the left, on the right, etc.*). At the very beginning of the CLIL courses, the language teacher insists on the importance of using short sentences, privileging the use of coordinate and not subordinate clauses, emphasizing on the correct word order in English sentences (subject + verb + object + manner + place + time). The vocabulary and language structures that the participants in the courses acquire through CLIL are a lot more demanding than those they generally learn in traditional classes, as the content they are working with is of a very specific nature.

At the beginning of the courses, major attention is concentrated on lower order thinking skills like describing (*"here we can see the epitaph..."*, *"the crypt contains ..."*, or defining (*a barrow/mound is a...."*), or classifying (*burials can be primary, secondary...*), while at a later stage there is more emphasis on the higher order thinking skills like explaining (*the upper part of the body is ..., the lower part is...*), narrating (*"in the 17th century, the custom of burying..."*), or hypothesizing (*"they must have used, they may/might have been..."*).

3. Exercises

Reading is certainly the major source of input and is generally followed by a wide variety of written activities. Listening is a vital skill which provides the basis for successful communication: unfortunately, owing to the scarce number of hours available during these courses, the students are offered the chance to listen to only a few selected audio recordings, but it is hoped that longer courses will provide increased exposure and improvement of the language [16]. Finally, the speaking activities carried out in pairs or in small groups, appropriately guided by the teacher, are those which constantly expose the students to the language, helping them learn the contents of the discipline and increase their proficiency in the language. The tasks can consist in labelling the different parts of a picture, filling in a table, making notes on specific information, reordering information, filling in the gaps in a text.

Let us now examine in further detail a number of different activities that can be performed by the students, according to the type of content they need to learn or consolidate. The following tasks carried out by the students comprise all the four language skills, both receptive (reading and listening) and productive (writing and speaking). Exercises can consist in completing the text with relevant words (given or not given), specifying whether a sentence is true or false, writing a short summary of an article or part of an article, writing a short dissertation. Further activities can be the following:

Asking and answering questions. For example: *Which parts of the body decay first? How do we recognise a primary burial? Clay and leather play an important role in funerary archaeology. Can you say why? What are the most important mechanisms involved in the filling process? What happens to a corpse that has been buried in the earth? What is the difference between the terms "coffin" and "bier"?*

What is transubstantiation?

Matching up. The terms in a left-hand column are to be matched with the correct definitions in a right-hand column.

Filling the gap. Another exercise consists in filling the gaps of a text, using the words provided in a box.

Summary. The students write a brief summary using a number of given key-words and expressions: e.g., primary burials, the deceased, secondary burials.

Ordering. The students must put into order a number of sentences, each describing the different phases of a specific process (e.g. putrefaction of a corpse), or they can sequentially dispose a series of images representing a process, and then take it in turns to describe the single images.

Classifying. After acquiring information about a particular subject area, the students consolidate such information by classifying, for example, the different types of joints, which can be labile, or persistent, or thoracic, or abdominal.

Multiple choice. Multiple choice exercises consist of a number of questions with a set of options only one of which is correct.

Jumbled sentences and paragraphs. These exercises consist in mixing sentences or paragraphs in a text, and then putting the sentences or paragraphs in the correct order.

Labelling. Labelling is a useful task as it can help the teacher explain the meaning of key terms or concepts, introduce a particular subject, familiarize with subject area concepts, practice the plurals of irregular nouns (*foot, feet; tooth, teeth; dentalia*, etc.). Divided into groups, the students can label the different parts of a picture showing the human body, and relative joints belonging to that part of the body. The same illustration can be used to show which parts of the human body deteriorate more quickly.

Videos. Videos can be used to practise different tenses, for example a film can be shown, turning down the sound; the student can describe what is happening in the video (using the present continuous), or what happened during an excavation (using the simple past), or hypothesizing (using different modal verbs).

Glossary and Grammar. Each student is assigned a part of text drawn from authentic certified material, and must extract the terms or expression related to the topic area or other related fields (chemistry, osteology, etc.) with their definitions and contexts to be included in the bilingual glossary and grammar already available. A translation in Italian should also be provided of the new English words encountered, e.g.: *deposit* (English), *deposito* (Italian), *burial* (English), *sepoltura* (Italian); *primary burial* (English), *sepoltura primaria* (Italian).

Describing. Each student describes an illustration, using modal verbs to speculate, express possibility or probability, etc.

Powerpoint presentations. Each student must read the assigned section of a text (a chapter of a book, or an article), and then provide an oral summary of what (s)he has read in the form of a Powerpoint presentation.

Before the end of each two/three-hour slot the students can be divided into small groups of four, working concomitantly but each group performing a different activity, for example working on the glossary, or preparing questions, or writing a short summary of a part of text, etc.

4. Classroom organization

The students should possibly be seated in a semi-circle, so as to be able to see one another, and the attention should be shifted as much as possible from the teacher to the student. The teacher should avoid frontal teaching, move around the class speaking clearly and loudly, and encouraging interaction. The instructions for the performance of a task should always be clear, and should be given before distributing any sheets of paper, in order to prevent the class from starting to read and not listen. The teacher should show, not just tell the trainees what to do, how to perform an activity, demonstrating with a good student first, so that the tasks to be carried out are clear.

A number of tasks by way of individual, pair or group work, need to be designed and used to get the students actively involved in the learning process. The students, either in pairs or in small groups of four, are assigned a specific task. They must be even in number, so that they can exchange roles and take it in turns to perform an exercise. The students then change partner or the groups are mixed so that they can communicate their findings to their new partners. There may be the problem of some stronger individuals in the class dominating over the others, and it is up to the instructors to help those students who are in greater difficulty, to enable them to communicate with the others more easily and effectively. Students should in any case work in a relaxed environment, and not be constantly interrupted, unless a mistake affects comprehension of a particular concept, or compromises communication with a partner or with the other members of the group.

Peer teaching. As we have seen above, the class can be divided into small groups of students. Each group is assigned a specific task which requires the members to carry out research, or contribute to the preparation of the teaching materials and even exercises and handouts for the other members of the class. The teacher can use rotation activities so that the students do not get bored and restless, but can experiment various tasks and be exposed to different learning contexts. Trainees achieve content and develop good language skills at the same time, overcoming the problem of their learning more language than mastering content. Furthermore, they are involved in authentic tasks and provided with real-world purposes for language learning, interacting in the target language, exchanging ideas and experiences, and acting as creators as well as users of the resources. Motivation is essential to achieve a level of competence in the target language. When the students are sharing experiences, exchanging ideas, speaking about their personal work, focusing on learning topic, they forget that they are speaking in a foreign language. They gradually build up their self-confidence for communication, reaching positive outcomes in terms of learning the language and the content subject.

5. Fieldwork

The courses are particularly useful to those students who want to participate in archaeological excavation courses like the ones held near the village of Benabbio (near Lucca, Tuscany) for the exhumation of individuals buried in the medieval cemetery near the church of the Castle of Benabbio, and of people who died in the village during the cholera epidemic of the year 1855 [12]. Other important archaeological excavations are those started in July this year at the monastery Badia Pozzeveri (near Altopascio, Tuscany), resulting from the collaboration of the University of Pisa and Ohio State University, which have already brought to light dense concentrations of features, artefacts, and organic material. The academic program of the Field School in Medieval Archaeology and Bioarchaeology is aimed at training students in archaeological and bioarchaeological field and laboratory methods. The students working on archaeological fieldwork excavations can put into practice what they have learnt in the classroom. They are offered the possibility of enhancing the

competence achieved in the second language and are constantly exposed to the language, gaining experience by working side-by-side with leading researchers in the discipline and communicating with their peers from the same or from other countries, especially the UK and USA. The students learn to use important field techniques such as balloon aerial photography, geographic information system (GIS), georadars, etc., which have undergone striking changes over the last years [4]. In particular, the field school is aimed at providing the participants with an in-depth knowledge of bioarcheological field and research methods including recovery, restoration and analysis of human skeleton remains. The trainee archaeologists must carry out fieldwork in a meticulous manner, measuring out the unit that will be excavated, removing the layers of soil gently, looking for particular features like changes in soil colour and texture, searching for artifacts, recording all the information on data sheets. The artifacts are placed in bags labelled with unit number, stratigraphic level (sequence of layers or deposits caused by human occupation), name of the excavating team, and date of the finding. Some of the bodies recovered at Benabbio and at Badia Pozzeveri were adorned with rings, ear-rings, buckles, a crucifix, a rosary and several devotional medals; different artefacts like pottery, glassware and coins were also found. The excavations carried out so far have produced a wealth of evidence and brought to light remnants of the past, with a surprising abundance of material and important finds which will add greatly to the knowledge of the past.

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