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Philological study programs in the digital age: A comprehensive analysis of Moodle integration and utilization

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Abstract

Learning Management System (LMS) Moodle (Modular Object-Oriented Dynamic Learning Environment) is used by educators and institutions around the world and is an effective solution for creating and delivering engaging online courses. Moodle has also gained popularity in universities across Slovakia which have adopted it as their preferred Learning Management System for managing and providing e-learning content. The use of Moodle courses in university education in Slovakia has several benefits, including increased access to education for students, improved engagement and interaction between students and instructors, and greater flexibility for students in terms of when and where they can complete coursework. The paper aims to investigate the integration of this learning/content management system in the area of philology (linguistics/applied linguistics, translation, culture, literature, didactics) by analysing Moodle courses offered by the Department of English Language and Literature at Trnava University's Faculty of Education. The study analyses existing Moodle courses from multiple perspectives to identify digital service advancements in philological study programs, including teacher and non-teacher training programs. The study examines various features of Moodle courses, including the number of courses offered, the subjects covered, course structure, learning materials employed, methods of assessment and feedback, communication and collaboration tools utilised, and integration of online and multimedia resources. The paper presents the essential findings and provides insights into the current situation. Identifying gaps in the existing state and suggesting areas for further research, aims to advance understanding in the field.

Keywords: LMS Moodle, Moodle tools, blended learning, philological study programs

1 Introduction

Moodle courses in university education in Slovakia are often used to complement traditional, in-person courses, and provide students with access to course materials, assignments, and other resources. They also allow students to interact with their instructors and classmates through collaboration tools. In Slovakia, Moodle courses are typically customized to meet the specific requirements of each university and can include a range of features, such as multimedia content, online assessments, and grading tools. The customization options available in Moodle allow universities to tailor their courses to the needs of their students, and to provide an effective and engaging learning experience.

Learning materials, methods of assessment and feedback, communication and collaboration tools, as well as integration of online and multimedia resources are made possible utilizing two main Moodle tools *Activities* and *Resources*.

Activities engage students through Assignment submissions, real-time video conferencing (BigBlueButton), synchronous text communication (Chat), multiple-choice options (Choice), information sharing (Database), opinion gathering (Feedback), asynchronous discussions (Forum), collaborative terminology (Glossary), group decision-making (Group Choice), interactive content (H5P), structured learning (Lesson), data collection (Questionnaire), knowledge assessment (Quiz), interactive e-learning (SCORM), data gathering (Survey), collaborative content creation (Wiki), and peer assessment (Workshop).

Resources support learning with tools like Book (content organization), File (document sharing), Folder (resource arrangement), Label (text/multimedia annotations), Page (web content creation), and URL (external web links).

2 Literature review

Researchers have examined various aspects of Moodle utilization, including teachers' active participation, implementation of social strategies, blended learning designs, usability perspectives, and instructional design for higher education. Their studies offer insights into Moodle's features, collaborative learning, assessment methods, and its potential to enhance the teaching and learning experience.

Nozawa (2011) suggested that the effectiveness of Moodle lies in the way of teachers' active and interactive participation, and emphasised that there are still some unfamiliar functions or unused features of Moodle.

Etzebarria, Garay & Romero (2012) explored Moodle features for language learning social strategies, focusing on cooperative work, exercises, critical reflection, surveys, and glossary. They linked these strategies to Moodle tools like forums, wikis, chats and questionnaires, aligning with second language learning.

Tang (2013) provided teaching design of the blended learning of ESL based on the Moodle platform including functions of Moodle, such as chat rooms, forums, interactive evaluation, Webquest, Wiki, web, document, poll, diary, BBS, chatting Room, Online assignment submission, inter-evaluation, collaborative learning, online test to conduct collaborative learning, which can convert the traditional closed learning environment into an open interactive network learning platform. Ivanović et al (2013) examined teachers' views on Moodle functionalities. They found most modules functional, though some had limitations. Teachers noted low student engagement with instructive features like forums, chats, blogs, and wikis. Online activities complemented traditional teaching, but effective student participation was crucial for optimal tool utilization.

Bošković, Gajić & Tomić (2014) analyzed Moodle use in English teaching at Singidunum University. They assessed all platform functions and course elements (resources and activities) dependent on course content. Web pages were primary for course creation (text, links). Lesson activity was favoured for language learning, offering diverse content, including PowerPoint presentations. Forums enabled student-teacher interaction, while Chat and Journal served for communication.

Gogan, Sirbu & Draghici (2015) presented the functionalities of the Moodle platform and synthesized its features. Also, Althothli (2015) assessed Moodle's impact on student performance, focusing on assignments, presentations, teamwork, and quizzes. Moreover, the study examined forum participation, instant messaging, engagement, and teacher impressions. Students scored the system lower in improving oral assignments, engagement, and teamwork in group projects.

KC (2017) intended to discover which Moodle features were mostly adapted and used by the lecturers. The measurement criteria of the Moodle features in the paper were qualitative. The result of the evaluation showed that Moodle was generally used by the lecturers for delivering course content, course progression plans, grading, creating activities, collecting course feedback, and communicating with course participants. Only some activities such as assignments, feedback, quizzes, and workshops were considered essential from the pedagogical point of view and were frequently used. Gundu & Ozcan (2017) observed Moodle use in EFL classes for lectures, material projection, pre-practice, and revision. It facilitated assignments, quizzes, presentations, and websites. Yet, potential features for student autonomy like asynchronous chats and instant-feedback quizzes were underutilized.

Prasetya (2021) provided instructional design for effective Moodle-based English teaching in higher education using the tools Activities and Resources. Tu & Luong (2021) found that students used Moodle primarily to download learning materials, submit assignments, and take quizzes. When they did not keep up with the lectures, they often re-read the lecture slides, re-watched the previous lecture videos, or asked their classmates, instead of expressing their problems straightforwardly. Therefore, teachers should design many highly interactive activities.

Gamage, Ayres & Behrend's (2022) study offered key insights into Moodle trends. Reviewing 155 articles from 55 countries (2015-2021), using Scopus and Web of Science, trends were analyzed through bibliometric and thematic methods. Findings revealed the following patterns: quizzes and workshops (23%) were prominent, while activities like Choice, Database, Feedback, and SCORM received less attention. Collaborative learning (12%) and assessment (33%) were focal points, with Moodle's data capacity and multiple-choice questions noted. Improved marking and feedback (4%) were explored, highlighting the benefits of peer review.

The reviewed studies emphasised active teacher engagement, social learning strategies employing forums, wikis, chats, and questionnaires, and blended learning designs integrating chat rooms, forums, interactive assessment, and collaboration tools. These studies revealed educators' selective adoption of Moodle features, including content delivery, grading, and feedback, potentially highlighting a gap between feature availability and their full utilization. They showcased the integration of multimedia and examined Moodle's impact on student performance, particularly in oral assignments, engagement, and teamwork. The findings also indicated the underutilization of potential Moodle features, such as asynchronous chats and instant feedback quizzes. Certain activities like quizzes and workshops stood out, while features like Choice, Database, Feedback, and SCORM received comparatively less attention.

3 Research methodology

The research methodology will focus on the analysis of available Moodle courses offered by the Department of English Language and Literature at Trnava University's Faculty of Education. This method will involve a qualitative approach to collect and examine data from the Moodle platform. According to Cohen et al (2007, p. 461) "qualitative data analysis involves organizing, accounting for and explaining the data; making sense of data in terms of the participants' definitions of the situation, noting patterns, themes, categories and regularities".

3.1 Research aim and research questions

The primary goal of this study is to explore the integration and utilization of LMS Moodle within teacher (Teaching English language and literature) and non-teacher study programs (English language and Anglophone cultures) at the Department of English Language and Literature at Trnava University's Faculty of Education. To achieve this, the following research questions will be addressed:

1. How are Moodle courses integrated into all degrees of teacher and non-teacher study programs?
2. What are the predominant learning material types within the Moodle courses offered?
3. What are the approaches used for assessment and feedback in the Moodle courses?
4. What are the communication and collaboration patterns among students and instructors within Moodle courses?
5. To what extent does the integration of multimedia content in the Moodle courses enhance the learning experience in philological study programs?

3.2 Sampling

The entire population of Moodle courses within the Department of English Language and Literature at Trnava University will be considered as the sample. This approach ensures that all courses are included, providing a comprehensive representation of the use of Moodle in philological study programs.

3.3 Data collection and analysis

The data will be collected directly from the Moodle platform. First, Moodle courses will be compared to the current study plans of all existing programs at all academic levels (bachelor's, master's, doctoral). Then, a content analysis of all content-filled Moodle courses available up to September 10, 2023, will be conducted. In each Moodle course, the tools "Activities" and "Resources" will be identified, along with how they are used to help organize course structure, enrich courses with learning materials, provide assessment and feedback, foster communication and collaboration, and integrate online and multimedia resources. Finally, a coding framework will be developed including the aforementioned categories.

3.4 Ethics

Since this research involves the analysis of publicly available course data on the Moodle platform, ethical approval and informed consent are not required. Data privacy and confidentiality will be strictly maintained, and no personal information of students or instructors will be disclosed.

4 Analysis of the research results

This section offers a comprehensive overview of the content-filled courses available on Moodle within the Department of English Language and Literature (N=46), comprising 33 for bachelor's and 13 for master's degrees. The information is categorized into tables, each focusing on different aspects of the courses. The tables are complemented with detailed comments.

Table 1 offers a summary of the courses available in Moodle for existing programs at different academic levels. It includes information about both compulsory and compulsory elective subjects for each degree. Table 2 offers a summary of how Moodle tools *Activities* and *Resources* are applied in the Bachelor's and Master's degree programs.

For bachelor's degree programs, students pursuing the teaching English language and literature single major have access to 20 out of 28 compulsory subjects and 8 out of 23 compulsory elective subjects. Those in the teaching English language and literature double major can access 12 out of 15 compulsory subjects and 11 out of 25 compulsory elective subjects. Similarly, the English language and Anglophone cultures, a non-teacher programme, provides 23 out of 37 compulsory subjects and 9 out of 20 compulsory elective subjects.

Progressing to the master's degree programs, students in the teaching English language and literature single major can access 3 out of 10 compulsory subjects and 9 out of 17 compulsory elective subjects, while students in the teaching English language and literature double major can access 2 compulsory subjects and 9 compulsory

elective subjects. Additionally, the English language and Anglophone cultures non-teacher programme at the master's level offers 5 out of 16 compulsory subjects and 5 out of 21 compulsory elective subjects in Moodle.

Tab. 1: Number of courses available in Moodle according to academic degree

Teaching English language and literature - Single major (bachelor's degree)	Teaching English language and literature - Double Major (bachelor's degree)	English language and Anglophone cultures (bachelor's degree)	Theory of language and literature education (doctoral degree)
20 out of 28 compulsory subjects	12 out of 15 compulsory subjects	23 out of 37 compulsory subjects	0 out of 4 compulsory subjects
8 out of 23 compulsory elective subjects	11 out of 25 compulsory elective subjects	9 out of 20 compulsory elective subjects	0 out of 9 compulsory elective subjects
Teaching English language and literature – Single Major (master's degree)	Teaching English language and literature – Double Major (master's degree)	English language and Anglophone cultures (master's degree)	
3 out of 10 compulsory subjects	2 out of 7 compulsory subjects	5 out of 16 compulsory subjects	
9 out of 17 compulsory elective subjects	9 out of 17 compulsory elective subjects	5 out of 21 compulsory elective subjects	

The availability of subjects in the teaching English language and literature single major for both bachelor's and master's degree programs indicates a strong focus on this specialization. Similarly, the teaching English language and literature double major provides students with a comprehensive selection of subjects to enhance their expertise.

The English language and Anglophone cultures non-teacher program at both bachelor's and master's levels offers fewer subjects compared to other majors. This suggests a potential scope for further expansion and diversification of subjects in this non-teacher program.

However, the doctoral program in the Theory of Language and Literature Education currently does not offer any compulsory or compulsory elective subjects in Moodle. The absence of both compulsory and compulsory elective subjects in the doctoral program indicates that Moodle does not currently support this program's offerings.

Tab. 2: Moodle tools Activities and Resources applied

Bachelor's degree	Course structure	Learning materials	Methods of assessment and feedback	Communication and collaboration tools	Integration of online and multimedia resources
	provided for all 33 courses	provided for 27 courses	provided for 31 courses	provided for 4 courses	provided for 18 courses
Moodle tools	Page, File	File, Folder Assignment	Assignment, Quiz	Forum, Feedback, URL link to Google form	URL link
Master's degree	Course structure	Learning materials	Methods of assessment and feedback	Communication and collaboration tools	Integration of online and multimedia resources
	provided for all 13 courses	provided for all 13 courses	provided for all 13 courses	provided for all 3 courses	provided for all 10 courses
Moodle tools	Page, File	File, Folder, URL link	Assignment, URL link to Google form	Feedback, URL link to Google form	URL link

In the Bachelor's degree program, the course structure is populated using the Page and File tools. Learning materials are managed through tools such as File, Folder, and Assignment. Assessment and feedback mechanisms employ tools like Assignments and Quizzes. Communication and collaboration are facilitated through Forum, Feedback, and URL links to Google Forms. Online and multimedia resources are integrated using the URL tool.

In the Master's degree program, the course structure is established using Page and File tools. Learning materials are organized using File, Folder, and URL link tools. Assessment and feedback processes utilize tools like Assignment and URL links to Google Forms. Communication and collaboration utilize tools such as Feedback and URL links to Google Forms. Online and multimedia resources are incorporated through the URL tool.

Certain activities like Page, File, Folder, URL, and Quiz are more commonly employed, whereas features like Feedback and Forum have received relatively less emphasis. Tools such as Book, Label, Chat, Group Choice, Database, Glossary, Lesson, Questionnaire, Survey, Workshop, Wiki, and SCORM remain entirely unused.

4.1 Courses available in Moodle for Bachelor's degree

This section offers an overview of the existing bachelor's degree courses available in Moodle at the Department of English Language and Literature. It is centred around the features of Moodle courses, encompassing the subjects covered, course structure, learning materials used, assessment and feedback methods, communication and collaboration tools employed, and integration of online and multimedia resources.

Information about Course structure is provided for all 33 courses. The courses demonstrate diverse structures to meet the specific needs of each subject and exhibit a consistent pattern of organization. Most courses are structured around a series of weekly topics, covering a range of subjects relevant to the course content. Additionally, some courses provide detailed descriptions of the course requirements and assessments, including assignments and exams. However, it is worth noting that a few courses do not specify any particular course structure. Overall, the bachelor's courses demonstrate a systematic approach to organizing the curriculum, providing students with a clear outline of the topics and requirements they will encounter throughout their studies.

Information about Learning materials employed is available for 27 courses. The learning materials include PowerPoint presentations, PDFs, Word documents, audio files, and worksheets. Some courses offer a mix of these resources. In some courses, such as "American Literature," "English for Academic Purposes," and "English Syntax," PowerPoint presentations and PDF materials are utilized to support the learning process. Courses, like "American English" and "Basics of Literary Studies," offer a mix of PDF and Word materials, enabling students; to access a diverse range of content. Similarly, "Intercultural Communication" provides theory in PDF format along with audio files and worksheets for practical application. Some courses, such as "History and Culture of Ireland," offer a combination of PDF and Word materials, along with three activities in the form of lectures to enrich the learning experience.

Information about Methods of assessment and feedback is given for 31 courses. Courses employ different assessment strategies to evaluate students' progress. Courses like "Computer-assisted Translation and Technologies Used in Translation" and "Semester Project 1" offer multiple assignments with grading and comments, providing constructive feedback for improvement. In contrast, courses like "Basics of the Latin Language", "Basics of Literary Studies" or "Linguistic Analysis of Text" currently lack specific methods of assessment and feedback. In the course "American Literature," students are evaluated through a test (Check yourself) and 10 assignments with comments provided as feedback. Similarly, the course "American English" employs 21 assignments as self-study tasks and worksheets for assessment. In "English Literature 1," students undergo a test (Check yourself) and 8 assignments. Other courses, like "History and Culture of the Slovak Republic," adopt a more comprehensive assessment approach with 1 assignment (Final multimedia project) and 10 Portfolio tasks, yet feedback details are not provided. Similarly, in "Intercultural Communication and Mediation," students complete 5 graded assignments and 9 Moodle tests as exercises. Some courses, such as "Communication Language Skills 1," involve 8 Moodle tests for evaluation and "Interpretation of an Artistic Text" employs 3 assignments and 1 Moodle test without specific feedback information.

Communication and collaboration tools are utilised in 4 courses. The course "Interpretation of an Artistic Text" uses Google Forms for student presentation assessment, facilitating peer evaluations. This tool encourages collaboration, as students are actively involved in evaluating each other's presentations, providing insights, and promoting a deeper understanding of the course material. In the course "American Literature," students have the opportunity to engage in discussions and collaborate with their peers through the use of the activity Forum. This tool facilitates interactive discussions on various topics related to American Literature, encouraging active participation and fostering a collaborative learning environment. The course "Teaching Seminar 1" utilizes the Feedback activity, which allows students to provide feedback and evaluate each other's microteaching sessions. In the course "Semester Project 3" the inclusion of links to attending online conferences allows students to engage with academic

events, expand their knowledge, and connect with experts and researchers in their field of study. This fosters a collaborative environment where students can actively participate in academic discussions and gain valuable insights from the conferences. The use of Research paper reviews in Google Forms allows peer review, and feedback encouraging collaborative learning. The Conference paper feedback in Google Forms allows students to give or receive feedback from others on conference presentations and enables students to improve their presentation skills and receive input from their peers. The remaining courses do not currently utilize any specific communication tools. Yet, it has to be mentioned that communication both in bachelor's and master's courses is facilitated through MS Teams, as each Moodle course is linked to its corresponding Teams course.

Details regarding the Integration of online and multimedia resources are provided for 18 courses. Several courses extensively integrate online and multimedia resources to enhance learning experiences. Courses like "American Literature", "Computer-assisted Translation and Technologies Used in Translation", "American English", "English Phonetics and Phonology," and "Interpretation of an Artistic Text," utilize URL links to online materials, YouTube videos, and quizzes. These resources complement the course content, allowing students to access additional readings, video lectures, and multimedia content relevant to their studies. However, in some courses, the integration of online and multimedia resources is not explicitly mentioned. For instance, courses like "Academic Writing and Presentation Skills," "Ancient Civilization and Foundations of Classical Philology," "Teaching Seminar 1", "Basics of the Latin Language" and "Linguistic Seminar 4 - English Lexicology" do not currently employ any online or multimedia resources. They might focus on other teaching methods and resources without incorporating digital elements extensively.

4.2 Courses available in Moodle for Masters' degree

This section provides a comprehensive analysis of the Master's degree courses available on Moodle at the Department of English Language and Literature. Each of the 13 courses is thoroughly examined in terms of its course structure, learning materials employed, methods of assessment and feedback, communication and collaboration tools utilised, and integration of online and multimedia resources.

Course structures are outlined for all 13 courses, highlighting specific features such as evaluation criteria, weekly topics, syllabi, and information letters. This information gives students a clear understanding of how the courses are organized and what to expect throughout their studies.

All 13 courses provide information about the learning materials used. Learning materials employed in the courses vary across courses, encompassing a wide range of resources. These materials include PDF formats of publications, PowerPoint lectures, online video lessons, multimedia projects, exercises, and materials in both PDF and Word formats.

Methods of assessment and feedback are detailed in all 13 courses. These methods include assignments with grading, peer reviews via Google Forms, and evaluation of portfolios and presentations. Several courses, such as "Bilingual Education and CLIL," "Individual Project 1," "Literature in Language Education," "Contemporary Anglophone Cultures," "Contemporary Anglophone Literature," "Pragmatics: Verbal Communication and Discourse," and "Sociolinguistics," use assignment-based assessments. These assignments cover various topics related to the course content and are complemented by grading and feedback, allowing students to gauge their progress and make improvements. Other courses, like "Digitally Supported Language Learning," "Teaching AJ to pupils with special needs," "Teaching English at a younger age," and "Experiential Excursion 1," incorporate specific assessment tasks tailored to the course objectives. These include portfolio assessments, lesson plan evaluations, and multimedia project reviews, providing students with personalized feedback to enhance their skills and comprehension.

Three courses stand out for their use of specific communication and collaboration tools to foster interaction and engagement among students. In the course "Bilingual Education and CLIL" a communication and collaboration tool Feedback is employed. It allows students to actively participate in the evaluation process by engaging in student-student evaluation of microteaching. It creates an environment where peer-to-peer interaction thrives, and students can provide constructive feedback on each other's microteaching sessions, enhancing their communication skills. The course, "Individual Project 1" utilizes the communication and collaboration tool Students' presentations assessment (peer reviews) via Google Forms. Through this tool, students are encouraged to assess and provide feedback on each other's presentations. This interactive approach fosters teamwork while supporting the development of presentation skills. In the course "Literature in Language Education" the communication and collaboration tool of Feedback plays a significant role and facilitates feedback exchange between students and instructors, creating an environment of assessment for assignments and micro lessons.

Lastly, the integration of online and multimedia resources, including URL links to YouTube videos, TEDed online video lessons, podcasts, and online materials, adds depth and variety to the learning experience. 10 courses provide

information about the integration of online and multimedia resources. Courses like "Bilingual Education and CLIL," "Digitally Supported Language Learning" and "Pragmatics: Verbal Communication and Discourse" make extensive use of such resources to enrich the learning experience and include URL links to YouTube videos, offering supplementary multimedia content, engaging educational videos, and practical examples to enhance students' comprehension. Additionally, courses "Literature in Language Education" and "Contemporary Anglophone Cultures" provide URL links to book reviews, online materials, and podcasts, further deepening students' understanding of the literature and cultural contexts. "Theory and Practice of Interpretation and Translation" integrates materials in PDF and Word formats, along with PowerPoint lectures, to support students in their interpretation and translation studies. On the other hand, courses, like, "Teaching English at a younger age" and "Experiential Excursion 1," do not incorporate specific online or multimedia resources. Instead, they may emphasize traditional learning materials and hands-on experiences.

5 Discussion

The research findings are summarized by answering the research questions. To address the first research question *"How are Moodle courses integrated into all degrees of teacher and non-teacher study programs?"*, the analysed data shows that Moodle courses play a significant role in the philological study programs at Trnava University's Faculty of Education. The course structures are systematically organized, providing students with a clear outline of topics and requirements. For both bachelor's and master's degree programs, Moodle serves as a platform for hosting a wide range of courses, offering students access to various subjects and elective options. The availability of subjects in different majors reflects a strong focus on certain specializations, such as teaching English language and literature, while other programs, like the English language and Anglophone cultures non-teacher program, have a potential for further expansion in terms of available subjects. The absence of both compulsory and compulsory elective subjects in the doctoral program indicates that Moodle does not currently support this program's offerings.

To answer the second research question *"What are the predominant learning material types within the Moodle courses offered?"* the learning materials employed include PowerPoint presentations, PDFs, Word documents, audio files, worksheets, online video lessons, and recorded lectures offering students access to a variety of resources. It has to be mentioned that while the courses utilize a variety of learning material types, some of them still lack a diverse range of resources. For instance, certain courses heavily rely on PowerPoint presentations or PDF documents but do not fully use the potential of audio files, multimedia projects, or online video lessons, potentially limiting students' exposure to different forms of content. It is essential for course designers to consider incorporating a broader range of learning material types to satisfy various learning preferences and styles. The use of various learning material types and the potential to incorporate a broader range of resources, as suggested by Etzebarria, Garay & Romero (2012), is reflected in the variation of learning materials employed within the Moodle courses at Trnava University. The need to enhance engagement and accommodate diverse learning preferences through multimedia integration, discussed by Ivanović et al (2013), echoes the finding that some courses lack a diverse range of resources in the current study.

Addressing the third research question *"What are the approaches used for assessment and feedback in the Moodle courses?"*, methods of assessment and feedback also vary, encompassing assignments, tests, peer reviews, portfolio evaluations, and detailed grading with comments. Yet, some courses lack specific details on feedback and assessment methods. Without comprehensive feedback information, it is challenging to assess the effectiveness of the assessment process and the quality of feedback provided to students. The methods of assessment and feedback align with the examination of assessment and feedback approaches within Moodle courses, as indicated by Bošković, Gajić & Tomić (2014). Both studies emphasise the importance of providing comprehensive feedback mechanisms to enhance the learning experience.

Addressing the fourth research question, *"What are the communication and collaboration patterns among students and instructors within Moodle courses?"* the presence of communication and collaboration tools in certain courses facilitates peer-to-peer interaction and feedback exchange fostering collaborative learning experiences. This promotes a collaborative learning environment where students actively participate in evaluating each other's work, providing insights, and promoting a deeper understanding of the course material. However, the research data indicates limited use of communication and collaboration tools. While several courses utilize communication and collaboration tools, the majority of courses have not integrated these features. This limitation may hinder opportunities for student interaction and collaborative learning in these courses. Regarding communication and collaboration, the limited integration of these tools in Moodle courses resonates with the findings of Tu & Luong (2021), where students primarily used Moodle for accessing materials and submitting assignments, with limited engagement in communication and collaboration. On the other hand, the potential benefits of effective

collaboration tools and peer interaction, highlighted in the present study, align with the collaborative learning experiences emphasized by Etzebarria, Garay & Romero (2012).

To tackle the last research question “*To what extent does the integration of multimedia content in the Moodle courses enhance the learning experience in philological study programs?*”, the integration of online and multimedia resources in the Moodle courses enhances the learning experience by providing supplementary materials and diverse content formats. This inclusion of multimedia elements such as YouTube videos, TEDed online video lessons, recorded lectures podcasts, and quizzes supports self-directed learning and enhances students' comprehension of course topics and engagement. Still, the analysed data indicates that only a subset of courses (19 out of 33 for bachelor's and 10 out of 13 for master's degrees) integrate online and multimedia resources. This variation may lead to disparities in students' access to additional learning materials and multimedia content. The integration of multimedia content in Moodle courses corresponds with the potential of Moodle to offer a variety of content formats, including multimedia resources, as indicated by Prasetya (2021). The emphasis on diverse resources and supplementary materials, as highlighted by Gamage, Ayres & Behrend (2022), supports the idea that the integration of multimedia content can indeed enhance the learning process within Moodle courses.

Conclusion

By focusing on the analysis of available Moodle courses, the article provides an in-depth understanding of how Moodle is utilized in philological study programs at Trnava University, offering insights for educators and institutions aiming to enhance their blended learning strategies. The implications of the findings, highlighting the strengths and weaknesses of the current use of Moodle in philological study programs have to be discussed. The main critical points refer to the imbalance in the distribution of the courses across the study degrees, the insufficient utilisation of communication and collaboration tools and the emphasis on utilizing only specific Moodle features.

The research findings suggest a strong focus on certain specializations, while other programs have potential for expansion. The department can use this information to review and enhance the curriculum offerings, ensuring a well-rounded education for students across different study programs. Further investigation is needed to understand the reasons for this limitation and explore alternative ways to deliver doctoral-level content in this area.

The research also indicates that communication and collaboration tools are underutilized in certain courses. The tutors should be encouraged to incorporate more features into their Moodle courses, fostering interactive and collaborative learning environments, which can lead to improved student engagement and academic performance.

The lack of utilization of Moodle resources, particularly Book and Label, and Moodle activities such as asynchronous Chats, Group Choice, Database, Glossary, Lesson, Questionnaire, Survey, Workshop, Wiki, and SCORM is evident and emphasises the need to explore a wider range of tools to enhance teaching and learning through Moodle.

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References

- Althothli, N. (2015). Investigating the Impact of Using Moodle as an E-Learning Tool for Students in an English Language Institute. Graduate Student Theses, Dissertations, & Professional Papers. <https://scholarworks.umn.edu/etd/4524>
- Bošković, V., Gajić, T., & Tomić, I. (2014). Moodle in English language teaching. *ImpaCt of Internet on BUSInESS aCtivity In SerBia and WorldWide*, 480. <https://portal.sinteza.singidunum.ac.rs/Media/files/2014/480-483.pdf>
- Cohen, L., Manion, L., Morrison, K. 2007. *Research methods in Education*, Routledge, New York 2007.
- Etzebarria, A., Garay, U., & Romero, A. (2012). Implementation of Social Strategies in Language Learning by Means of Moodle. *Journal of Language Teaching & Research*, 3(2). <https://www.academypublication.com/issues/past/jltr/vol03/02/05.pdf>
- Gamage, S. H., Ayres, J. R., & Behrend, M. B. (2022). A systematic review on trends in using Moodle for teaching and learning. *International Journal of STEM Education*, 9(1), 1-24. <https://doi.org/10.1186/s40594-021-00323-x>
- Gogan, M. L., Sirbu, R., & Draghici, A. (2015). Aspects concerning the use of the Moodle platform—case study. *Procedia Technology*, 19, 1142-1148. <https://doi.org/10.1016/j.protcy.2015.02.163>

- Gundu, N., & Ozcan, D. (2017). *Implementation of the Moodle system into EFL classes*. Profile Issues in Teachers Professional Development, 19, 51-64. <http://www.scielo.org.co/pdf/prf/v19s1/1657-0790-prf-19-s1-00051.pdf>
- Ivanović, M., Putnik, Z., Komlenov, Ž., Welzer, T., Hölbl, M., & Schweighofer, T. (2013). Usability and privacy aspects of Moodle: students' and teachers' perspective. *Informatica*, 37(3).
<https://www.proquest.com/docview/1467989158?pq-origsite=gscholar&fromopenview=true>
- Kc, D. (2017). Evaluation of Moodle features at Kajaani University of Applied Sciences—case study. *Procedia computer science*, 116, 121-128. <https://doi.org/10.1016/j.procs.2017.10.021>
- Nozawa, K. (2011). To moodle or not to moodle: Can it be an ideal e-learning environment. *Political Science*, 18(3), 289-312.
[https://www.academia.edu/8664279/To Moodle or not to Moodle Can It Be an Ideal e Learning Environment](https://www.academia.edu/8664279/To_Moodle_or_not_to_Moodle_Can_It_Be_an_Ideal_e_Learning_Environment)
- Prasetya, R. E. (2021). Effectiveness of teaching English for specific purposes in LMS Moodle: lecturers' perspective. *Journal of English Language Teaching and Linguistics*, 6(1), 93-109.
<http://dx.doi.org/10.21462/jeltl.v6i1.498>
- Tang, J. (2013). The research on blended learning of ESL based on Moodle platform. *Studies in Literature and Language*, 6(2), 30.
<http://www.cscanada.net/index.php/sll/article/viewFile/j.sll.1923156320130602.3612/4120>
- Tu, N. P., & Luong, T. K. P. (2021). Online language learning via Moodle and Microsoft Teams: students' challenges and suggestions for improvement. In *Proceedings of the AsiaCALL International Conference* (Vol. 533, No. 978-94-6239-343-1, pp. 106-113). <https://doi.org/10.2991/assehr.k.210226.013>