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*I. Horbachevsky Ternopil National Medical University***COMPUTER-ORIENTED METHODS OF TEACHING LATIN LANGUAGE****Р. Б. Коцюба***Тернопільський національний медичний університет імені І. Я. Горбачевського МОЗ України***КОМП'ЮТЕРНО ОРІЄНТОВАНІ МЕТОДИ ВИВЧЕННЯ  
ЛАТИНСЬКОЇ МОВИ**

**Abstract.** Education has also been a field in which technology has found a fertile ground to grow. Technology has made education much easier for both teachers and learners and provided a more autonomous and amusing ambience for language learners. This paper demonstrates the relation between Computer Assisted Language Learning tools and language acquisition and learning. It also tries to incorporate technological tools into language teaching process via designing a lesson in which EFL language learners are encouraged to make use of technological tools and Web in particular in order to perform their linguistic tasks and exercises. The article is devoted to the analysis of modern innovative methods CALL – the key to improving the quality of Latin Language teaching in higher educational universities. The article highlights the actual issue of using innovative approaches and interactive technologies of teaching foreign language Latin Language in universities. The article tackles opportunities and advantages of innovative pedagogical methods, their introduction into educational process and practical realization at Latin Language classes. The special emphasis is laid on the information technologies and their role in the educational process. This article deals with the importance of innovative methods and interactive technologies Computer Assisted Language and also focuses on the basic theoretical analysis of the Ukrainian and foreign research works and own observations. The article deals with the methods raising student's motivation in Latin Language studying, which consists of wishes to study, to develop grammar and communication skills, to be successful in his or her activity, to be sure in future career. In order to reach this goal the teacher must use innovative methods combining communicative and cognitive aim.

**Key words:** innovative technologies and methods of education CALL; Latin; interactive methods; informative and communicative technologies.

**Анотація.** Освіта є сферою, у якій технології знайшли сприятливий ґрунт для розвитку. Технології значно полегшили освіту як для викладачів, так і для тих, хто навчається, і забезпечили автономнішу і приємнішу атмосферу для тих, хто вивчає мову зокрема. Ця стаття демонструє зв'язок між інструментами комп'ютерного навчання мови та опануванням і вивченням її. Описано технологічні процеси у процесі викладання мови, заохочуючи тих, хто вивчає мову, використовувати комп'ютерно орієнтовані інструменти та мережу «Інтернет» для виконання своїх комунікативних та граматичних завдань. У статті висвітлено також важливість використання інтерактивних технологій та інноваційних методів CALL у процесі викладання латинської мови у ЗВО. Спираючись на дослідження наукової літератури та власні спостереження й досвід, здійснено комплексний аналіз новітніх методик як основи підвищення якості вивчення латинської у закладах вищої освіти. Розглянуто роль і значення інформаційних технологій CALL, а також обґрунтовано ефективність і доцільність впровадження їх у навчальний процес та практичну реалізацію на заняттях із латинської мови. Розглянуто надзвичайно актуальне питання вибору найефективніших комп'ютерно орієнтованих методів навчання, які можуть забезпечити мотивацію вивчення латинської мови, підвищити активність студентів, покращити їх комунікативні та граматичні навички і визначити її направленість. Це питання є актуальним на будь-якому етапі вивчення латинської мови. Доведено, що використання інформаційно-комунікаційних технологій CALL сприяє розвитку у студентів навичок самостійної і групової роботи над навчальним матеріалом та з першоджерелами, презентації відеопроєктів, ефективного аудіювання тощо. При цьому, використовуючи новітні методи навчання, викладач поєднує як комунікативні, так і пізнавальні цілі.

**Ключові слова:** інноваційні технології та методи CALL; латинська мова; інтерактивні методи; інформаційно-комунікаційні технології.

**Introduction.** At the end of the 20th century, the computer-mediated communication and the Internet have reshaped the use of computers for language learning. Computers are no longer a tool for only informa-

tion processing and display but also a tool for information processing and communication.

Today, there is huge amount of foreign language materials next to the traditional grammar book and dictionary. These materials include-course books, work-

books, programmed courses, cue cards, charts, newspapers, posters, picture cards, and cut outs, and so on. These are supplemented by other media, such as radio, television, slides, video tapes, games, toys, realia, as well as computers, multi media and the Internet.

**The aim** –to improve the study of Latin Language using computer-oriented technology CALL.

**Theoretical framework.** CALL, an abbreviation for Computer Assisted Language Learning, is an interactive method of instruction that helps learners achieve their goals of learning, at their own pace and ability. In this method, computer technology is used in teaching/learning procedures at all stages such as presentation, practice and feedback.

Following an interactionist approach to learning, modern languages CALL tends to emphasize social interaction between the user and others as they negotiate mutual comprehension of their message meaning. Even though computers are not ‘others’ in the human sense, the interactions between students and the computer are typical of interactions in real life. Latin teachers, however, may have other aims in the teaching of the language, which is much less concerned with social interaction – with humans or computers. In order, therefore, to distinguish it from modern foreign languages CALL, Steven Hunt proposed the name AL- CALL (Ancient Languages CALL), because, although some of the practices may be the same, the ends to which it is put mostly differ (that is, the first language is routinely used in the classroom, and interactive communication in Latin is not the main aim) In the early years of CALL, educational technology was seen as a means of improving efficiency: drill and practice programmes could be faster, repeated as often as required, and taken outside the classroom, thereby freeing up time in the classroom for more meaningful learning activities; databases and the internet meant that texts and images could be easily accessed, manipulated, stored and supplied to students [10]. Warscahuer refers to this as behaviouristic CALL based on the notion of computer as tutor [21]. Early users of AL-CALL similarly saw the potential for turning standard classroom fare (and, perhaps, the more tedious elements of it) into something the computer took care of: the focus was on testing grammar and vocabulary knowledge [6, 11]. The CSCP digital resources, developed from 1999, were a game-changer for Latin teaching in the UK, and opened up a range of different activities for the teacher to deploy not just for testing but also for learning. The widespread deployment of computers, data projectors and interactive whiteboards in schools in the UK at the beginning of the twenty-first century provided further

impetus to experiment in the classroom with novel and innovative teaching methods. AL-CALL has offered a challenge to teachers: to adapt their old ways of working or to replace them entirely.

Past case studies have indicated the value of technology-enhanced collaborative learning in Latin: Hunt described the collaborative annotation of projected text for teaching literature; Smith used a digital space for encouraging students to discuss Latin literature at GCSE [18]; Paterson used the interactive whiteboard as a place of common reference for discussions about Cicero, saved for subsequent reworking [16]. Schwamm has described how his online learning community co-creates Latin stories, how it includes multiple learners’ personal interests, and how it enables learners to develop Latin language skills through peer-review and rewriting. In the pandemic, the common use of breakout rooms and chat functions in online teaching has alerted teachers to the need to provide opportunities for students even in face-to-face teaching to work together without direct teacher instruction, and to encourage every voice to be heard. Some of these practices which have taken place in online teaching are sure to strengthen face- to-face classroom teaching [17].

Computer-assisted flipped learning allows teachers to provide information for students to process prior to class, thereby making class time more effective for higher level planning, discussions, drafting and redrafting activities. Some studies have shown the success of this approach for classical studies in the university level classroom and at the school level [1, 2, 5, 15]. In the past, there have been challenges with this model of teaching, as students have not always primed themselves with the information prior to class, or because they have misunderstood it and the teacher needed to reteach the material. Nevertheless, evidence drawn from threads on social media suggest that Latin teachers made much use of the flipped classroom model in pandemic-inspired asynchronous teaching. Baddeley noted that students are sufficiently motivated to watch a pre-lesson video on an historical topic, which freed up lesson time to develop and elaborate their understanding through higher-order thinking and task-setting [2]. A further advantage of pre-recorded materials is that students may review them as many times as they wish, before, during and after the lesson. In the pandemic many teachers have experimented with screencasting and simple animations to record presentation resources for students. The increasing use of recorded audiovisual materials at home and live materials in school blur the boundaries of where learning takes place, and

course designers need to consider how to optimize existing resources for multiple technologies as well as develop new ones which take advantage of them.

Communicative CALL corresponded to cognitive theories which stressed that learning was a process of discovery, expression and development. Under the influence of Communicative Language Teaching defendants of communicative CALL argued that computer based activities should focus more on using forms. Software developed in this period included text reconstruction program and simulations. In communicative CALL, the focus was not so much on what students did with the computer, but rather what they did with each other while working at the computer.

In integrative CALL students are enabled to use a variety of technological tools as an ongoing process of language learning and use rather than visiting the computer lab once a week basis for isolated exercises.

There are main ways in which computers are useful in helping language learners develop reading skills:

1) incidental reading – CALL programs, whether oriented towards reading or not, involve the learner in reading text for the successful completion of the activity;

2) reading comprehension – traditional question and answer CALL programs are used for reading comprehension as well as grammar and vocabulary development;

3) text manipulation – there are a number of ways in which computers can manipulate continuous text which involve the learner in close study of the content and structure of the text.

Listening Call: one of the best ways of giving practice in listening is to use a multiple-choice or fill-in program in conjunction with a cassette recorder. The computer can let the learner hear the relevant part of the tape again. If a separate cassette recorder is used, the error message can give the learner appropriate counter numbers. Another simple technique is to use a tape with a test-reconstruction program which enables learners to reconstruct a summary of a recorded anecdote on screen by the help of the tape.

According to Higgins pronunciation work in particular has benefited from CALL. Most pronunciation programs now incorporate some sort of voice recording and playback to let students compare their recording with a model. Most computer programs stimulate some discussion among group of learners even if oral practice is not the main purpose of the activity. Higgins suggests that the computer's main value is as an environment which allows language experiments to be carried out [8].

The *Cambridge Latin Course* and *Suburani* both have extensive interactive resources aligned with the coursebook material, of considerable sophistication, available online, for free or for subscription. These include text analysers, interactive dictionaries, audio dictionaries, lists of derivations, vocabulary testers, drag-and-drop exercises, digital cloze exercises, audio and video files, teacher guides and hyperlinks to outside websites and resources. Several other coursebooks have accompanying websites of materials, such as downloadable worksheets. While course leaders at the university level have experienced challenges in tailoring their own materials to online learning platforms [4, 14], school teachers have been able to access their usual courses already online, and have for the most part only had to refine their pedagogical practices rather than create new resources. Numerous enterprising teachers have made full use of YouTube, for example, and devoted considerable time and effort in building collections of videos to help students with coursebook material, grammar and set text literature. A number of websites also provide exchanges for teachers to share such resources. The coursebooks often also have thriving online affinity groups who share resources and tips and ask questions. Crowdsourcing of materials not only saves teachers time, but also helps to develop a community understanding of the coursebook's pedagogical approach which goes beyond the teachers' notes. There may, however, be issues of curatorship and quality-control and there is also the risk that crowd-sourced materials might not align with the pedagogical approaches of the coursebooks themselves, despite receiving apparent authentication by inclusion on the website.

The prevalence of online translations of commonly used texts from Latin course books has spread some alarm among teachers: students routinely copy and paste the 'answers' or use *Google Translate* (mostly unsuccessfully). The effect of this is that many teachers are reconsidering the assignment of written translations for students to complete at home. In the search for 'un-cheatable' online assignments it is easy for teachers to replicate traditional testing for recall and retrieval of vocabulary and grammar: however, while a convenient tried-and-tested approach has much to commend it, there is a danger that teaching practices might stagnate unless teachers utilize the special affordances of digital learning to create better and more sophisticated ways of assessing students' understanding. The authors of *Suburani* have developed a tracking tool which provides instant feedback to students on assessments and reports

to the teacher's mark book. Teachers have experimented with apps, such as Peardeck and PowerPoint, as a means of presenting information and tracking students' progress by their annotations of text and images. However, examples seen online by me suggest that the limited amount of information which can be conveyed and assessed by this means may offer only a small indication of a student's progress; worse, the atomisation of a lengthy text into small chunks in order to fit on the screen goes against the principles established earlier in this book for developing reading fluency which depend on whole texts rather than short sentences, phrases or words.

Walden's experiences as a distance-learning teacher of Latin demonstrate the importance of the teacher's (virtual) presence – a source of familiarity and comfort for most students [19]. Many teachers who have used online conferencing apps like Zoom or Microsoft Teams have established classroom-style 'routines' to support students: greetings, enquiries after the students' wellbeing, the usual jokes and repartee of the classroom, and a final wave goodbye at the end of the lesson and the feeling is reciprocated: students bring their pets to show, introduce their favourite video links, and showcase what they have found on the internet that is relevant (or sometimes not so!). Teachers have started to utilize the various affordances of PowerPoint, for example, to include their own voiceovers, to record themselves reading Latin or English translations, and to provide audio instructions as well as written ones. The increasing use of audio as an accompaniment to written texts (in English and Latin) and for providing instructions on Power Point presentations could provide a breakthrough for improving the comprehension for all students, not just those who struggle to read.

Information technology provides opportunities to teach and learn in different, potentially better ways. The surge in the use of the interactive whiteboard seems to have stalled: I note that while the projection of text and its annotation are common practice in the Latin classroom, other functionalities are more rarely used [9]. While there is evidence that the student making choices and selecting information develops important skills for learning, the use of technology here delivers little more than a more efficient process of transcription. Online vocabulary testers have proved popular and effective and are widely used; however, the immediate classroom appeal of quiz apps like Kahoot! and Quizlet has to be balanced against the potential superficiality of learning that takes place. A small-scale study of the spaced-repetition vocabulary

tester Memrise showed its effectiveness for Latin vocabulary learning [20]. The Padlet app and handheld voting devices have been shown to be effective for student engagement and participation both online and in the classroom [3, 13]. Programs such as Socrative, in which student responses are collated and compared on screen, offer good opportunities for teacher-guided peer review which could not be easily achieved by traditional means [7]. Many teachers still teach dictionary skills, and yet it could be said that learning to use online analysis tools effectively might be a better option: many teachers use such tools themselves to prepare texts in advance of teaching them. Laufer and Hill's study of MFL students' use of online dictionaries for reading comprehension showed their use differed according to a number of factors, including training transfer, but that overall multiple dictionary entries (including first language, morphological explanations and audio) seemed to benefit students' incidental vocabulary learning for recognition purposes [12].

**Conclusions and Prospects for Research.** The Internet allows for a great number of opportunities to communicate in the target language, access textual and multimedia information, and publish for a global audience. Today, the A level and AP Latin exams, the gatekeepers of entry to traditional Classics courses at the university level, still expect a similar training of many years in the classroom – one that is getting harder to achieve for students in most of the existing schools which have the capability to offer it, and almost impossible for those in schools which have no track record, limited timetable and non-specialist teachers. Many of the commonly used coursebooks provide the means for students to have a reasonable chance at passing through the gateway, focusing on just the right vocabulary and just the right syntax to enable the student to squeeze through to the other side. They innocently suppose that by providing neat sets of resources and promoting the corresponding pedagogies, they will provide access to Classics for any who start it. If teachers want Latin teaching to grow – and the only area where it can grow is in the state-maintained sector – they need to find more ways to engage students and help them realize success. For example, teaching does not have to be slavishly following a coursebook from beginning to end. Technology will improve the coursebook into something more like a course programme which draws on the affordances of digital technology to provide students with a more rounded and holistic approach to learning the language. There will always be need of a teacher.



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