



## THE USE OF THE MOODLE PLATFORM IN A LEARNING CONTEXT

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### Summary

Prepared from a bibliographical survey, this article aims to describe the main features and tools made available by the platform *eLearning* most used in the world, the *MOODLE*. This platform is widely publicized and recognized for being a *software* open, and can be downloaded, used and modified by any of the platform's users free of charge. It thus seeks to understand how this platform has been widely used in a teaching-learning context, the teaching resources and pedagogical methodologies it offers, as well as the advantages and disadvantages it presents. From the point of view of the methodological approach, this is a qualitative and descriptive research - analytics. For bibliographical research, a search was carried out in the database *Google Scholar*, using the following descriptor: "the *MOODLE* in a learning context". It was concluded that ease of access, flexibility and constant improvement are aspects that make *MOODLE* one of the most complete online systems for Education, however, its simple insertion is not enough to guarantee a meaningful learning environment.

**Key words:** *MOODLE*. Education. Platforms *eLearning*. Learning.

### Abstract

Elaborated from a bibliographic survey, this article aims to describe the main features and tools provided by the most used e-Learning platform in the world, *MOODLE*. This platform is widely publicized and recognized for being an open software, which can be downloaded, used and modified by any of the users of the platform for free. In this way, it seeks to understand how this platform has been widely used in a teaching-learning context, the didactic resources and pedagogical methodologies it provides, as well as the advantages and disadvantages it presents. From the point of view of the methodological approach, this is a qualitative and descriptive-analytical research. For a bibliographic survey, a search was carried out in the Google Scholar database, using the following descriptor: "*MOODLE* in a learning context". It was concluded that the ease of access, flexibility and constant improvement are aspects that make *MOODLE* one of the most complete online systems for Education, however, its simple insertion is not enough to guarantee a meaningful learning environment.

**Keywords:** *MOODLE*. Education. E-Learning platforms. Learning.

### Introduction

The massive availability of digital media contributed to significant changes in the field of Education, favoring not only the development of distance learning, but also the improvement of the face-to-face modality, which gained new features, aiming to become more attractive to students and effective for learning. .

In this sense, the new distance learning modality called *eLearning* and based on Internet technologies has enabled the construction of personalized and adaptive learning spaces to the needs, rhythm and time of different individuals, in addition to providing opportunities for students with an extreme professional life.

extremely tiring or far from the main educational centers can continue their training.

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These spaces are characterized by being tools that promote self-learning, interactive, flexible and easily accessible, aligning with the interests of a computerized society (Gonçalves, 2007).

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Recognizing the importance of Information and Communication Technologies (ICTs) for Education, in order to enable better pedagogical experiences, the objective of this text is to discuss the possibilities of using the platform *MOODLE* in a teaching-learning context, describing its main characteristics and tools available for student learning. Created in 1999 by Australian Martin Douglas, who at the time was studying for a PhD at Curtin University, the *MOODLE*, in English Modular *Object-Oriented Dynamic Learning Environment*, and in Portuguese Modular Object Oriented Dynamic Learning Environment, is a *software free*, known for being the most used virtual learning environment (VLE) around the world.

The methodology used in this article is a bibliographical review, therefore, a qualitative approach, classified as descriptive-analytical, since the objective is to describe the main characteristics and pedagogical practices related to the platform *e-learning* *MODLE*.

## Main Features of the Platform *MOODLE*

The platform *MOODLE* was officially launched in 2002 and has expanded a lot in recent years, reaching 222 territories in the world in 2015, and the entire rest of the globe the following year, bringing together more than 100 million users and translated into more than 60 languages (Costa; Mendonça, 2014). Brazil is in fourth place in the ranking of countries with the highest number of users, and there are currently more than five thousand platforms registered in the national territory.

Much of this success is due to the fact that it is a *software open*, and can be downloaded, used and modified by any of the platform's users free of charge (Bechara; Haguenaer, 2009). This means that this platform is developed and improved by programmers from all over the world, also enabling a more adaptive environment to the demands of its participants (Costa; Mendonça, 2014). Other advantages can also be observed in relation to efficiency, flexibility and cost reduction (Alencar et al., 2011).

One of the most outstanding features of the *MOODLE* is the possibility of online, in-person and blended teaching aimed at Universities, schools, technical courses and other educational institutions, creating a virtual environment favorable to the development of quality distance learning.

In this regard, Costa and Mendonça (2014) emphasize that the use of virtual learning environments can constitute facilitating elements of the teaching-learning process, making this process more attractive and dynamic for students and, at the same time, improving communication between educators. and educating. These authors also list a set of utilities offered by the *MOODLE*, to know:

[...] protected access and user profile management: this feature allows the creation of a private environment for a specific subject for use by teachers and students; Management of access to content: allows teachers to make files and materials available *online* to students and determine when and how students will have access to these materials; Simultaneous and non-simultaneous communication tools: allow and facilitate extra-class communication between teacher-student and student-student; Activity control system: makes it possible to record and manage all activities carried out by students (Costa; Mendonça, 2014, p. 156).

As you can see, the *MOODLE* is a virtual learning environment widely used around the world, as it offers resources that lead to better teaching-learning experiences, which can be greatly improved.

## The Use of *MOODLE* in Learning Context

*MOODLE* was created from the social constructivist perspective, which considers the construction of ideas and knowledge as a collective practice, forged among different social groups, in a way to prioritize collaboration between them, thus promoting meaningful interaction (Alencar et al., 2011).

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The perspective of mutual construction of knowledge is fundamental for meaningful learning. The participation of students, as they begin to act as subjects who produce knowledge, developing active participation within the educational training process. As Paulo Freire (1996, p. 13) wrote, teaching is not transferring knowledge, but creating the possibilities for its production and construction".

In this sense, the teacher is not the one who holds all the knowledge, nor the student the empty subject who only receives knowledge passively and has nothing to offer, but both are involved in a process

dialectical, where “whoever forms forms and re-forms when forming and whoever is formed forms and forms when being formed” (Freire, 1996, p. 13). In other words, as the educator teaches he also learns, and as the student learns he also teaches.

With the insertion of the *MOODLE* in educational processes, this perspective of joint construction of knowledge has become even more evident, since the platform offers students pedagogical tools necessary for the development of autonomy, problematizing reading, interpretation and critical analysis, all through research, data collection, evaluation and recording. Furthermore, access to the platform is based on the student's own demands, in accordance with their rhythm and schedules (Alencar et al., 2011), an important aspect for developing discipline and organizational skills.

According to Bechara and Haguenaer (2009), one of the most significant particularities of *MOO-DLE* when compared to other educational programs based on virtual environments is that this system is much more focused on learning itself than on the computational tools it makes available, that is, it not only provides resources but also suggests a structure of activities aimed at doing so that students actually learn.

The resources made available by the platform are characterized by being instructional, and can be texts, files to be downloaded or online pages. Activities are interactive or social, with the former promoting interaction between participants and with the content itself, lessons and quizzes are some examples of this type of task. In the second group are the activities responsible for leading the process of collective construction of knowledge, such as discussion forums and chat rooms that allow, in addition to sociability, the exchange of information and sharing of ideas (Bechara; Haguenaer, 2009).

Thus, the *MOODLE* is one of the most complete online tools for Education. Through it, teachers and educational managers are able to manage distance courses, plan and share complementary materials to in-person classes, have teaching and interaction resources such as forums, chat, diaries, as well as many others available for a better pedagogical experience, based on collective construction and mutual collaboration between its users (Alencar et al., 2011).

Still regarding the benefits of this platform for education, Costa and Mendonça (2014) state that the *MOODLE* has the ability to make sharing files and teaching materials easier, enabling meaningful communication between teacher and student even when outside the institution's physical environment. In a similar direction, Alencar et al. (2011) highlight the advantage of using teaching materials in digital format, as they allow the information and data contained to be constantly revisited and updated.

Despite the countless possibilities offered, obviously, as in any other learning context, the use of *MOODLE* it can also impose challenges on educational agents, both in technical and pedagogical terms. The first of them, perhaps, is associated with the fact that, for a successful installation of this *software*, the user will need certain knowledge in the area or a specialized professional to assist in this process.

From a pedagogical point of view, students, often accustomed to conventional teaching practices, in which they are trained to simply memorize and reproduce the content transferred in the face-to-face classroom by the teacher, end up finding it difficult to develop the necessary autonomy and initiative. to collaborative learning. In this sense, it is worth highlighting the role of the teacher who, in his teaching practice, must create favorable conditions for the production of knowledge and reinforce the student's creative abilities. Quoting Paulo Freire (1996, p. 15) once again, “one can thus perceive the importance of the role of educator, the merit of the peace with which he lives the certainty that part of his teaching task is not just teaching the contents, but also teach how to think correctly.”

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In this sense, it is up to the teacher to encourage the student to assume a restless, questioning and insubmissive stance towards technology itself. To this end, he himself, as an educator, must become a critical individual, capable, for example, of articulating the content he reads with the reality he experiences (Freire, 1996). In isolation, without this articulation, the use of virtual platforms in a teaching context will hardly contribute to significant student learning.

However, it cannot be forgotten that these educators also face other difficulties when dealing with learning platforms. As Costa and Mendonça (2014) add, although they recognize the relevance of such resources for educational practices, many teachers do not have adequate training or instruction to handle them, others still, attached to traditional teaching methods, end up opposing the integration of tools such as *MOODLE* in the classroom.

It is necessary to get rid of the old ties and allow yourself to fully experience the new, this requires continued training, but also a willingness to revisit and update practices and methods. Corroborating this discussion, Pereira, Spanhol and Lunardi (2018) highlight that among teachers there is a tendency to only use the technological resources made available by virtual environments for basic functionalities, such as sharing files or sending messages, failing to explore the tools in order to enhance the teaching-learning process.

Thus, these authors consider it necessary to develop innovative research that can contribute to propositions about the best strategies and new ways of building knowledge based on such educational platforms (Pereira; Spanhol; Lunardi, 2018). Therefore, it is not a question of integrating the tool *MOODLE* to educational processes in a technical way and only to correspond to a certain demand of the capitalist technology market, but, on the other hand, it is about promoting a strategic and dynamic integration, linked to updated educational practices, aiming to enhance the capabilities of the subjects of act politically in the world (Belloni, 2005).

### ***MOODLE* in practice**

The platform *MOODLE* is the platform used in several Brazilian institutions and organizations, including the Federal University of Minas Gerais – UFMG. In 2020, UFMG launched a practical guide, aimed at the academic community, on how to use the *MOODLE* in the context of remote teaching, as all face-to-face activities were suspended due to health measures to contain the new Corona virus (Liu, 2020).

The objective of *Ebook* was to present in a didactic, simple and illustrative way the main activities and resources made available by the platform for teachers and students, in order to help them incorporate new technological learning and pedagogical planning strategies into their study routines (Liu, 2020).

Through the platform *MOODLE* students can have access to the classes in which they are enrolled, the available teaching materials and can enter into dialogue with teachers through chats and discussions. Among the tools available, some new features: it is now possible for students to have access to texts and materials from previous semesters, in addition to updated material, as long as they are attached by the teaching team (Gonçalves; Oliveira, 2020).

Gonçalves and Oliveira (2020) positively evaluated the novelty, highlighting that the student will be able, in this way, to consult quality material through which it is possible to review content and review information. Another resource provided by the platform *MOODLE* and explored by UFMG is the “Metaclasses” format, characterized by the combination of other classes of the same subject, with a larger number of students and teachers.

It is observed, therefore, that the incorporation of this platform is done in order to provide better interaction between teachers and students, facilitating not only communication, but also the sharing of materials and the exchange of ideas. Access to materials from previous semesters favors a better research experience, with data combinations, retakes and cross-referencing of information.

The “Meta Classes” format creates favorable conditions for students in different training periods to exchange experiences with each other, supporting the construction of knowledge in a collaborative perspective. Educators also find advantages, as they can provide the same content that meets the needs of several students, at the same time that, as it is a format that divides classes into specific subjects, they can provide personalized materials

*MOODLE* it also allows easy access to the syllabus of each subject, posted notices and the structuring of the document in accordance with the work weeks. However, even with the resources opportunized, many students and teachers report experiencing difficulties in handling them, sometimes due to the limitations of the platform itself and others due to lack of training (Gonçalves; Oliveira, 2020).

Recognizing such challenges, the content of the *Ebook* largely sought to meet this demand, on the other hand, this experience with the *MOODLE* the need to think beyond the most basic functionalities towards the construction of tools that enhance the conduct of learning itself.

Within this perspective, one of the possibilities to be widely discussed is the use of this platform to promote adaptive learning, respecting the cognitive style of different students, based on strategies that develop content organized into specific objectives, for which a

subset of resources is improved (Bechara; Haguenaer, 2009).

## Final considerations

*MOODLE* is the platform *e-learning* widely used in the world, this is mainly because it is a *open software*, flexible, easy to access and tools available. Its structure enables the implementation of strategies aimed at learning and the development of students' cognitive and social potential, based on a perspective of learning as a collective process of mutual collaboration between the agents involved.

However, we must consider the challenges of adopting a new teaching format, based on self-learning and problem solving for the joint construction of knowledge, with the educational system still being quite arbitrary and conventional. Therefore, it is important that educational institutions develop strategies that go beyond the merely technical use of this platform towards its strategic, dynamic, adaptive use and that actually contribute to enhancing the critical development and creative capabilities of students.

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