

SINTEZA 2023 INTERNATIONAL SCIENTIFIC CONFERENCE ON INFORMATION TECHNOLOGY, COMPUTER SCIENCE, AND DATA SCIENCE

INFORMATION TECHNOLOGY IN TEACHING FOREIGN LANGUAGES SESSION

# USING MOODLE IN EFL TEACHING IN ITALY: THE CASE OF EVERYWHERE

Michael Boyd<sup>1, 2</sup>, Fabrizio Gallai<sup>1\*</sup>

<sup>1</sup>UNINT, Via delle Sette Chiese, Roma, Italy

<sup>2</sup>Università degli studi di Roma Tre, Roma, Italy

### Abstract:

Nowadays, higher education institutions are faced with the complex challenge of serving increased enrollment levels with tighter budgets. This has prompted universities around the world to explore new approaches, including the use of Learning Management Systems (LMS) - such as Moodle - for delivering courses to help extend teaching and learning beyond the classroom. The implementation of these systems was also spearheaded by the forced adoption of online tools during the Covid-19 pandemic.

This paper investigates UNINT (Università degli Studi Internazionali di Roma) educator and learner experiences in using a modified version of Moodle - called Everywhere - as an online learning management system, which was created to facilitate learning in the context of English as a foreign language (EFL). In particular, it examines issues about adopting Moodle as an online learning management system and implementing blended learning in EFL/ESP education.

The incorporation of Moodle into Everywhere learning platform has led to the development of an interactive platform for both students and teachers. The authors discuss their own course page on Everywhere, which is seen as a boon for the development of an interactive learning platform, but it is highlighted the course might become even more blended with further implementation of the plethora of resources and activities available to course developers.

### Keywords:

Moodle, Italian higher education, English as a foreign language (EFL), Blended learning, English for specific purposes (ESP).

### INTRODUCTION

The paradigm of education has changed around the globe due to the combination of the recent development of smart technology with their forced adoption during the Covid-19 pandemic. Various web-based course management systems or instructional approaches have been integrated into classroom learning and teaching in order to inspire the study experience of a digital-native, young generation.

Moodle is a web-based *learning management system* (LMS) with pedagogical approaches based on constructivism, which emphasizes the roles of shared learning communities, learner-centeredness, and social interaction in the learning context.

**Correspondence**: Fabrizio Gallai

e-mail: fabrizio.gallai@unint.eu It allows educators to create and manage online courses and has become an essential tool for many educational institutions as it provides a flexible and customizable platform for delivering course content and facilitating communication between students and teachers [1].

In particular, this LMS is aimed to promote enhanced learning in higher education, and provides great opportunities for organizing the educational process and is welltested in practice [2], and can be used to improve graduate and post-graduate students' learning. Susana et al. [3] state that Moodle extensively enables this type of learning because of these three characteristics: a. interaction, enhancing student-student discussions; b. usability (as it has a variety of useful options for students such as easy installation, customization of the options, easiness of navigation; etc.); and c. social presence, i.e., promoting a sense of community in online courses. However, a systematic review on trends in using Moodle for teaching and learning found that Moodle is mainly used within University STEM disciplines and effectively improves student performance, satisfaction, and engagement [4]. Scholars also found that Moodle is increasingly being used as a platform for adaptive and collaborative learning and used to improve online assessments.

In conclusion, the use of Moodle in higher education is developing rapidly to address academic integrity, ethics, and security issues to enhance speed and navigation, and incorporate artificial intelligence. Technological factors, social factors, human factors, and reinforcement factors affect the adoption and use of the Moodle platform [5]. To date, the success of this virtual platform among the university community has been mainly based on offering a permanent repository of contents, units, assignments, and essays that can be shared at any time [6]. However, it is still unclear to what extent the use of Moodle allows students and teachers to build collaborative learning, in what is the ultimate goal of educational research.

### 2. USE OF MOODLE FOR TEACHING ENGLISH AS A FOREIGN LANGUAGE (EFL)

Moodle naturally lends itself to the teaching of languages, both with its collaborative activities such as Forum, Chat or Wiki and, for those with the time and aptitude for DIY, suggestions include a number of plugins such as Hot Pot quizzes (http://hotpot.uvic.ca), audio and video [7], and, more recently HP5 (HTML5 Package, https://h5p.com). The latter can be accessed through the content bank on Moodle (provided the site administrator enables the HP5 library), and this can be used for seamless creation of responsive content interactive activities, which, at the moment, include over 50 content types. This plugin makes it much easier for non-expert users to create modern-looking interactive content. Many of the HP5 resources can also be repurposed in four of the standard Moodle question types that allow educators to develop more interactive quiz/ test questions. Not surprisingly, most HP5 can easily be incorporated into the foreign-language classroom to enhance learning and foster a student-centered learning environment.

### 2.1. MOODLE AND FLIPPED LEARNING

Flipped learning has been introduced as an effective instructional method which can supplement conventional teacher-centered instruction and help to promote learner-centered learning in the classroom. Jeong [8] argues that Moodle can be used to enrich flipped learning for EFL education. Along with the use of Moodle as the learning management system, adopting flipped learning as an effective instructional strategy can exploit the full potential of the constructivist paradigm.

### 2.2. USING MOODLE FOR BLENDED LEARNING

Blended learning is possible in modern era using information communication technology (ICT) based learning management tools. It has proven to be a successful approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods [9], [10] paper describes why blended learning is so significant in higher education. In particular, scholars compare Moodle with other open-source learning management systems such as ATutor, Eliademy and Forma LMS, and a case study of Moodle that demonstrate how it is an effective in blended learning in higher education.

Moodle can specifically be used for blended learning in teaching English as a foreign language (EFL) and English for special purposes (ESP). When teaching EFL and ESP using Moodle for Blended Learning, teachers can pre-teach given lexical items (using Flashcards and other similar activities, as we shall see below in 3.2), present content that introduces relevant and authentic situations (through other activities such as Wiki, Chat, Forum, etc.) and engage pupils so that they participate actively.

## 3. CASE STUDY: EVERYWHERE LEARNING PLATFORM AT UNINT

As a direct consequence of the COVID-19 pandemic, UNINT University (based in Rome, Italy) was fast to adopt new technologies to aid both educators and students. Since online teaching in Italy was widely adopted well into the 2021-22 academic year, universities were forced to find suitable solutions for online classrooms in a very short time. As a result of these rapid transformations, UNINT built and implemented its own platform, *Everywhere* (https://everywhere.unint.eu), based on a modified version of Moodle (currently Version 3.11.3, Build 20210913) with the integration of Zoom for streaming and video collaboration. The theme Herald Boost (v6.0, https://elearning.3rdwavemedia.com/themes/ moodle-theme-herald-boost/) was adopted for the specific needs of the university.

As we can see in Figure 1, the platform was developed with both learning and collaboration in mind which allows both learners and educators to access learning content wherever they want in full security, attend graduations sessions, and follow live lessons:



Figure 1 - UNINT Everywhere platform.

The platform is now an integral part of the course structure at the university and many students continue to follow courses online. In the next sections, the Everywhere platform will be introduced (cf. 3.1), and a case study of its implementation for an MA-level ESP course described (cf. 3.2). This section will end with final remarks on blended learning at UNINT (cf. 3.3).

### 3.1. THE PLATFORM

Once authenticated and logged in, users can access their courses and find information about both the technologies adopted on the platform and information about the university and their faculty, which are all in one place. While much of the contents are available only to university staff and registered students, there are various forms of temporary access to allow users outside the organization to access certain content. When developing their online platform, IT experts at the UNINT chose Moodle for the obvious reasons of it being an open-sourced, and thus easily adaptable for the specific needs of this university, and it is widely used at other learning institutions throughout Italy and the rest of the world. They main objective was to create a single space where both students and teachers could continue to interact during the pandemic (when F2F contact was impossible) and later for hybrid learning environments. In fact, at the time of writing (May 2023), UNINT students can still follow all their courses both online and in person. Another important consideration was ease of use for the teaching staff, especially at the time of the pandemic when educators were faced with so many different online tools at the same time, with little time to study them. As soon as the platform was activated a number of online seminars were organized to illustrate its main functions.

Integration with Zoom is a key feature of Everywhere. Initially, the open-source virtual classroom Big Blue Button (https://bigbluebutton.org) was used but according to IT staff at the UNINT there were too many problems with connection, number limits and quality to make it a viable alternative for the university. Since the introduction of Zoom on the platform such problems are much less common and the integration of the Zoom meeting plugin on Moodle is completely seamless. Another factor that led to the choice of this software over the previous one is the possibility of enabling language interpretation, a feature that is widely adopted at the UNINT for interpreter training through the creation of virtual interpreting booths. While obviously the use of Zoom incurs payment of an Education license fee, the many positive aspects of this application clearly outweigh the negative ones. Currently, educators can host meetings with up to 300 participants and have access to unlimited editable whiteboards. Furthermore, students can create meetings with their peers with a 40-minute time limit.

On their dashboard both learners and educators can easily access their courses and can find links to other university services and events, such as graduations, conferences and seminars. From there access to course content is the matter of a simple click of the mouse. We shall see in the next session how this is done in an actual course.

### 3.2. THE COURSE AND ITS IMPLEMENTATION ON EVERYWHERE

We will now describe in detail the adoption and implementation of Everywhere for the English Language and Linguistics course, which is obligatory for all firstyear MA-level English language students (in two separate degree courses – one, LM94, for Interpreting and Translation Studies and the other, LM37, for future language teachers). The main theoretical focus of the course is applied (Critical) Discourse Analysis for interpreters and translators with a focus on media, political and legal discourses [12], [13]. For the sake of brevity, in this description we will be focusing only on the latter. page in Figures 2 and 3. The students click on the course name on their personal dashboards and find sections for Course updates (a Forum activity) from three course lecturers, more specific course information (Label), Zoom lesson links (in the Lessons section). Scrolling further down the course page there are other sections: Teaching Materials (which include folders, web-page links, activity chooser for quiz sign-up and other activities), Exams (not shown), and Online Activities (Figure 3). It should be noted that the pre-defined names of the individual sections are in Italian and it is up to the course teacher(s) to change them. In the current example, for obvious reasons, we have decided to change to names to English in so far as possible.

We will now briefly discuss a few of the activities located in the Online Activities section of the course page (Figure 3). This section includes a collaborative Glossary about institutional and legal discourse as well as a number of HP5 activities for individual and group practice. Due to the peculiarities of legal English students are encouraged to collaborate on the creation of the course glossary. Students can easily add glossary entries following the example given in the directions, and collaboration is enhanced through the use of the Comment feature which has been enabled.

Let us begin by looking at the set-up of the course	

= Inglish juni •	Lessons	
UNINT	Control - Andre Strategy (Full Kap)     Control - Andre Strategy (Full Calce)	
LINGUA E LINGUISTICA INGLESE @ Darthard / My more / 10000,2025	Control - Harts Heading Photos Benetity Teaching Materialis	
Surve aphilite (Rayl)		
<ul> <li>Course-optimise (function)</li> <li>Course-optimise (function)</li> </ul>	New yes can find the last is the full value of Queentine Statistics Rose Region Residential the Art of Mar with the second statistic of the second statistics of the Statistics Residential Residentia Residential Residential Residential Resi	
Lingua e Linguistica Inglese LM94/LM37 (l'anno)	C April America Section and	Water date

Figure 2 - Everywhere course page for *Lingua e linguistica inglese*.

81	effusional and legal designets glossary
	It is glossary please add any new works with their definitions and inansiations here. Feel here to add any examples of use that you find throughout the course.
U	ion a capital latter at the leagnering of each entry
	you also word to provide a translation into Railan use italics for the Railan word()).
1	bu are allocities to edit any of the entries that have already been added.
	amontog Sac The Grown Count Part I
	amoning 3to: The Orseen-Count Part 8
	anaring 5: Differences between out and otiminal cases.

Figure 3 - Online Activities.



Figure 4 - HP5 Flashcards activity for legal English.

As far as the HP5 activities are concerned in the Online Activities section, the authors have made ample use of the Flashcards, Complex Fill in the Blanks<sup>1</sup> activity, and Drag and Drop activities, which appeared particularly suitable for the introduction of complex legal and institutional lexical structures and themes. Other activities such as Question Set will be incorporated later for revision purposes.

In Figure 4 we can see an example of a Flashcards activity. The focus is legal professions and students are encouraged to review complex legal lexical structures in a straightforward manner. We should recall that since HP5 activities are mobile friendly, so learners can review their vocabulary flashcards on their mobile devices as well.

 In the support materials on the HP5 support page (https:// h5p.org/tutorial-advanced-fill-in-the-blanks), this is known as *Advance Fill in the Blanks*; however, in the Content Bank - where the HP5 activities can be created and edited - it is known as *Complex Fill in the Blanks*. The final example from the course is a Complex Fill in the Blanks with embedded video for listening comprehension. In Figure 5 we see an embedded YouTube video with a listening comprehension video below. Students listen for specific legal lexical items in context and must write the words or expressions in the gaps. An information button (i) is provided for items that were considered to be more difficult to understand. Such activities can also easily be set up by the content creator to use other video formats (if not available online) and a drop-down list so students can select among several different options. This latter format has been adopted in the same course to introduce and consolidate grammatical structures.

278



Figure 4 - HP5 Flashcards activity for legal English.

### 3.3. BLENDED LEARNING AT UNINT

At this point we should ask ourselves whether the course presented above can be considered as an illustration of flipped classroom (cf. 2.1) and blended learning (cf. 2.2). Through the lens of the blended learning paradigm, courses on Everywhere indeed combine online educational materials and opportunities for interaction online with traditional place-based classroom methods.

A number of traditional Moodle resources such as File (to share slides, handouts and reading materials), File (to display files within the course interface or make them downloadable), Book (for multi-page resources presented in a book-like format), and URL (to share web links). In addition to these, we can find standard Moodle activities such as Quiz (for in-class assessment and final exams), as well as Glossary, Feedback, Choice, Forum, etc., which open up the course for more interactive learning. The addition of other plugins such as HP5 and Zoom further enrich the learning environment creating conditions for the flipped classroom to be put into practice.

### 4. CONCLUSION

Research has proved that Moodle has proven to be an effective tool for teaching purposes, and its use is rapidly developing to address various concerns and improve the learning experience. Previous scholars, however, bolstered further research in order to investigate the use of Moodle in non-STEM and non-tertiary disciplines, as well as educators' perspectives on its use.

As shown in Section 3, the incorporation of this platform into the UNINT Everywhere learning platform has led to the development of an interactive platform for both students and teachers. While authors' experience of their own course page on Everywhere has been a boon for the development of an interactive learning platform, more resources may be added to make the course even more blended. Indeed, this requires time and effort on the part of the content creator. However, our shared aim is that our students become more central in the learning process - and this may lead to a more effective learning paradigm for future university students enrolled on ESP and EFL courses.

To conclude, what began as a race to make UNINT course content and lessons more easily during the Covid-19 pandemic has now developed into a full-fledged flipped classroom and blended scenario, which offers numerous resources and activities for both F2F and online learning situations. Further studies on the use on LMS in higher education are needed, yet we firmly believe that we are moving into the right direction – both for students and educators alike.

### 5. ACKNOWLEDGEMENTS

While the paper was conceived of and drafted by both authors, F. Gallai was primarily responsible for Sections 1-2 and M.S. Boyd for Sections 3-4. The authors also wish to thank Alessandro Mecarelli, IT expert at the UNINT, for his invaluable help during the writing of this paper.

### 6. REFERENCES

- [1] D. D. Essel and O. A. Wilson, *International Journal* of *Information and Communication Technology Education (IJICTE)*, vol. 13, n. 1, pp. 14-26, 2017.
- [2] E. E. Evgenievich, M. Petrovna Prokhorova, T. Evgenievna Lebedeva, O. Aleksandrovna Mineeva and S. Yevgenyevna Tsvetkova, "Moodle LMS: Positive and Negative Aspects of Using Distance Education in Higher Education Institutions," *Journal of Educational Psychology-Propositos y Representacione*, vol. 9, 2021.
- [3] O. Susana, M. Juanjo, T. Eva and I. Ana, "Improving graduate students learning through the use of Moodle," *Educational Research and Reviews*, vol. 10, n. 5, pp. 604-614, 2015.
- [4] S. H. P. W. Gamage, J. R. Ayres and M. B. Behrend, "A systematic review on trends in using Moodle for teaching and learning," *International Journal of STEM Education*, vol. 9, n. 1, pp. 1-19, 2022.
- [5] A. Ziraba, C. A. Godwill and C. L. Shiynsa, "The adoption and use of Moodle learning management system in higher institutions of learning: A systematic literature review," *American Journal of Online and Distance Learning*, vol. 2, n. 1, pp. 1-21, 2020.
- [6] M. I. Medina M. and H. E. Briones A.J., "Using moodle virtual platform in teacher for secondary school teachers that have little knowledge of ICT through a working group offered by the educational administration," in *Paper presented at the 8<sup>th</sup> International Technology, Education and Development Conference*, Valencia, Spain, 2014.
- [7] Moodle, "Moodle Languages: A key to Communication," 2014. [Online]. Available: https://moodle. com/news/moodle-languages-a-key-to-communication. [Consulted 20 April 2023].
- [8] K.-O. Jeong, "The use of Moodle to enrich flipped learning for English as a foreign language education.," *Journal of Theoretical & Applied Information Technology*, vol. 95, n. 18, 2017.
- [9] R. R. Estacio and R. Callanta Raga Jr., "Analyzing students online learning behavior in blended courses using Moodle," *Asian Association of Open Universities Journal*, vol. 12, n. 1, pp. 52-68, 2017.
- [10] M. Yeou, "An investigation of students' acceptance of Moodle in a blended learning setting using technology acceptance model," *Journal of Educational Technology Systems*, vol. 44, n. 3, pp. 300-318, 2016.
- [11] D. Patel and H. I. Patel, "Blended learning in higher education using MOODLE open source learning management tool," *International Journal of Advanced Research in Computer Science*, vol. 8, n. 5, pp. 439-441, 2017.

- [12] M. S. Boyd and C. Monacelli, "Politics, (con)text and genre: Applying CDA and DHA to interpreter training," *The Interpreters' Newsletter*, vol. 16, pp. 51-70, 2010.
- [13] M. S. Boyd, English for Law: Theory and Practice, 2<sup>nd</sup> Edition, Molfetta, Italy: Neldiritto Editore, 2021.