DIGITAL TOOLS IN A CLIL CONTEXT OF TEACHING ENGLISH TO ARCHAEOLOGY STUDENTS

Nikita Pechunov¹*, Elena Taipova²

¹Mr, lecturer, Kazan Federal University, Russian Federation, pechunovn@gmail.com
²Ms, lecturer, Kazan Federal University, Russian Federation, el.tpv29@gmail.com

*Corresponding Author

Abstract

Foreign language teaching is closely connected with the active globalization tendencies, enlarging international connections and the digitalization of the educational sphere. Consequently, new methods, techniques, and tools for teaching a foreign language are needed to be developed and implemented that will contribute to the acquisition of both linguistic and professional skills and competencies.

One of the innovative teaching practices is content and language integrated learning. CLIL is a bidirectional competence-based approach to learning in which a foreign language is used for teaching both the major subject and language itself. This method is based on the content, cognitive, communicative, and cultural components, as well as on a number of didactic, linguistic and psychological principles.

The purpose of this work is to provide a theoretical basis as well as the examples of effective implementation of the technology of content and language integrated learning in teaching English in a digital educational environment. The article discusses the features and advantages of using CLIL technology in the language training of archaeology students. Thus, the academic novelty lies in the development of a model for the implementation of CLIL using digital technologies in English classes for students studying archaeology.

Keywords: Digital education, CLIL, language, communication

1 INTRODUCTION

In the modern world the methodology of foreign language teaching is characterized by its interdisciplinary nature and is closely related to the active processes of globalization, the expansion of international contacts and the exchange of information among various groups, including the scientific community.

The COVID-19 pandemic has changed the ways of organizing learning process: the role of distance technologies is growing, new formats of interaction in the digital educational space are being mastered and actively applied.

Due to these reasons, new educational methods, technologies, and tools should:
- Be aimed at the formation of a highly qualified specialist capable of developing international cooperation and solving professional tasks in a foreign language;
- Be able to be implemented in a digital educational environment.

One of the innovative technologies that meets the requirements mentioned above is the content and language integrated learning (CLIL).

CLIL is a bidirectional competence-based approach to learning in which a foreign language is used for teaching both the major subject and language itself.
This approach is focused on teaching of non-language-major students, since the language within the CLIL acts as a tool for mastering the professional content.

The use of CLIL technology in teaching English to archaeology students will prepare future specialists for professional communication in a foreign language. However, the features of the implementation of CLIL technology for the above-mentioned major in the digital educational space are yet insufficiently developed.

Therefore, the purpose of this article is to analyze the pedagogical prospects of digital education and CLIL in teaching English to archaeology students, as well as to give examples of possible tasks.

2 METHODOLOGY

In order to solve the tasks, the following theoretical methods were used: analysis of the literature on the definition of the concepts of “CLIL” and “Digital Learning” and the implementation of the CLIL approach in teaching students a foreign language.

In addition, this article will rely on the rules given in the paper by Plácido E. Bazo Martínez and Sergio D. Francisco Déniz:

- It is the students who are supposed to construct their own knowledge through practical activities;
- They must be active participants of the learning process;
- The students have to deal with authentic tasks;
- They must learn how to cooperate while working on tasks;
- The students must apply digital principles to accomplish the tasks [1].

For successful integration of CLIL technology, we consider the importance of following the basic rules of lesson planning within this technology:

- Check the authenticity of the planned task;
- Identify linguistic and content objectives included in the solution of each task;
- Create a sequence of activities within the task;
- Encourage the use of different contexts, registers.
- Check the variety of linguistic activities leading to the final solution of the task;
- Check whether the linguistic exercises are used to reinforce specific aspects that can be considered necessary;
- Ensure each learner plays interactive roles (among peers; with the teacher and with the rest of the class) during the process of implementing the task;
- ensure active teamwork during the learning process. [2]

3 RESULTS

For the successful integration of CLIL technology in the framework of teaching foreign language to archaeology students, it is necessary to analyze the scientific literature and define the basic concepts.

3.1 Literature review

3.1.1 The Notion of CLIL

CLIL technology involves the study of one more several subjects in a foreign language, the creation of a professionally oriented environment in foreign language classes and the inclusion of issues relevant to the major to the educational material. However, it is assumed that students initially do not speak foreign language at a professional level but study the language and the subject simultaneously.

There are the following features of the CLIL methodology:

Learning a foreign language by integrating the studied language into the content of the subject. For example, a simplified geography course in English or German;

CLIL can be used in the process of teaching any language for any age group and at any stage of education (from preschool to higher education);
CLIL promotes the development of metalinguistic, social, cultural and cognitive learning skills.

CLIL technology is based on four interrelated principles:

The subject-content aspect (Content) – the language is studied to obtain certain knowledge in a specific subject area, language skills are developed during the process;

The communicative aspect (Communication) – all four types of speech activity are developed in classes on CLIL technology in non-language majors, which contributes to the formation of an active communicative environment and the development of the conscious communication skill;

Cognitive-learning aspect (Cognition) – the integration of one or more foreign languages into a non-language major activates the cognitive activity of students and promotes the study of the subject from different perspectives;

Cultural aspect (Culture) – awareness of different cultures’ values plays a key role in the effective implementation of subject-language learning.

Due to the features and principles mentioned above, CLIL technology is considered as an innovative way to study several disciplines at the same time.

Researchers in the field of integrated learning identify the following models of CLIL technology implementation:

Model 1: Multilingual learning. A certain subject is taught in several foreign languages during different years of study. Upon completion of the multilingual training course, students acquire professional knowledge in several languages;

Model 2: additional training in non-language and linguistic major. This training model involves the study of a non-language subject in a foreign language. Upon completion of the course, students acquire foreign language skills to work in their major;

Model 3: Subject courses with additional language support. The curriculum is aimed at developing both professional and language skills. The training is conducted by subject teachers and language teaching specialists.

The choice of communication skills to work on during the learning process depends on the objectives of the curriculum and can be adjusted. CLIL technology provides the ability to select the language tools that are most effective for the implementation of the content part of the lessons.

Using CLIL technology, the main function of a teacher is to control the educational process and assist students, if necessary.

3.1.2 The notion of Digital Education

“Digital education” is a broad concept that currently has no strict definition and has different meanings. In the broadest sense, it is a type of education that involves the use of various digital technologies: computers, the Internet, electronic services and programs.

According to Jörn Lengsfeld, the concept of “digital education” also encompasses “all knowledge, skills and competencies related to digital information and communication technologies” [3].

In this paper, we will rely on the definition proposed by the European Commission in the Digital Education Action Plan: digital education is education that aims to use various digital technologies to improve the quality and efficiency of the educational process, on the one hand, and the development of digital competencies among students and teaching staff, on the other hand.

Digital competencies mean information and data literacy (digital literacy), communication and collaboration, digital content creation, safety, and problem solving. [5]

3.2 Digital Tools in a Content and Language Integrated Learning Context: Compilation of Museum Exhibit Cards

3.2.1 Introducing the Task

One of the examples CLIL technology usage in teaching English to archaeology students is to create museum exhibit cards for the English-language version of the websites of real museums.
The project on creating museum exhibit cards in English is aimed not only at developing language skills, but also mastering the subject content.

In the context of CLIL technology, this project has the following advantages:

1) Content:
   - Understanding some features of the future profession;

2) Communication:
   - Improving written communication skills,
   - Improving verbal communication skills,
   - Mastering language competence;

3) Cognition:
   - Development of interest towards the future profession,
   - Development of skills in collecting, analyzing and systematizing information,
   - The ability to come to conclusions and find solutions;

4) Culture:
   - Development of intercultural communication skills;

In the context of digital education, this task contributes to the development of the following skills among students:

- The ability to search, find and use information from authentic websites;
- The skill of using digital technologies.

3.2.2 Description of the Task

Target group: undergraduate students aged 18-22 years who receive education in the "Archeology" major. The level of English proficiency is B1: students are able to understand and create simple texts on everyday topics, describe experiences, impressions and events, justify their opinions and talk about plans.

Topic: development of museum exhibit cards in English

Goals:
- Learn specific professional vocabulary;
- Learn how to use websites in English to search and analyze information;
- Learn how to create a simple digital product;
- Present the result.

Planned time: 2 academic hours (90 minutes) to study new vocabulary, 2 academic hours (90 minutes) to present results, 1 week to compile museum exhibit cards.

Tasks of the teacher:
- Prepare tasks that contribute to the introduction and strengthening of new vocabulary;
- To help students understand the purpose and importance of a project assignment;
- To help students working with information sources;
- Place students into working groups;
- Inform about the rules and deadlines for the project work.

Materials:
- Website quizlet.com and worksheets for learning professional vocabulary;
- Websites of well-known museums as a source of information;
- A computer and a projector to present the results.
Planned result: cards of museum exhibits in English for English-language versions of local museum websites.

Presentation of the result: A PowerPoint presentation with the necessary audiovisual effects.

Evaluation of the result: exchange of opinions.

Lesson progress:

Vocabulary task: introduction of new vocabulary

The teacher divides the blackboard into three columns: pictures, English words, and translation. On the desk there are printed cards which the students are supposed to attach to the blackboard. When the table is completed, the teacher and the students check everything together and pronounce the words several times.

Recommended vocabulary: artifact, archaic, bola, the Bronze Age, Megalith, Mesolithic, methods of remains extraction, rock art, Neolithic, pinnacle, statue, Paleolithic, monument, pictography, scraper, stele, composite tools, pottery shards, chisel, excavation, sculpture.

Vocabulary task: strengthening a new vocabulary

To effectively strengthen new vocabulary, it is advisable to conduct an educational game called “Taboo”. The teacher places students into small groups of 3-4 people. Each student takes a card with a new word in turn. The goal of the game is to explain to the other team members the meaning of the word written on the card in English.

However, while explaining, the player should not pronounce forbidden “taboo” words. Forbidden words are also listed on the card.

Possible cards: artifact (forbidden words: human activity, tool, result); rock art (forbidden words: painted, cave, mammoth); sculpture (forbidden words: place, landmark, famous); antiquity (forbidden words: time period, ancient, Greece); excavations (forbidden words: shovel, research, excavated); stele (forbidden words: stone, ritual, pillar), etc.

The game “Taboo” is also possible for the distance learning format. In this case, cards with new vocabulary can be created on the quizlet.com website.

Creating your own cards with new words on the quizlet.com website can be used as a homework assignment. Students can work on the website quizlet.com independently or in small groups of 2-3 people.

Vocabulary task: Using new words in context

Students work on several texts with gaps. It is assumed that they have to fill in the gaps with the appropriate words. Texts from the websites of well-known museums can be used as authentic material.

Text example [6]:

Words used: sculpture, antiquity, ceramics, neoclassical, period, artifacts, statues, Neolithic, excavations.

The National Archaeological Museum is the largest museum in Greece and one of the most important in the world. Originally destined to receive all the 19th century __________ , mainly from Attica and other parts of the country, it gradually took the form of a central National Archaeological Museum and was enriched with finds from all parts of the Greek world. His rich collections, enumerating more than 11,000 exhibits, offer the visitor a panorama of ancient Greek culture from the prehistory to the late __________.

The museum is housed in the imposing __________ building, built at the end of the 19th century in designs by L. Lange and eventually formed by Ernst Ziller. Its exhibition grounds, dozens of halls on each floor, cover an area of 8,000 m². and houses the five major permanent collections: The Collection of Prehistoric Antiquities, which includes works of the great civilizations that developed in the Aegean from the 6th millennium to 1050 BC. (__________, Cycladic and Mycenaean) and finds from the prehistoric settlement of Thira. The Collection of Sculpture Works, presenting the evolution of ancient Greek __________ from the 7th century. B.C. until the 5th c. AD, through unique works of art. The Vase and Miniature Collection, which includes representative works of ancient Greek __________ from the 11th century. B.C. up to the Roman era, as well as the Stathatos Collection, a timeless collection of miniature __________ . The Collection of Metalworking Works with many unique original works, __________ , figurines and miniature crafts. Finally, the unique for Greece collection of Egyptian and Eastern Antiquities with works of art, dating from the pre-emptive __________ (5000 BC) to the times of the Roman conquest.
Development of museum exhibit cards: planning

Students study examples of museum exhibit cards and draw up a work plan:
- Brainstorming (gather ideas for upcoming project work),
- Defining the tasks priority (ranking tasks according to the degree of importance and urgency),
- Setting deadlines for completing the tasks.

Development of museum exhibit cards: division into teams.

The teacher divides students into groups of 3-4 people. Each group chooses a museum located in their region. Students should independently distribute the following tasks among the group members:
- The choice of a museum for whose exhibits cards in English will be created;
- Drawing up a list of exhibits for which cards with a description will be developed;
- Editing compiled cards.

Working on a checklist: teamwork.

During the week, students work in teams. They choose a local museum, make a list of exhibits, develop cards with a description and history of the exhibits in English and edit the completed cards.

If necessary, students can work with online dictionaries and use information from English-language versions of various museums websites.

Presentation of results.

Students present their work with the help of a PowerPoint presentation, using a projector, then share ideas and opinions.

4 CONCLUSIONS

Currently, the teaching of foreign languages should be aimed at training highly qualified specialists who are able to conduct professional activities in the language of international communication.

The implementation of CLIL technology using digital technologies in the training of archaeology students makes it possible to modernize the educational process and prepare future specialists for foreign language communication in the professional field.

The following results were achieved in this work:
- The features and advantages of CLIL technology in teaching English to students of non-language major were determined;
- Has been developed a model for the implementation of CLIL technology in teaching English to archaeology students;
- An approximate lesson plan aimed at developing professional communication skills in a foreign language was described;
- An example of students' project work within the framework of CLIL technology and digital education was given.

The plan presented in this document can be implemented by colleagues around the world.

REFERENCE LIST


