

ICT and English as a Foreign Language in the Higher Technical Education Course (IFTS) "Multimedia Production for the Cultural Heritage and Museums"

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Abstract

The teaching/learning process has been made easier by the Information and Communication Technology and the present paper focuses on how students of English as a foreign language in a higher technical education course in "Multimedia production for the cultural heritage and museums" (organized by the Industrial Technical Institute E. Medi, S. Giorgio a Cremano, Naples and University Federico II, Naples) could fully explore the possibilities of autonomous learning through the Internet and through their study of English. The primary aim of our paper is to lay emphasis on the need for an effective use of the ICT by both teachers and learners of foreign languages, using English as a case study.

The study focused on the innovation and change about the teaching and learning process through the use of digital devices. Students were actively engaged in their learning and could work on meaningful, real cultural heritage and museums multimedia projects in which they applied their learning. In order to produce multimedia products in the field of the cultural heritage, the students used their basic art and ICT knowledge and increased their English through classroom training.

Results indicated that Innovative ICT-based activities may turn a flipped classroom experience into a new model of learning through innovative ICT practices. Students produced very interesting multimedia products and discussed them in English, showing their results to the evaluation committee so that each student had the opportunity to analyze and evaluate his/her own work and the tools used to create it as well as to evaluate his /her level of learning.

In conclusion, the use of Information and Communications Technology (ICT) for language learning is still at the forefront of best practices as educators strive to build a culture that fosters innovation and revolutionizes the classroom experience. School teachers are recognized for their ability to showcase expanded and creative technology building momentum to support students in using new technology. Both students and educators consider innovative ICT practices as a crucial way to change education successfully and represent their goals in the evolving, expanding global society.

1. Introduction

The present work describes the context, design and ICT-related methodology, as well as the learning outcomes of a 30-hour learning module of English as a Foreign Language (EFL). The module is part of a post-secondary technical training course (*IFTS*). Every *IFTS* course consists of a series of modules for a total of 800 hours. IFTS courses are addressed to small groups of unemployed young people with a high school diploma or even, in some cases, a lower qualification. Participants are required to attend all course modules and pass tests for each module [1]. After completing the course successfully, they are awarded the qualification of *Specialized Technician*, equivalent to level 4 of the European Qualifications Framework (EQF) [2].

The course titled "Multimedia Production for the Cultural Heritage and Museums" (henceforth MPCHM) was organized by the *Industrial Technical Institute "E. Medi"* – a secondary school in the province of Naples, Campania region, Southern Italy – in cooperation with the University of Naples "Federico II". Successful participants were meant to become expert technicians in art and ICT products in order to be able to analyze ways to implement innovative products and processes of communication – such as web pages and applications for smart phones – for the promotion of museums, archaeological sites, sightseeing tours, especially within the territory where they work.

The participants were twenty young people, aged between 18 and 34, searching for first employment opportunities, either in the ICT- or art-related fields. As to their level of education, they all have a high school diploma: one third had an academic degree and previous work experience; three of them stopped studying immediately after taking their diplomas; and the remaining ones were undergraduate university students. Finally, with regard to the distance from home, it can be said that it varied significantly among participants: almost half of them travelled for longer than thirty or forty minutes to



2. Syllabus design and methodology

In the above-described framework, English was learnt as a language for a special purpose (*LSP*), which Swales defines as "the area of inquiry and practice in the development of language programs for people who need a language to meet a predictable range of communicative needs" [3]. In the MPCHM course, the methodology underlying the English module program was based on the core principles of English for Specific Purposes (*ESP*) [4], identified by van Naerssen, Brinton and Kuzetnova, i.e. specific needs, specificity, relevance [5]. The module, indeed, was designed to meet the specific needs of the learners, who are required to use the language as a tool at work, which means to be able to communicate in a specialised technical/vocational context on topic relevant to their aims by using specific lexis, discourse procedures, and text genres.

Such needs were specifically identified through a needs analysis test – inquiring about their learning aims, competences and preferences – and subsequently prioritised so as to define the main objectives of the module, bearing in mind the time constraints (the English module time amounted to 30 hours). With regards to their initial competence in English, they can be divided into three groups: six students have an A2 level of English, ten have a B1, and only four have a B2.

The aims were expressed in terms of communicative language activities, which refer to what learners are "able to do with the language" or "can do" strategies [6], as summarised in the table below.

At the end of the module, the students were supposed to be able to:		
UNDERSTANDIN	Listening	Understand oral texts on topics related to the domain of cultural heritage and/or museums; Understand the main points of a standard speech on work, leisure, University, etc;
	Reading	Read written texts, including the structured ones, on topics related to the professional domain of ICT; Understand written texts, including the structured ones, on topics related to the domain of cultural heritage and museums;
NG	Spoken Interaction	Interact orally quite fluently and accurately using the specific vocabulary of art; Use the English language to interact in a job interview in L2;
	Spoken Production	Make oral descriptions and presentations on topics related to the field of cultural heritage and museums; Give basic instructions about the functioning of software used at work; Describe places, people, experiences, events, hopes, and ambitions;
WRITING	Writing	Produce descriptions related to the domain of cultural heritage and museums, by retrieving information from different sources and using specific vocabulary; Write simple connected pieces of writing relating to topics in areas of personal interest or related to his/her education and work experience.

Accordingly, the scope of the language on which to focus on was narrowed down to the specific fields of art and ICT, so that the module syllabus included only the functions and forms of General English that are essential to the specialised communication. As Hyland points out, GE skills are not to be considered as a pre-requisite for ESP, because learners tend to acquire features of the language as they need them, nor is a full control of the so-called "common core" necessary to participate in ESP activities [7]. Having been identified and selected, the syllabus was organised into three units, i.e. English for IT (10 hours), English for Art (15 hours), and English for Work (5 hours). The first one focused on the language dealing with specific technical ICT contents, including the Internet connection and services, the World Wide Web, webpages terms and acronyms, computer systems, graphics software, pixel-based software and vector-based software, and CAD software. The second phase was devoted to the language of Art, with special attention paid to archaeology, architecture, and painting, since the cultural heritage of the Campania region ranges from the major archaeological sites of Greek Paestum, and Roman Pompeii and Herculaneum, to beautiful royal palaces in Naples and Caserta, as well as notable paintings like those by Caravaggio. The contents of the third and last unit related to the



In the light of the learners' needs, learning aims, syllabus contents, as well as the necessity to meet the time constraints, the "flipped classroom" [8] approach was adopted. The underlying principle of the "inverted classroom", or "flipped classroom", is that work traditionally done in class is performed at home, whereas practical activities traditionally done at home are undertaken in class with the help of the teacher, who acts as an instructor/facilitator. In this study case, the teachers built a small specialized multimedia corpus [9] by selecting from web resources relevant learning objects like presentations, videos, images, audio files, and articles included in brochures, so as to provide the learners with accurate, specific language patterns, vocabulary and text types, to be exploited partly during in-class activities and partly outside the classroom. The students were also given basic instructions to use a corpus analysis toolkit – the *AntConc* analytical software, Version 3.4.3 for Windows [10] – to retrieve key information about keywords, concordances and collocations which are commonly found in the special language of art.

Based on these materials, the students reflected upon what they had learnt, selected and organized the language suitable to their learning needs. Back to class, learners were provided with further explanations on the assigned topics and encouraged to work in groups to prepare the linguistic contents of multimedia products – such as web pages or audio/video presentations – that may promote some of the several cultural sites in the Campania region. Each group described some of the most famous cultural sites in Campania such as the town of Naples, the Vesuvius, the islands of the Gulf of Naples and the Amalfi Coast, the above-mentioned archaeological sites, and Caravaggio paintings.

3. Discussion

The flipped classroom strategy – which is based on the extended use of the ICT – proved effective throughout the course in that the students were actively engaged in both in-class and at-home activities. By exploiting the *ad-hoc* compiled corpus, they worked independently – albeit supervised by the teachers/facilitators – on a wide range of authentic materials relating to cultural heritage and museums to implement, by working in small groups, multimedia products involving, on one hand, their basic art and ICT knowledge, and, on the other, their competence in the use of specific patterns and vocabulary of English for art. Compared to traditional settings, the flipped classroom also provided more time for students to carry out in-class activities and allowed teachers to devote more time to feedback to both groups and individuals. Additionally, this "inverted model" made it possible for teachers to reduce their talking time, thus increasing the Student Talking Time.

Technology also contributed to make the students autonomous and aware of their learning process as they could make decisions about the selection and use of their digital resources in order to achieve their learning goals and accomplish the task to produce art-related contents in English for webpages and apps. The students were involved in the continuous assessment of the learning process both during the lessons and at the end of the course: they were asked to identify particular elements of the language learning process such as team roles and goal setting, formative assessment, as well as the evaluation process. Each group evaluated their peers' products in English, together with the teachers. In addition, each learner had the opportunity to analyze and evaluate his/her own work and language learning achievements.

In view of the expected learning outcomes, the final test results showed that all students had made significant progress in the receptive skills, with better results achieved in the reading competence compared to listening. The students also gained better command of the specialized written and oral production skills, whereas they appeared still quite weak at spoken interaction, probably because the students often used L1 during group activities. It can be added that, despite the fact that each group consisted of students with different entry levels, the students with lower competences in General English achieved lower results. Although these data seem to controvert Hyland's remarks on the need for specificity rather than for GE skills, it must be noticed that those who performed less well had clearly showed lower commitment to their home assignments.

4. Conclusion

This study case indicates that the use of Information and Communications Technology in an ESP flipped classroom for non-academic tertiary students may affect positively the students' learning outcomes. The ICT-based inverted setting contributes not only to raise the motivation to learn, but also to make the learning process as autonomous and independent as possible, which is crucial in developing the necessary life-long learning skills to keep the pace with the ever-changing global world



of work. Finally, it enables both learners and teachers to devote more time to in-class activities, thus increasing the amount of time devoted to the students to talk and allowing more time to feedback.

References

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